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PREFACE

I. HISTORY OF THE ENCYCLOPAEDIA. It is only in comparatively recent years that the interdependence of the social sciences has come to be recognized as a concept necessary to their progress. The older sciences had such a great mass of phenomena to arrange and to interpret that each of them was busy in pursuing its own problems. The newer sciences found enough to do in staking out their respective fields and in vindicating their claim to existence as separate disciplines. The result was that all the sciences continued in water-tight compartments and it was thought that the greatest progress could be made by emphasizing differences rather than similarities. There was in truth much to be said for this point of view in the early years of development; but there has come a slow realization that, while there are all kinds of associations and many angles from which human contacts can profitably be studied, it is a mistake to separate them permanently into independent sections. The sentient being is after all a whole; it is unwarrantable to hold that any one phase of his activity is completely divorced from the others. Especially is this true when we consider the relation of the individual to the group and endeavor to comprehend the subtle influences reciprocally exerted by the various manifestations of common activity. The conclusions reached by the separate sciences were gradually recognized, therefore, as incomplete and provisional, and the demand went forth to attempt a better analysis through a more comprehensive synthesis.

It was in the pursuit of this purpose that after many abortive attempts and premature efforts a movement of real vitality was initiated. In the year 1923 Dr. Alexander Goldenweiser and Dr. Howard B. Woolston of the American Sociological Society sponsored a resolution designed to lead that association to consider whether the time might not have come to attempt some united action in this general direction. In the following year, as the result of the efforts of the above gentlemen and Professor W. F. Ogburn, six of the other leading learned societies in the field of social science appointed committees to consider the suggestion. An energetic campaign to enlist the interest of a wide range of scholars was carried on by Dr. Goldenweiser. A Joint Committee, consisting of three representatives of each association, held several meetings during 1925 and discussed the various possibilities from every point of view. The result of its deliberations was the recommendation that there be undertaken some comprehensive and unifying publication. The task of working out the details of the plan was entrusted to an executive committee of which the subsequent editor-in-chief was made chairman. After much discussion it was resolved to give effect to the ideas of the Joint Committee by the launching of an encyclopaedia.

During the early months of 1926 the report was adopted by each of the cooperating societies and was also approved by the Social Science Research Council. Moreover the report was sent to a small list of distinguished scholars in the various fields concerned in order to elicit their opinions as to the feasibility of the project. Uniformly favorable replies were received. These letters were printed in the *Memorandum on the Projected Encyclopaedia of the Social Sciences* published in 1927.

The executive committee then asked the chairman to serve as editor-in-chief. After much hesitation, due to his appreciation of the responsibility involved, he accepted the invitation, and devoted the next twelve months to the collection of the necessary funds and to the elaboration of the plan. By the spring of 1927 these two objectives had been attained, and in May of that year the Joint Committee was reconvened. At this meeting the number of constituent societies was increased to ten. The sponsors of the Encyclopaedia are thus the following:

American Anthropological Association
American Association of Social Workers
American Economic Association
American Historical Association
American Political Science Association
American Psychological Association
American Sociological Society
American Statistical Association
Association of American Law Schools
National Education Association

The time had then come for the definite organization of the enterprise. The first point was the selection of the staff. After much deliberation the editor-in-chief prevailed upon Dr. Alvin Johnson to become associate editor. Assistants well trained in the various sciences were chosen to take charge of the different fields of work and their number was increased from time to time as occasion demanded. Their names appear on the title page. Acknowledgment should also be made of the help accorded by Dr. Helen Sumner Woodbury, Miss Gladys Boone, Dr. Benjamin Ginzburg, Dr. Gustav Peck and Dr. Alexander Goldenweiser, who at various times were members of the editorial staff. The next point was the provision for the business end of the project. The enterprise was incorporated as Encyclopaedia of Social Sciences, Inc., and the corporation was composed of the Joint Committee. The Board of Directors consists of twenty-one members, eight lay and thirteen academic, the latter being selected by the constituent societies.

During the summer of 1927 the editor-in-chief went abroad in order to enlist the support of the leading European scholars. In the course of a trip which included virtually all of the important universities from Oslo to Florence, he conferred with hundreds of the most distinguished scholars scattered throughout Europe. He was both astonished and heartened by the enthusiasm that was manifested on all sides, and by the readiness of virtually everyone to lend his hearty cooperation in what was recognized to be not only a gigantic project

but one which would be of great importance to the progress of the social sciences throughout the world.

In the autumn of 1927 provision was made for the selection of a board of Advisory Editors. The members of this board were chosen by the editor-in-chief and number seventeen Americans and eleven foreigners. The advisory editors have been heavily drawn upon for constant advice and criticism, and deserve this entirely inadequate word of appreciation for their admirable services. They are not to be held responsible, however, either for the particular articles or for the selection of specific contributors. The responsibility for these matters attaches entirely to the editorial staff.

The Encyclopaedia has suffered an irreparable loss in the death of one of its advisory editors, Leonard T. Hobhouse. He placed his wealth of learning and catholicity of mind most generously at the service of the editors and they will find many occasions in the further development of the work where his advice would have been invaluable.

As the work progressed it became evident that much help would be needed by the editorial staff, in addition to that given by the advisory editors. The field covered by the Encyclopaedia was in large part so untrodden that it was resolved to enlist the aid of several hundred scholars, both here and abroad, to each of whom were referred all manner of queries as to special points falling within their competence. These specialists, whom we have designated as Editorial Consultants, have served without compensation, and to them is in large measure due whatever credit we may have earned in the difficult matter of selection and organization of material.

It had been originally intended to publish the Encyclopaedia in ten volumes. It was soon found, however, that this would necessitate either undue bulk or inordinately thin paper, so that it was finally decided to issue the work in fifteen volumes. The first volume, appearing now, will be followed in regular sequence at the rate of three volumes a year.

II. SCOPE, METHODS AND AIMS OF THE ENCYCLOPAEDIA. The Encyclopaedia includes, in the first place, all of the purely social sciences as they are described in the first section of the introduction. Obviously, however, it can not go so much into detail as would be possible for a series of works dealing with each separate science. Intensive treatment of this kind would be inappropriate because the real object of the Encyclopaedia is not so much to exhaust each particular subject as to bring out in the respective topics the relations of each science to all of the other relevant disciplines. Accordingly we endeavor to include all of the important topics in politics, economics, law, anthropology, sociology, penology and social work. With the technique of these subjects we obviously have to be more brief. A subject such as history is represented only to the extent that historical episodes or methods are of especial importance to the student of society.

In the case of what we have designated in the introduction as semi-social sciences—ethics, education, philosophy and psychology—it becomes necessary to select those topics of which the social aspects are acquiring increasing significance. This is still more true of what we have called the sciences with social implications, like biology and geography on the one hand, and medicine, philology and art on the other. It is, however, precisely the social aspects of these sciences which have come to the front in recent years and which it is especially important to emphasize. The proper treatment of the more or less outlying fields which have never yet been comprised under the head of social sciences, but which it now becomes necessary or at all events desirable to include, is one of the most difficult questions that has confronted the editors. Moreover the requirements of a work which seeks to coordinate the various social sciences and to indicate their relations to the general movement of thought involve the inclusion of many topics not usually treated in the special encyclopaedias.

In considering whether the Encyclopaedia should be primarily a dictionary or, as is customary in Germany, primarily a handbook, the decision has been reached that it ought to combine the characteristics of both. This means that the alphabetical method is followed, but that the arrangement is so flexible as to contain not only short articles of a few lines or paragraphs but also longer articles of ten or twenty thousand words, which will permit of thoroughgoing and original contributions. A carefully worked out system of cross references will enable the student with a special interest to cover thoroughly any part of the field.

It has also been decided to include biographies of deceased persons whose work has been significant in the various sciences in question. As this list will comprise many names hitherto unnoted, it has become necessary to make the typical biography very brief and to allow a longer treatment only in extraordinarily important cases. Even thus, the space allotted to biographies covers about one fifth of the entire contents.

For the sake of giving unity to the work it has been decided, largely at the suggestion of Dr. Goldenweiser, to equip it with an extended introduction, which appears in this first volume. This introduction, as will be noted, is arranged in two main divisions. In the first are a discussion of the meaning of the social sciences and a history of their development arranged according to periods. It is designed to exhibit as far as may be in non-controversial fashion the filiation of the social sciences and their contemporaneous relationship, as well as their dependence on the institutional and general intellectual situation. The second division of the introduction is an account of the social sciences as disciplines, in their historical development, throughout the world. In the final volume it is proposed to include a rigorously selected and annotated bibliography covering the works of primary importance in the development of the social sciences.

The special character of the Encyclopaedia has necessitated methods of approach which are not customary in works devoted to the separate sciences. The first task was to assemble a list of topics for the entire work, to form tentative

plans for the treatment of each topic and to assign it a space valuation. As a preliminary to this it was necessary to make a systematic analysis of each science or of each section of a science, such as the labor problem or government, and to organize this material into topics suitable for encyclopaedia treatment. A survey was made of all the existing reference books in order to note the topics treated, the methods of treatment, the relation to other topics and the allocation of space. On the basis of such data the staff prepared cards indicating the character of the article needed, the space assigned and the probable cross references. By comparison of the various topics we were able to determine how adequately each group covered its part of the field.

At the outset we classified our material as falling under the several sciences, economics, social psychology, etc., and tried to discover some rule of proportion for the distribution of space. In the actual presence of the material, classification and apportionment lost their definiteness and rigidity. Such a topic as wages, for example, may be classified as economic, but the treatment must involve the use of statistical, historical and sociological methods. David Hume may be accredited to philosophy, but he is very important for political science and economics. Psychological methods have to be employed widely in political, social and economic topics. When the Encyclopaedia has been completed, it is safe to say, no one will be able to determine what proportion of the total space has gone to one science, what proportion to another. We are trying to give each topic, wherever it falls, as adequate space as its importance and the nature of the material demand. This does not mean that the space assignment is indicative of the importance attached to the various subjects. Some very important topics can be treated adequately in relatively brief space, as, for example, the doctrine of sovereignty, which has been refined down to clear cut principles. Such a topic as housing, on the other hand, involves a great deal of specific material and requires much more space in relation to its absolute importance.

When a provisional list of topics within each field was completed it was circulated for comment and criticism among the editorial consultants. After noting their suggestions the staff prepared an outline of the contents of each article. This outline was then sent to the contributor, with the object not of limiting his freedom in any way but of pointing out our own conception of how the article would best fit into the general plan. The labor involved in this method of work has been prodigious, but the results, we hope, will prove correspondingly satisfactory.

In the history of encyclopaedia making, the problem of composition has been handled in three ways: the bulk of the work has been done by the staff; it has been assigned in large sections to editorial contributors who have sublet the actual composition to others; it has been distributed widely, each assignment being made directly from the central office. We have followed the last method, for two principal reasons. First, the importance of our enterprise consists not only in its result but also in the process of its making. Those who collaborate

with the staff in preparing the Encyclopaedia will join us in thinking through many of the problems of the relations of the sciences and of the evolution of social scientific ideas. The more we succeed in securing the cooperation of the whole body of social scientists, the greater the value to social science of the work of preparing the Encyclopaedia. Second, by distributing the work widely with especial attention to the interests of each contributor, we are justified in expecting each article to be executed according to the best ability of the writer.

In speaking of our contributors we desire to emphasize the international aspect of the enterprise. It is true that since the work is written in English the great mass of our contributors are English speaking and, since the inception of the project and its management are within the United States, the Encyclopaedia may in one sense be regarded as an American enterprise. It would be a great mistake, however, to consider it as merely a national product. Our policy has been in every case to select the scholar best fitted to write the particular article. Where we find an American of equal competence with a foreigner, we give him the preference, chiefly on the score of convenience. But whenever, as frequently happens, the scholar who is indisputably best qualified for that particular topic happens to be a foreigner, we assign the article to him. In order to afford them the fullest measure of opportunity we have asked our foreign contributors to write in their own language. Therefore articles by foreigners, with the rarest exceptions, have been translated by our staff, so that the contributor must be held responsible only for the content, not for the form.

In the making of the Encyclopaedia we have had three purposes in mind. In the first place it is intended to provide for the scholar a synopsis of the progress that has been made in the various fields of social science in the broadest sense of the term. The student of any particular science should not only find here factual and methodological information of value, but will also have his attention called, perhaps in a hitherto unusual way, to the relation of his own science to the other disciplines involved. What is probably more important at this time, when such rapid advance is being made in more or less untrodden paths, the Encyclopaedia may be expected to serve as an incentive to the votaries of the younger and more inchoate sciences in order to bring to fruition what is now only in germ.

Secondly, the Encyclopaedia will, it is hoped, appeal to a much more numerous class which for lack of a better term might be called the intelligentsia in the various countries. It ought to furnish an assemblage or repository of facts and principles which will subserve the interests of all those who are keeping abreast of recent investigation and accomplishment. It is for this reason that we have made every effort to keep the articles free from all scientific jargon.

Finally, amid the welter and confusion of modern thought, it has been our hope that the Encyclopaedia would constitute a center of authoritative knowledge for the creation of a sounder and more informed public opinion on the major questions which lie at the foundation of social progress and world development.

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ALIENIST	*William A. White*
ALIMONY	*William Seagle*
ALISON, ARCHIBALD	*W. H. Dawson*
ALLAN, HUGH	*H. A. Innis*
ALLAN, WILLIAM	*J. H. Richardson*
ALLEGIANCE	*Carl Joachim Friedrich*

INTRODUCTION: PART ONE

The Development of Social Thought and Institutions

I

What Are the Social Sciences?

From the very beginning of analysis and classification the field of science has been divided between physical nature and the phenomena of mind. The natural sciences have to deal with the phenomena of the universe in which our world forms so tiny a speck. By common consent, although not quite accurately, we contrast with these what are traditionally termed the mental or cultural sciences, those that deal with what takes place in man himself, in the realm of his mental life. We say "not quite accurately" because it is clearly inadmissible to assume that the mind is entirely independent of the body or that the mental processes are not in themselves subject, in part at least, to the play of natural forces.

Accepting, however, the common distinction between the natural sciences, on the one hand, and the mental or cultural sciences, on the other, it is obvious that the latter fall into two categories. The one deals with man as a separate individual, conceived of as dissociated from his fellow beings. The discipline of logic, for instance, deals with certain mental processes of the individual as a separate entity. Other sciences treat of man as a member of a group. In contrast to the separate wants, which can be satisfied by the unaided action of the individual, are wants experienced by the individual which can be satisfied only by associated or group action. These we call the common wants. Common, like separate, wants are experienced by the individual; the difference consists in the appropriate methods of satisfaction. In the one case the satisfaction of the want is obtained by unaided action; in the other by associated action. The phenomena thus related to group activities are commonly called social phenomena, and the sciences which classify and interpret such activities are the social sciences. The social sciences may thus be defined as those mental or cultural sciences which deal with the activities of the individual as a member of a group.

Since the common wants of mankind are exceedingly diversified, the group activities designed to satisfy these wants are correspondingly manifold. In the measure that these group activities have been subjected to study, the social sciences have multiplied. They may be said to fall into three classes—the purely social sciences, the semi-social sciences and the sciences with social implications.

Perhaps the earliest of the social sciences is politics, for the most important of human groups has in general been the state. The state is indeed not the earliest group, nor has it always been the most important. In the millennia which have elapsed since the advent of man, the state was a relatively late comer in the succession of human associations. When scientific discussion arose in Greece, the pre-political groups had dwindled to insignificance or had been absorbed by the all-embracing state. The chief concern of the Greek sages was accordingly politics or political science because it dealt with the *polis*, the highest form of the self-governing commonwealth.

On a somewhat lower plane, in the purview of the Greeks, stood the second of the social sciences, economics. For while politics dealt with the state—the noblest embodiment of human striving—economics had reference to the *oikos*, the household which represented man's property relations. The right ordering of the household—including in one's possessions his wife, his children and his slaves—was indeed important; but the acquisition of wealth, especially in what we should nowadays call business, seemed to the Greeks to stand on a distinctly lower level.

When in the sixteenth century the problem of the acquisition of wealth shifted from that of individual salvation, as typified by the mediaeval usury doctrine, to national strength and power, the way was prepared for the advent of modern economics. Because of these national prepossessions, de Watteville suggested the term political economy; for it was the national state which was to shape the new system of wealth relations. So strong was this feeling that even Adam Smith, despite his doubts as to the desirability of government interference, could not escape from fastening the term political economy on the discipline which he did so much to develop.

It was over a century later before the real social implications of the science were perceived, with a consequence that its leading votaries reverted to the old name given to it by the Greeks and that today we speak of economics, or sometimes of social economics. The political implications are indeed apprehended, but even more than politics itself economics is nowadays recognized as primarily a social science.

The third of the older disciplines that we trace back to the Greeks is history. From the outset history has laid claim to a field co-extensive with human interests. In the work of Herodotus history appears more closely related to the art of literature than to any science, and throughout the centuries history has maintained the union of art with science. In the hands of Thucydides history centered its interest in the state. Its spirit became essentially scientific, and its methods and results represent important contributions to political science. Among the classical and mediaeval successors of Herodotus and Thucydides, while many were essentially annalists or litterateurs seeking dramatic or epic material in past events, the function of history as an inquiry into the genesis and development of political forms and institutions was never entirely forgotten. History has never actually been "past politics" alone; but until comparatively recent times it has served the social sciences mainly through the material it afforded for the interpretation of politics. In the last century history has not only become far more rigorous in its scientific method, but it has extended its scope to the inclusion of the manifold phenomena of human life, individual and mass phenomena as well as those of formal political organization. Thus history has become an indispensable source of material for the interpretation of all manner of social processes.

The fourth of the older social disciplines is jurisprudence. Even in primitive society certain customs hardened into the rigid coercive relations that we call law. But it was long after the legal systems of relatively advanced states had developed, that law was recognized as an embodiment of justice and that jurisprudence arose. It was primarily the Romans who were led to cultivate this science because of the need of solidifying their world empire. The civil law, like the common law, yielded the chief opportunities that existed in the Middle Ages for the discussion of what were the most important relations of man to man. Next to theology law was the moving force in the creation of the mediaeval universities. It was the most significant of the cultural sciences, and its votaries far outnumbered those devoted to politics or history.

Although Rome sought through its *jus gentium* and *jus naturale*, as England later did through its system of equity, to loosen the rigidity of the early system, the accommodation of the old legal forms to the newer social habits was slow. To this extent jurisprudence was conceived as something quite independent of, and unrelated to, the other social disciplines. It is only in very recent times that a change for the better has ensued. More and more have we come to recognize the reciprocal relations of law and economics; more and more has criminal law been influenced by penology; more and more do we hear of the new sociological jurisprudence. What is taking place, in other words, is a recognition of the fact that legal relations are inextricably intertwined with the other phases of human association, and that an adequate legal system must always reflect the myriad forms of social life. Modern jurisprudence, abandoning its early claim to complete independence, has been definitely recognized as one of the social sciences.

Thus the four older disciplines—politics, economics, history and jurisprudence—have outgrown their early separatism and have increasingly realized their interpenetration. Each is gradually recognizing that it is primarily a social science and that this reciprocity enriches its own domain and deepens its own conclusions.

While the disciplines thus far considered reach back to the beginnings of scientific endeavor, there are others of more recent origin, a result of the modern curiosity as to social relations. The characteristic feature of these newer disciplines is that they arose at a time when a growing recognition of the intertwining of all the human strands in the texture of life was leading to a disappearance of separatism in the older sciences. The newer sciences have thus never presented so hard a crust of tradition to be penetrated.

The first of the newer social sciences is anthropology. A study of early man, historic and prehistoric, became possible only after the rise of some of the natural sciences like geology. The unearthing of primitive artifacts—tools, implements and ornaments—led to the discussion of their uses or social connotations; and the later progress in the study of still existing

primitive groups broadened the comprehension of all manner of early customs. Thus anthropology was ready, almost from the outset, to recognize its affiliations with the other social sciences; and while it succeeded in throwing light on early political, economic and legal conditions it received in turn from these sciences many a valuable suggestion.

The second of the newer social sciences is penology. Until the time of Beccaria and Bentham there was no development of such a science because the offender was from the earliest times deemed to be the rightful object of communal vengeance. The commission of a crime was *lèse majesté*—an infraction of the king's peace or of the community's tranquillity. It was only natural for society to revenge itself on the malefactor by putting him out of the way. Criminal law was as barbaric as the conception of vengeance. But when it was recognized that attention must be paid not only to the rights of the group but to the possibilities of the individual, the first step was taken toward a more rational theory of punishment, and the science of penology was ushered in. A much longer step in advance, however, was taken when crime was recognized as at least in part a disease. The final advance was the realization of a large degree of social responsibility for both crime and disease. Modern penology is coming into intimate relations with economic and social conditions in general. Penology as a social pathology is contributing in full measure to the understanding of a normal social life.

Sociology, the next of the newer sciences, is only three-quarters of a century old, and has scarcely come of age even today. It is the most ambitious of all the social sciences, because in a sense the most comprehensive. As its very name signifies, it is an endeavor to lay bare the foundations of all living together, to elucidate the laws which lie at the basis of social intercourse. Far deeper than the economic or the legal or the political relations are those which govern human association in general. Sociology is the social science *par excellence*. It is also the most difficult of the cultural sciences. If it is not easy correctly to appraise one's self, how much more arduous is it to know one's neighbor or to evaluate one's own reactions to him. It is no wonder that sociology is still far from the definiteness and unity that characterize the older social sciences. Nor is it surprising that broad generalizations lacking adequate verification still hold an important place in sociological theory. Nevertheless sociology remains the most important of human sciences. Only when real progress has been made in the elucidation of its laws, can we hope to attain a comprehension of life itself with its countless facets.

In the formative period in the history of sociology a wide range of social activities were for convenience subsumed under its rubrics, although not essentially related to its theories. Such, for instance, were the history and technique of charities and corrections, and the whole institutional structure built up to deal with them. What characterizes this entire field is the association of scientific inquiry with social action. The typical procedure is an investigation of a concrete situation as, for example, excessive infant mortality in a given area, followed by recommendations for remedial action, and the actual organization and administration of remedial measures.

For this whole range of activities the term social work has come into vogue, a term intended to emphasize the union of inquiry and action. Social work thus conceived holds a position analogous to that of engineering in its modern phases. Like the engineer the social worker starts with a concrete problem, and in his inquiries draws freely upon all the social sciences. So, too, in devising remedial measures he draws upon materials derived not only from the other social sciences but from the natural sciences and the arts as well. As in the engineering field, so in social work recent tendencies point to a vast extension in the future, with multiform specialization. Schools, hospitals, nurseries, housing, employment in factories or in commercial establishments, institutions for the handicapped may serve as examples of the fields in which the social worker is applying his professionalized methods of investigation and offering his professional services.

The sciences that have thus far been mentioned are the purely social sciences. Side by side with them we must put the semi-social sciences. These fall again into two categories. Some, however diverse their present-day importance, are social in origin and still retain in part a social content; others, although independent in origin, have acquired in part a social content. Starting in different ways, both groups have reached an identical position.

In the first group the most important is ethics, in a certain sense the most sublime of all sciences. For the right ordering of the moral life is the ultimate aim of human endeavor.

Ethical conduct is primarily a question of the individual, for conscience, the great regulator of conduct, is a personal matter. However, individual morality itself has been increasingly recognized as the resultant of social forces. Without the group there would have been no conception of right or wrong. The origin of morality is to be sought in the efforts of the individual to satisfy certain wants where unaided action no longer sufficed—as in the primitive elephant hunt or search for whales. As against the separate want which can be satisfied by his own action the individual experiences a common want which can be satisfied only through uniting with others. In order to accomplish the end the individual must now defer to his associates. He must cease doing certain things and must begin to do other things. Thus morality is born.

With the multiplication of the common wants new concessions to the other members of the group are continually made, until there emerge certain standards of conduct which are calculated to achieve the desired results. The concepts of right and wrong are thus social in their origin, although it is largely an unconscious process by which the criterion of the distinction is relegated to the individual himself. His conscience develops and the feeling of moral obligation becomes an essentially personal matter from the sway of which the finely attuned individual cannot free himself. The categorical imperative is the last word of individual conduct.

While the science of ethics thus deals chiefly with the problems of the individual, the increasing contact between groups of all kinds has engendered a new aspect of the moral problem, that of the conduct of groups toward each other. It is precisely in this sphere of activity, international and intranational, that the least progress has been made. Group morality is still far inferior to individual morality.

Ethics, therefore, despite the fact that it deals primarily with the individual conscience, is a social science in part, not only because social phenomena are continually creating individual reactions, but also because the contacts of social groups are responsible for the constant emergence of new moral problems. Social ethics constitutes today a not insignificant part of the moral sciences.

Analogous to ethics is education. It is perhaps true that education is not a product of the group in the same sense that individual morality is the outcome of social forces. Nevertheless education is also, to some extent at least, social in origin. While pedagogics deals with the unfolding of the individual mind and the strengthening of the individual aptitude, it has always been recognized that isolation is incompetent to achieve the desired results. The activity of the individual in the group and the reactions of the group on the individual are of signal importance. Not in vain have schools and classes been invented; not lightly to be dismissed are the educational functions of play, of song and of dance, all of which connote a social origin. Moreover we must not forget that education for the satisfactory accomplishment of the social duties is an indispensable part of all modern curricula. Finally education, in the wider sense, has nowadays come to be predicated of the group as well as of the individual, even though the technique of group education must naturally differ. Education is thus partly social in content, partly social in aim, partly social in method, and may therefore be deemed a semi-social science.

In contrast to ethics and education are those sciences which, originally separate, have acquired a social content. Philosophy, in a certain sense the forerunner of science, was long considered as something entirely independent. When we deal with the final interpretation of life, of thought and of conduct, which we call philosophy, we seem to be treading on ground unbroken by science. But in proportion as parts of the unknown are converted into the known, new sciences are detached from the all-embracing philosophy and pursue a life of their own. It was in this way that chemistry and physics arose out of the mediaeval natural philosophy, and that politics and economics were separated from moral philosophy.

The social relations of man not only constitute one of the many domains still cultivated by philosophy, but they have also acquired a new significance as a recognized factor in the formulation of philosophic doctrines. For it has become increasingly clear that not a few systems of philosophy have themselves been, if not dependent upon, at least modified by, the social and political environment. The character of the problems and the methods of solution have been, in part at least, influenced by social conditions. The consequence is that not only does social philosophy as such demand growing attention but that all philosophy lends a more willing ear to social discussion. In this sense

we may speak of philosophy as in part a social science.

In psychology the transition is more unmistakable. It affords, moreover, an admirable illustration of the way in which the metaphysical elements in philosophy give way to scientific elements. The study of the mental processes of the individual was a favorite field of philosophy and split off into an acknowledged science only when, with the aid of the newly born biology, laboratory methods were applied to the phenomena of individual sense impressions, reactions and the like. Scarcely, however, had psychology vindicated its claim to be a separate discipline than as a study of human behavior it was recognized to be in part social in character. With an ever deeper knowledge of the mechanistic and the biological foundations of life and thought, the psychologist has come to recognize that the entire process has been molded by the human as well as the natural environment, and that the concept of the isolated individual is untenable as an explanation of actual fact. Psychology is therefore becoming social in a double sense. We must interpret the individual mechanism of mental processes, in part at least, in terms of a social environment; and secondly we have to deal with the thought process of the group as such, that is, of the individual not simply as unconsciously influenced by others but as purposively cooperating with others.

In contrast to the purely social sciences as well as to the semi-social sciences, there remains the last category of sciences, some of them natural, others cultural, which have well defined and increasingly recognized social implications.

Of these the first is biology. Biology as the science of life in its genesis and evolution has indeed a far broader scope than man. But in so far as it is applied to human beings it is compelled in its dynamic aspects to deal in large measure with the conditions of associative action. Moreover some of its recent offshoots, like eugenics, have an overwhelmingly social content. Finally, although later in the field than social psychology, social biology in the sense of the science of group changes is not without its numerous acolytes.

Slightly different is geography. Geography began indeed as the study of the earth's surface, but it soon advanced to a consideration of the territorial distribution both of natural and of social phenomena. As such it is in an excellent position to analyze the interaction between man and his social heritage, on the one hand, and the natural environment, on the other. Through this description and analysis it is of great importance to the social sciences, enabling them to explain the regional peculiarities of human societies and institutions.

While biology and geography started out with no thought of man, the second group of the sciences with social implications was virtually limited from the outset to man. Although the scope of medicine has been extended to animals, it is still today overwhelmingly a human science. While, however, it necessarily deals with the health of the individual, medicine also has traversed the same double phase as some of the other cultural sciences. More and more does the physician realize that disease is in part a product of social forces. Moreover the reciprocal influence of individual and group is being increasingly attested by the newer development of social hygiene and public health. On all sides we are today confronted by the social implications of medicine.

Linguistics, in its social scientific aspects, has had a somewhat checkered career. With the development of comparative philology in the late eighteenth and early nineteenth centuries, it was widely assumed that language afforded an adequate clue to the dispersion and ultimate distribution of the races and the diffusion of institutions. Under late nineteenth century criticism the claims of the comparative philologists to authoritative interpretation of prehistoric movements of the peoples were much abated. Linguistics remains, however, an important instrument of social scientific inquiry. Judiciously employed, the history of words often sheds light on the history of institutions and modes of thought. The economist, the lawyer, the politician, the historian who neglects to arm himself with the panoply of linguistic science shows that he does not fully comprehend the possibilities of his own discipline.

Finally we come to the realm of art. It goes without saying that art as creative activity stands in contrast with science, whose objective is analysis and understanding. But artistic creation is dominated by values and these are, at least in part, of social origin. In the history of art there is much that helps to explain social institutions, and vice versa. No one who wishes to understand the operation of social laws in the modern world can afford to overlook the evidence offered by the arts.

EDWIN R. A. SELIGMAN

II

Greek Culture and Thought

I. EARLY GREEK CULTURE. The institutions of the ancient Greeks first appear, in a form tangible enough for historical consideration, in the Homeric poems. Although the picture of Greek society there presented is not a unified one, in general it may be called a tribal society in the process of evolution into more elaborate state forms. There were many tribes, each led by a king (*basileus*). The kingly office was hereditary and the kings claimed divine sanction for their rule. Nevertheless the Homeric kingship retained certain features of the more primitive type of tribal chieftainship with which the Greeks had entered the peninsula. The *basileus* was leader of the warriors of the tribe in their forays or larger military enterprises. In the field of war the military divisions were by brotherhoods and by tribes. The council of the king was still called "the council of the great-hearted elders"; but it is apparent that the more primitive stage of tribal organization, in which the council was actually composed of old men, was past. Its membership included chiefly active younger men who represented a nobility of landed gentry among the tribal warriors. In some parts of Greece the more primitive organization, in which the advisory council of the *basileus* was composed of actual elders of the tribe, persisted far into a period when most of the Greek states had long passed beyond the tribal stage. This was notably the case in Sparta, where the institution of the gerousia (composed of *gerontes*, old men over sixty years of age holding office until death) continued even into the Hellenistic period. Aristotle in his *Politics* criticized this Spartan institution from the standpoint of its life-tenure principle because of the danger arising from "intellectual old age." The duties of the council in Homeric society were still essentially primitive tribal. In war time its members formed an advisory board of strategy to the king. In times of peace it assisted him in composing disputes between tribe members. Throughout the *Iliad* and the *Odyssey* the power of the tribal kings was strictly limited by the necessity of putting all important questions before the assembly (agora) of the tribal warriors for its approval before taking action.

In three respects the original tribal ideas of the early Greeks determined the evolution of Greek political institutions throughout the period of the preeminence of the Greek city-states in the political life of the Mediterranean world. These are: (1) the idea of citizenship as a privilege inherent in the descendants of the tribe members by right of birth; (2) the nomenclature of the divisions of the citizen body into tribes (*phylai*); (3) the persistence of the conception that ultimate sovereignty reposed in the citizen, or tribal, members of the state, who delegated executive authority to selected members of their number at the meetings of the assembly.

In the Homeric epics there is a distinct artistic effort to hold fast, as far as possible, to obsolete and archaic conditions of life which were fast disappearing when the poems were attaining their final form. Despite this archaizing tendency the life as there represented was, in the main, that lived by the Greeks in the period stretching from 1000 to 800 B.C. Villages and towns were appearing everywhere. Economically the Greeks of the Homeric period carried on exchange of goods by barter. Trades had already become specialized, without any noticeable specialization of craftsmanship within a given trade. Distribution of the products of the skill of carpenter or metal worker was strictly local. Prior to the Homeric period, at the time when the Greek tribes were slowly moving downward into the Greek peninsula and fusing with the pre-Greek population, the countryside of central and southern Greece was dominated by strongholds, heavily fortified with stone and placed upon hills. These were the "Mycenaean" palaces, so well known from the excavations at Mycenae and Tiryns in the Peloponnesus. They had afforded the subject population a refuge from attack by wandering tribes on land or by pirates from the sea. As the Greeks took over the rule of the country, these fortified palaces became in some instances the centers of their tribal rule and the seats of their local governments. Where the Mycenaean

strongholds were destroyed in the struggle with the invading Greeks they nevertheless suggested to the new people the form of the simpler fortified refuges which they, in turn, established.

During the course of the two centuries (*circa* 1200–1000 B.C.) which precede the Homeric period, occurred the eastward and southeastward expansion of the Greeks which ended in the occupation of the islands of the Aegean Sea and the western coast of Asia Minor. In this expansion into areas occupied by alien peoples the early bands of Greeks were of necessity compelled to establish themselves in the walled towns which already existed there or to construct the fortified refuges with which they had already become familiar on the mainland of Greece. These are the impulses which determined the physical setting for that important political institution, the city-state (*polis*), which characterized Greek political life and determined in considerable degree the cultural development of Greece throughout the classical period of its expression.

In its use by the ancient Greeks the word *polis* developed two distinct and separate meanings. It was the physical city, a group of private dwellings and public buildings concentrated in a given area; but in its meaning of "city-state" it was a political concept, a state form containing several essential ideas. The *polis* as a state might cover a considerable area; but the center of this state and the seat of its rule lay in the physical city with its enclosing walls. It must be a "free" state externally, in the sense that it had the right to live in accordance with laws of its own making. The characteristic feature of the Greek landscape is its valleys lying like bowls, the sides of which are mountains. The opposite slopes of these mountains again form the inner rim of similar bowls on the other side. It was this peculiar geographic conformation of the Greek peninsula which determined the fact that the area of the Greek city-states was usually so restricted. Within such an area, sharply delimited by nature, the towns and villages tended to unite to form one state. This actually occurred in Attica where the three divided plains which constitute geographic Attica early united to form the city-state of Athens. It occurred similarly in Laconia where the city of Sparta united a large territorial area into a single city-state. In other plains just as sharply delimited by nature, as in Boeotia, unity of the entire area into a single *polis* could never be maintained for long because of the tendency of each town to assert its right to a free and autonomous life. In the western parts of Greece, such as Aetolia and Acarnania, there was no urban development until very late in Greek history. In these and other backward parts of Greece village life and primitive tribal organizations persisted. Throughout the history of Greece, therefore, we find side by side tribal states with village grouping and tribal states with a civic center, i.e. city-states. The desire for complete autonomy was equally characteristic of the two types.

There are no data regarding many important problems of the early history of those Greek-speaking tribes which came from the north into the Balkan peninsula and by assimilation with the native population formed the Hellenic people of ancient times. Information concerning the intermarriage of the Greek-speaking tribes with the natives is irretrievably lost, and with it all knowledge of its social results. It is clear from the Homeric poems that the economic basis of the resultant Greek life was primarily agricultural; but the Homeric Greeks were already sailing the seas. What the new conditions were which impelled them into navigation we can only guess. The fact of a colonial expansion from the Greek peninsula, extending from about 800 B.C. to 600 B.C. in its intensive period, is known from Greek tradition and from the results of that movement. In the space of these two hundred years the Greeks had rimmed with agricultural communities and trading towns the Black Sea, the Thracian coast, much of the coastal area of Italy, Sicily and southern Gaul, the eastern littoral of Spain, with occasional outlying posts on its south coast. They had established a Greek trading community at Naucratis, on one of the mouths of the Nile. At Cyrene in Libya they had a strongly entrenched colony. The causes of this colonizing activity must have been many. In the Greek peninsula the earliest colonies were presumably due to relative over-population in a land which was four-fifths mountainous and therefore restricted in its possibilities of food production. In the cities of the Asia Minor coast, industry had developed early. There the need for raw products, as well as markets, determined that the colonies sent out, notably by the city of Miletus, should be from the outset trading posts rather than agricultural communities. With the development of industries in the homeland of Greece itself, the requirements of a growing industrial production and commerce soon be-

came the dominating factor. In this connection the problem of relative importance—whether colonization determined the swing to industrial life in the home cities or the growing industrial trend at home motivated and caused colonization—is not possible of solution. The interaction of the two movements may be assumed as certain.

The results of this widespread colonizing activity were vital and constant in the material and intellectual development of the Hellenes. It gave invigorating contacts with new worlds and differing cultures to a people singularly receptive of new ideas and peculiarly gifted with ability to transmute these into modes of their own expression. It brought the Greeks a diversity of experience of men, of countries and of customs which must have affected them deeply; and it came at a fortunate time, when their own customs had not yet crystallized into set forms. There is no possibility of answering the question whether the exploits of these unknown adventurers of the sea were an expression of an intellectual restlessness and curiosity of mind already developed, or whether colonization is to be regarded as a factor in developing that exploring habit of mind which characterized Greek intellectual life for the succeeding four centuries. Greeks of the distant colonies were compelled to expend their energies in the necessary activities of a pioneering and commercial life, such as the building of cities and development of trade. Their cultural energy, as seen in the ancient temples at Selinus in Sicily, displays them as true Greeks in their architectural expression and in similar utilitarian applications of the native Greek sense of form. No outstanding names of colonists appear, however, in sculpture, painting or literature until about 500 B.C. Because of the practical requirements of colonial life and the greater cultural maturity of the eastern Mediterranean, the cities of the Aegean littoral were the first to draw the artistic and intellectual profit of the colonizing activity. After 500 B.C. and in the eastward expansion of Greek culture after Alexander, both western and eastern Hellenism of the *diaspora* came into its own in power of Greek expression.

Though the colonies of the period 800–600 were sent out by single cities, the relation of colony to mother city was distinctly not that of a dependent, or even of an inferior to a political superior. From the mother city the colonists took the sacred fire from the altar of the city god. They adopted from her their religious cults and their festivals. As a rule they established a similar political organization, using the same tribal names. Often they used the same code of laws. But the colonists lost their citizenship in the mother city which they had left and became citizens of a new city-state. They took with them as the fundamental gift of their home environment the idea of the complete independence of their new home in its statehood. The colony did, however, acknowledge a filial relationship which might well determine its orientation on the side of the mother city in case of war. It granted to the mother city an indefinite religious primacy; but insistence upon actual political leadership was rarely sought or granted.

In many aspects of their civilization the Greeks formed a single people, unified by common religious beliefs and practises, and by the use of dialects of the same language which all could understand. They were all conscious of a cultural Greek unity as against all non-Greeks. These they classified under the one comprehensive term of *barbaroi*. Despite this feeling of unity they remained a people divided into hundreds of little independent states. Complete political disassociation was the normal condition among them and the ideal desired by each. Under the stress of external dangers which affected all these separate units alike and which seemed paramount to their constant local animosities, they could unite for temporary action. The danger once removed, the separative force of the tribal state ideal always disrupted the union thus attained. Several other forces within the Greek world tended to force the centrifugal city-states into larger or smaller unified groups. One of these was imperialism, under which the more powerful of the Greek states were constantly attempting to establish themselves in a dominant position (*hegemonia*) over less powerful neighbors. Economic or other social advantages also might motivate the subordination of city-state autonomy and the formation of larger and more comprehensive political forms. In the situation thus created lay a distinctive peculiarity of the political and social background of the Greeks in antiquity. A pan-Hellenic cultural unity existed, self-recognizing and acknowledged as well by the non-Greek world; but no single political organism of any permanence could develop out of the aggregate of city-states; and no Greek nation ever developed in antiquity.

Under this situation of city-state particu-

larism developed the variegated forms of cultural activity which have made the ancient Greeks stand out as so interesting a people. It is generally conceded that their amazing intellectual activity was in great degree conditioned by the intensity of the political life engendered in the autonomous city-state units. In that it rendered difficult any continuous political effort on the part of the Greek people as a whole, city-state disunion was also the source of the outstanding weakness of the ancient Greeks.

Neither in the political theory of the Greeks nor in their political practise did the constitution of the tribal state need to be of any one type. Throughout its history as an independent state Sparta, in its outward form, remained a kingship with two kings reigning side by side. Macedon assumed its position of leadership in the Greek world in the fourth century B.C. under a monarchic form of government. Under the absolute monarchy of Alexander and his successors Hellenic civilization was spread over western Asia and Egypt, the ruling dynasties being, for the most part, descendants of the old Macedonian nobility. But it is certainly true that the typical forms of Greek culture which have been admired by posterity were generated in the autonomous and democratic city-states.

In the Athenian state the lifelong tenure of military and executive leadership held by the tribal king had completely disappeared by 683 B.C. In its place appeared a collegiate body of magistrates, the nine archons, elected by vote of the tribal assembly for a one year term. The war archon (polemarch) was commander-in-chief of the military levies of the state. In the hands of one of the archons, distinguished as *the* archon, lay the executive authority in civil administration. Proof that this process of change in the Athenian state was one of evolution, rather than revolution, lies in the retention in the hands of the magistrate called the "king archon," of the religious leadership which had formerly been an attribute of the tribal king. The kingship had, presumably, not been abolished; but the king had been shorn of his important functions. In addition to these three archons six others made up the board. These were the lawmakers (*thesmothetes*) who combined the functions of judges and overseers of the laws of the state.

The disintegration and decentralization of the functions of the tribal kingship as it appears in the Athenian state were typical of a general movement common to many of the Greek states of the time, producing similar kinds of elective magistracies. Although these varied widely in name and in the details of their functioning they show a basic similarity. Their typical features are: election by the citizen assembly, annual tenure, the collegiate form, and collegiate and individual responsibility.

Typical of the same period is the weakening of the tribal idea of government as manifested in family, clan and tribal action in the state, and the substitution in its place of corporate action of the entire citizen body. This movement may be designated as an evolution from primitive tribal ideas of government to comprehensive civic responsibility and action. Our knowledge of the codification of the customary civil and criminal law and procedure at Athens which is ascribed to Draco (*circa* 621 B.C.) is meager. It is sufficient, however, to show that the state had assumed in homicide cases the right of punishment which had formerly rested with members of the immediate family or of the brotherhood (phratry) of the victim. Certain rights in procedure and punishment were still left to the family and clan; and in criminal cases these social organisms continued to hold decisive rights of reconciliation and decision of penalty in minor particulars, even throughout the fourth century B.C. In Athens, and in other Greek states also, family and clan rights were still observed in the seventh century B.C., and were retained in obsolete form, but still as theoretical rights, into the time of Demosthenes. In this basic tribal right of family and clan groups in civil and criminal litigation lies the explanation of the strange fact that the Greek states, in the period of their development as autonomous political entities, did not provide for any public prosecuting agency representing the right of the state itself to initiate the processes of justice. This action continued to depend upon the unorganized initiative of individuals, whether of the family or clan, or any interested member of the entire group of citizens.

In the Athenian state of the seventh and sixth centuries political activity centered about the struggles of prominent clans for preeminence. A radical change in the structure of the state was made in 508 by Clisthenes, an Alcmeonid. In the place of the old system of voting under a division of the state into four primitive kin tribes, he substituted an artificial division into ten units still called tribes. Despite the retention of the name and concept of the tribe, this change denotes the passing of systematized voting on the basis of kinship and clan solidar-

ity. Membership in the ten new tribes was geographic, but under a distributive system in which three separate and non-contiguous territorial areas were combined in each so-called "tribe." In this process of redistricting the state for voting purposes, Clisthenes did not destroy the actual clans and phratries. They continued to exist, but only as religious and social organisms. Their retention was a concession, on the part of a leading political mind of that time, to the strength of the tribal feeling.

II. THE CITY-STATE DOMINATION. In the great congeries of Greek states in the fifth and fourth centuries hundreds of small polities existed, most of them with democratic governments. Where monarchies persisted, the powers of the monarch were limited by the electoral and legislative rights of the assembly of citizens. The tribal origin of Greek citizen privileges was everywhere maintained, under whatever form these states were organized. Citizenship was acquired by right of birth from citizen parents, sometimes on the paternal side alone, sometimes on both sides. Only by vote of the citizen body upon special cases could citizenship be extended to those who had not inherited it. In cases of great need the privilege might be voted to a group; but this practise was rare. As judged by the standards of the inclusive adult citizen privilege of modern democratic practise, the Greek city-states were actually organized as oligarchies. The correct approach to their understanding must, however, be from the viewpoint of the political practise of the pre-Greek cultural states of antiquity. By comparison with the absolute or the feudal monarchies of the ancient Near East the Greek experiment in government receives its sanction as political democracy and assumes its position of historical importance. The word *demokratia*, the rule of the *demos* (tribal citizen group), was coined by the Greeks; and they were the first people to establish any form of popular rule.

In their mode of operation these city-states were pure democracies, each citizen being compelled to come to a central place to cast his ballot in elections, to vote upon legislative matters of greater or lesser import or to determine questions of purely administrative routine, such as the sending of an embassy to another city-state. In the last case he must vote upon the number and membership of this embassy, upon the amount of its *per diem* expense account, and empower one of the financial boards to make the required payments. The cumbersome and time-consuming character of the machinery of pure democracy was somewhat relieved by the fact that it operated on the committee system. The council (*boulē*) was in effect a committee of the assembly, elected annually out of the citizen body (i.e. the assembly itself), which put into completed form all matters for presentation to the assembly and arranged the agenda for its fixed and special meetings. In the more populous city-states where the *boulē* was large, a small offshoot of this body, customarily the councilors of one tribe, functioned as a subcommittee, preparing rough drafts for action by the full council. At Athens, as in many other states which copied the Athenian system, this subcommittee was called a prytany. When the assembly met to take final action, the council dissolved into the assembly of citizens, as under the usual committee system.

As a result of the lack of statistics for antiquity our knowledge of the relative numerical proportion which existed between the citizen bodies of the Greek polities and their total populations is a matter of approximations. For the Athenian state, which offers the best chance for a trustworthy estimate, a recent view of the composition of the population in 431 B.C. gives the following results: male citizen body over 18 years of age about 50,000; adult male metic population about 15,000. The total free population has been estimated at about 200,000. For the total slave population 80,000 to 100,000 has been taken as a conservative guess. On this basis the entire population of Attica would necessarily be put at about 300,000 persons.

The class of metics (co-residents) in the Athenian state corresponded to a similar group found in many other Greek states, although under different class names. They were men of families originally alien to the city which had admitted them to metic status. In case the family remained in the state the classification seems to have been hereditary, except in the rare cases of advancement of metics to citizen status. Metics enjoyed for themselves and their families all the protective rights held by citizens; but they could hold none of the state offices, neither could they vote or own real property in the state. They must each have as patron some citizen to stand as surety of their good behavior. They had to pay a direct metic tax of twelve drachmas for each man, six drachmas for each unmarried woman. In other respects they

were on a footing of equality with citizens, serving the city-state in its wars and taking part in all public religious festivals except those distinctly reserved for old tribal brotherhood and clan observance. No social grouping of metics is known. The conclusion is therefore warranted that they were completely assimilated into the state organization and were dominated, like the citizens, by the idea of devotion to the all-powerful *polis*. The metics at Athens, and probably in other Greek cities, were skilled laborers, small shopkeepers and street hucksters, or were engaged in transportation services. Building accounts of the construction of the Erectheum for 409–408 B.C. give the following relation of contractors and workmen engaged: total 71, distributed as follows—slaves 16, metics 35, citizens 20. These figures may be taken as roughly typical of the general situation in the Greek urban commercial centers of that time, such as Chios, Samos, Corinth, Corcyra, Syracuse. States which had failed to move forward with the industrial spirit of the time (such as Sparta), and the non-urban, agricultural and more primitive states of western Greece, presented quite different conditions.

The acceptance of alien Greeks or of barbarians as protected subjects and the permission of continued residence granted to them were an outcome of the growth of industry and trade due, first, to the colonization movement, with its creation of distant markets demanding goods of Greek manufacture and supplying raw materials from central and northern Europe and, second, to the invention by the Lydians, in the seventh century B.C., of the use of coined money, first in electrum (natural mixture of gold and silver), then in gold and silver separately. This discovery was eagerly taken over by the Greeks. It spread rapidly in the sixth century in the handicraft industrial communities of the Aegean littoral and into the colonial markets, giving a new impulse to the industrial movement which had accompanied colonization by speeding up the processes of exchange. With the growth of the cities the complexities and exactions of administration increased. In the democratic movement of the fifth century the admission of all citizens, of whatever class, to all magistracies and administrative boards had been carried through. The time and the energies of the citizens were in some degree being consumed by the heavy task of ruling in their direct democracies, whether in electing magistrates or holding magistracies, or participating in legislative meetings or in jury service. More consuming in time and energy was the citizen obligation of military service in the constant wars of the fifth century. These were the circumstances which explain the presence of so large a number of metics at Athens and in other industrial city-states, and the preponderance of combined metic and slave labor over citizen labor as exemplified in the Erectheum building inscription. Other changes also followed upon the use of coinage. It changed the nature of wealth through the accretion in private hands of money surpluses. This in its turn hastened the passing of the collective economic system of the Greek tribal society and the political downfall of the tribal aristocracies whose wealth was based on land holding. In combination with colonization coinage tended to release latent individual energies and to transmute these into productive effort.

The same combination created an equally momentous change in the slavery system of the Greek world. In the agricultural-pastoral economy of the Homeric world field and household slaves appear, but they were relatively few in number. As the handicraft system spread in the Greek world, the Asia Minor cities first took over the industrial practise, long in operation in the Babylonian area, of using slaves in manufacturing. From the Asia Minor cities industrial slavery as an economic system spread into the Greek peninsula. With it and with the increasing wealth of individuals, household slavery progressed likewise; but this situation was prevalent only in the industrialized city-states. In the non-industrial communities where life was still largely agricultural, either free agricultural labor dominated or, as in Thessaly and Sparta, a helot system left no room for slaves.

Industrial slavery in the Greek world cannot be dismissed as a system bad in its total social and economic effects. From the humanitarian standpoint it seems not to have been so bad as the helot system, which in Sparta produced a tension between the master and serf classes resulting in a constant state of hatred and fear. One form of slave employment, that in mining and stone quarrying, was distinctly bad. Its evils lay in too long hours of work under trying working conditions. In individual cases the evils of mining slavery might have been deprecated, though the writer of the tract *On the Athenian Constitution* makes no mention of its bad features in his discussion of a reorganization of the Laurian mines and their use of

slaves. In Athens in the fifth century public opinion, if it had seriously deplored the evils of slavery in the mines, might have found expression through the medium of comedy or tragedy. The lack of such protest bespeaks the general callousness toward suffering characteristic of Greek and Roman antiquity. This callousness expressed itself in the legal provision which permitted the taking of testimony from slaves by torture.

The outlook for programs of social betterment through legislation was therefore limited within each Greek city-state. One organization in the Greek world is known to have constructed definite rules for amelioration of the savagery of war between the Greek states which were included in its membership. This was the Delphic Amphictyony. The amphictyonies were very old organizations of neighboring cities centering in some outstanding temple, and had originally been established for the better celebration of a particular worship through unified action. There were a half dozen of these in the Greek world. The functions of the representatives of the member states in the amphictyonies, who met at stated intervals in council, were to look after the protection and administration of the sacred land and other properties of the god, and to provide for the conduct of the sacred games. The representatives of the member states of the Delphic Amphictyony were required to take oath that they would not destroy any city of the amphictyony or cut it off from running water, either in war or in peace; and that, if any community adhering to the amphictyony transgressed the agreement, they would make war against that member and destroy its cities. The negative implication must be drawn from it that such practises were permissible in wars with all non-Greek peoples and with all Greek states not members of the amphictyony.

In other ways, also, the later forms of interstate relations between the different Greek communities betray their tribal origin. In primitive tribal thought the "outsider" is considered an enemy; and the Greek word for enemy actually means "outsider." But the stranger who appeared within the tribal territory and asked safe conduct and protection, with appeal to the gods, had to be accepted as a guest and friend (*xenos*). He was under the protection of the god and of the family which might have received him. When he returned to his own home a reciprocal and hereditary relation of "guest-friendship" had been established between his family and that of his protector in the foreign state. This is the situation which existed in the time of the Homeric poems. With the great increase in intercourse and movement of traders which colonization brought, the custom of "guest-friendship" between the subjects of different states became a regulated and recognized feature of Greek life. Just as in the case of the metic, the stranger temporarily domiciled in another state for trading purposes was required to have the protection of a citizen. When such guest-friendship had not been established between the family of the stranger and some citizen in the foreign state, the stranger had no legal status. To meet this situation there arose the *proxenia*, a system in which some one citizen stood "in place of guest-friend" (*pro-xenos*) to all visiting aliens from some one city-state. So Alcibiades was guest-friend to all Spartans who might come to Athens. In the fifth and fourth pre-Christian centuries the proxeny system gave way before the custom of establishing definite commercial treaties and treaties of friendship between city-states, with recognized mutual rights of freedom of visit and intercourse for the members of the two states; and in the many proxeny inscriptions which have come down to us after that time "guest-friendship" has become a mere honorary title bestowed by the city-states upon aliens who had in some way been of service to them.

In Greek social life the ideas of the maintenance and solidarity of the family, which is the basal unit in clan, tribe and state, play an important part. Aristotle in his analysis of the *polis* as physical city recognizes the ascending series of house, village, city. On the political side his series is family, tribe, state. As far back as historical research can trace the Greeks they were monogamous, and complete control of the family and household lay in the hands of the eldest of the family group. In view of the tribal basis of citizenship it lay in the interest of the Greek state to preserve each citizen family, so that the number of citizen families both for religious and for political reasons might be maintained. Out of this fact arose a peculiar provision regarding female inheritance. The inheriting daughter of a deceased family head who had left no living sons might be claimed in marriage by the next of kin. Upon the girl it was a legal obligation to marry a man of her father's blood as near to her as possible. The

paternal uncles of the girl and their sons, in a definite series, were obligated to undertake the marriage of the heiress. According to the laws of Gortyn in Crete of the sixth century B.C., greater right of selection was left to the woman. If she agreed to renounce one half of the inherited property to her male next of kin, she might herself make choice of her husband, but within the circle of the clan of which her family was a part. In the greater legal freedom of women which is to be noted in this Cretan law, there may be preserved a characteristic of the culture of the pre-Greek, or "substratum," people of Crete. The wall paintings of the Minoan palaces of Crete certainly portray a life in which the social conventions applying to women were less constraining than those prevailing in the Greek cities of the fifth and fourth centuries B.C.

A complete household, according to Aristotle, consisted of the father, wife, children and slaves. The father of the family was lord of the household. He was guardian and representative of all the family members before the state and before the gods. The oversight of the household cult lay in his hands; and he was the legal representative of wife, slaves and minor children. He had the power to determine whether a newborn child should be exposed, that is, whether it should be left either to die or to be picked up by a passer-by and raised as a slave, unless proof of free birth could be brought forward. Exposure was more frequent in the case of female infants than in that of male, both for economic reasons and for purposes of family continuation. The complete sway of the family head over his household which characterized early Greek relations was somewhat curtailed in the period from 800 to 500 B.C. as a result of the growing power which the state assumed as against the family and the clan. Such curtailment is seen in the legislation of Solon in 594 B.C. to the effect that when a male child had once been formally presented to the state by the citizen father, the father thereafter lost to the state the right of life and death. There remained to him still, however, the right to assign a minor child for adoption into another family. Moreover he had the power, in case of grave disobedience, to thrust a son out of the family organization, but only by public announcement through a herald.

The position of women in Greek society of the sixth, fifth and fourth centuries was on the whole an inferior one, both legally and socially. The explanation of this fact is to be found in the original tribal structure of the Greek state, which resulted in a heavy emphasis upon the continuation of the family and tended to make marriage an institution destined to that end, and women the necessary instruments for the maintenance of the family life and its economic fortune. Greek women had no independent status in court. Married women were represented in court by their husbands. A divorced wife or a widow who left the house of her dead husband returned immediately under the protection of the head of her own house. In case a widow remained in her husband's house she became subject to the legal representation of her eldest son, who upon his majority assumed control of his mother's property. Divorce, like marriage, took place without the need of any official intervention. The husband could bring it about by the simple process of sending his wife away; the wife could leave her husband at will, although at Athens she was legally required to announce the fact before the archon. In Sparta childlessness of a wife was sufficient ground for divorce. There were, however, many ameliorating circumstances. The dowry which a wife brought with her in marriage was protected for herself, though customarily the usufruct of it went to the husband. In case of divorce, under ordinary circumstances, it was returned to her. In the sixth century laws of Gortyn the divorced woman received, in addition, a half of what her dowry had earned. Within the household the position of the legal wife could be both honorable and important. Among the poorer citizen classes the position of women was much less subject to restricting conventions than among the well-to-do. As free economic agents the wives of the poor appear in the markets selling vegetables or engaging in similar work. Even with respect to the upper classes it must be said that the grave monuments of the classic period and the tone of the Athenian drama of the fifth century speak strongly for the assumption that the actual position held by Greek women was considerably higher than the legal recognition of them would imply.

It is not possible to formulate any general characterizations of the economic life of the Greek world for the entire period from 700 B.C. to the conquest of western Asia by Alexander. The changes which took place in this long period were great, the local diversities which appear at any given time quite marked.

Certain features, however, seem fairly definite. The trade of the Greek world after the

seventh century encompassed the entire Mediterranean littoral. It was largely sea-borne trade. Transportation of goods and travel of persons by land were much more costly than by sea. Indeed it is one of the marked and constant features of the Greek and Roman civilizations that they remained thalassic, rimming the Mediterranean Sea, and that they tended to confine their expansion, both military and cultural, to its shores and hinterlands. The two persons who departed from this tendency were Alexander the Macedonian, in his conquest of western Asia, and the Roman politician Julius Caesar, in his conquest of Gaul and in his foreshadowing of the Roman expansion into Britain. It was for this reason, and by virtue of the consequences of their break from the traditional intra-Mediterranean viewpoint, that these two lives must be regarded as pivotal points in the political and economic history of antiquity.

In the sixth century the Ionian coast of Asia Minor was the chief center of handicraft industry in the Greek world. In the fifth century the center of gravity of manufacturing and of trade had shifted to certain cities of the Greek mainland. Two causes stand out as important in this movement. The first was the long continued war of the Greek cities with the Persian Empire, which was almost constant during the years 500–448 B.C. and brought about a considerable lessening of the trade with the East by way of the Ionian cities. The second was the great expansion of the Greek markets in the western Mediterranean in the sixth century. Among the mainland cities which reaped the benefit of their central position in the Mediterranean and Black Sea areas of Greek commerce were Corinth, Aegina, Megara and, above all, Athens. Inter-Greek politics and wars of the fifth century are marked by an increased emphasis, which was thoroughly conscious of its methods and aims, upon economic relations both in war and in peace. Particularly Athens, under the leadership of Pericles, maintained its sea power partly in the interests of the commanding economic position given to it by its hegemony over the Delian League. In the fifth century Athenian ships carried the bulk of the trade in the Aegean and Black Seas. After the Persian expedition of Xerxes in 480–479 B.C. Athens made a strong bid for the trade of the West. This brought the Athenian state as a strong competitor into the sphere of trade formerly controlled by Corinth. The clash of their economic interests is one of the tangible and immediate elements in the growing feeling of hostility to Athens which brought about the Peloponnesian War. In respect to the Athenians a pamphlet of the period makes this statement: "They alone can have the riches of the entire Hellenic and non-Greek world. For if any state is rich in woods for ship building, where may it dispose of these, unless it persuades the ruler of the sea? If any state is rich in iron or copper or flax, where may it dispose of these unless it persuades the ruler of the sea? Indeed for these very reasons our ships are built." As compared with the fifth century, the fourth century was marked by a decrease of the trade of the urban centers of Greece itself in the western markets, caused by the development of local handicraft centers, especially in Italy. This constriction of the western trade sphere must be regarded as one of the contributing pressures which resulted in the invasion and conquest of the East by Alexander.

The variety of the articles of trade which came into the harbor of Athens, and some indication of the districts from which they came, are obtained from a comedy produced in the early years of the Peloponnesian War: "From Cyrene the ships bring us silphium stalks and cowhides, from the Hellespont tunny and all kinds of pickled fish, from Italy groats and ribs of beef. . . . Syracuse delivers pigs and cheese. . . . Egypt contributes sails and papyrus rolls; Syria, incense; lovely Crete, cyprus wood for the gods. In Libya ivory is to be bought. From Rhodes come raisins and dried figs that cause sweet dreams, from Euboea pears and apples, slaves from Phrygia, mercenaries from Arcadia, no-good servants and branded rascals from Pagasae [a Thessalian harbor], chestnuts and almonds from Paphlagonia. . . . Phoenicia furnishes dates and fine flour, Carthage, carpets and colored cushions." From this and many supporting sources it is clear that the industrial urban communities, of which Athens is the outstanding example, lived upon foodstuffs imported chiefly by sea. These cities exported in return the wares of their weaving, ceramics and other industries, whether produced in the homes of the craftsmen or in small hand factories. The largest manufacturing industry known to us was that of a shield maker in Athens which busied 120 workmen. This was exceptional. There must have been many small industries in Athens and the Piraeus which employed from ten to thirty workers. There was distinct specialization in industry, each shop

turning out objects of a single type such as shields, helmets, shoes, chitons or the like. Specialization of function within the craft occurs, as between potter and painter in ceramics, and cutter and sewer in sandal making. Training in craftsmanship was by the age-old apprentice system. This applies equally to training for medical practise, which was classed as a craft (*technē*), as were also sculpture and painting. A separate designation for the "professions" did not exist.

The area of Greece itself which can be successfully cultivated is about one fifth of the whole peninsula. Its soil, as compared with that of Sicily or that of the fertile valleys of western Asia Minor, is poor. With the colonization movement, as the handicraft industries grew in the Asia Minor cities and in those of Greece proper, grain was imported, constantly in greater amounts, from lower Russia, Egypt and Sicily. Small farming of grains still maintained itself in Greece, rotation of crops being by the two-year system of alternate planting and fallow; but grain production in peninsular Greece could not well stand against the competition of the more fertile terrains accessible to colonial shipping. A change to olive culture and the manufacture of olive oil for the colonial trade, as in Attica, and wine production, as in some of the Aegean Islands and on the coast of Asia Minor, brought a welcome relief in the fifth century to agricultural life in the older city-states centering about the Aegean. At the beginning of the fourth century a more scientific handling of the soil (advocated in books upon the subject), a better knowledge of the use of manures, a change by the more intelligent farmers to the three-field system of cropping, gave a renewed but temporary impetus to agriculture, even on the mainland of Greece. For the most part, however, the picture of Hellenic economic life from 600 to 300 B.C. shows a constant increase of industrial production, a gradual decrease in the importance of agriculture, a growing dependence upon grain raised by non-Greeks and increased difficulty in feeding the growing city communities. However much the political theorists might advocate the self-sufficient city-state as an ideal, its day in the progressive parts of the Greek world had passed.

Greek culture assumed its characteristic aspects in the fifth and fourth centuries. Whatever local differences may be established for the various Greek tribal groups and for the many city-states, two elements characterized the religious attitude of all the Greeks. The first was that there was no state worship, in the sense of a pan-Hellenic religion to which all Greeks must subscribe, or any single and exclusive religious worship in any one city-state. The second was that the Greeks showed an amazing degree of tolerance, along with a keen intellectual interest in all religious questions, both tolerance and interest remaining with them throughout the period of their cultural greatness. When the Jew, Saul of Tarsus, presented his new religious doctrine at Athens he could still count upon a Greek audience imbued with religious interest and tolerant to the point of willingness to debate the question of resurrection from the dead.

The Olympian hierarchy of anthropomorphic gods had been formulated by Homer and Hesiod. The Homeric epics and Hesiod's *Theogony* spread through the Greek world as a common Hellenic literary heritage. As these poems became known their gods were accepted as outstanding deities common to all Greeks; and locally one or the other of these gods became the particular deity who protected each city-state and received particular worship as the distinctive deity of that community. They paid the penalty of their origin by becoming poetized creations, with no more religious sanction than could be given in poems which never became a sacred literature and could not lay claim for their teachings to any authority of religious revelation. Religious sincerity must be granted to the city-state cults. It is expressed in the fifth century in magnificent temples, in expensive processions and above all in the dignified statues of the gods created by Phidias and other sculptors of his time. Nevertheless the devotion and worship given to these gods was paid to them as symbols of the glory and the power of the city-state, rather than as deities. Spiritually the small local deities worshiped by the common people struck much deeper. In them and in certain ecstatic worships such as Orphism, the Dionysiac worship and the Eleusinian mysteries, the fundamental religious feeling of the Greeks more truly expressed itself.

In most of the pre-Greek civilizations of western Asia had developed a caste of priests who, as holy men, stood in a closer relation than the layman to the deities whom they represented. In Egypt the Pharaohs were identified with God. The government was theocratic. In marked contrast with this stands the

Greek religious attitude. The priests of the Greek states were mere magistrates, annually elected by and out of the citizen group. The appearance of priestly states is therefore foreign to Greek politics. The Greek religions developed no dogma which each believer must accept. This helps to explain the religious tolerance which was characteristic of Hellenic society. It likewise helps to explain why the Greek religion was so quickly and vitally changed after the conquests of Alexander and the penetration of all western Asia by the Greek spirit. Lacking a common religion believed in by all the Greeks, lacking a sacred book, lacking a theological dogma, lacking the established sanctity and the corporate and vested interests of an old and powerful priesthood, the Greek *polis* religion was altered toward the spirit of the older oriental religions, in which these elements were long and deeply rooted.

In the Homeric poems all of that body of legal customs which had grown up in the Greek tribes to meet the requirements of tribal community life were referred to divine origin. Beside Zeus sat the goddess Themis as his adviser, who was responsible for divine ordinances called *themistes*. During the clarifying movement of the seventh century single lawmakers were empowered in many of the city-states to arrange the laws which were to govern the community. These men were sometimes founders of constitutions and thus originators of public law, sometimes codifiers of customary law. Although the conception of Greek law still retained something of the idea of supernatural origin, a new term arose to express the idea of "justice," the body of rights which appertained to the individual on the basis of the *themis*. This included both natural law (the unchanging laws expressed in the will of the gods) and man-made rules of the social group. These latter rules, originating from men and subject to change by them, could not retain the ideas of changelessness and inviolability. Nevertheless they expressed the sense of "justice" as the will of the tribal citizen body, namely the *polis*. They arose during a period of development from communistic tribal ownership to that of private ownership of property, which attended the change from tribal to *polis* organization. Formulated in a period also marked by the struggle of the lower citizen classes for the right to hold the magistracies, they tend to express restraints imposed upon the *polis* magistrates in their application of the law to the conduct of the citizen body. Just as the Homeric Greeks personified Themis as a goddess, so the Greeks of the sixth century personified the abstract idea of the laws by which the *polis* was ruled as *nomos* (the law) which incorporated both the idea of the state and the idea of justice for which the state stood.

The complete sovereignty of the laws of the *polis* was expressed about 475 B.C. by the Boeotian poet Pindar in the phrase: "Law (*nomos*) is king over all things." The necessary subjection of the individual to *polis* law and the possibility of a conflict of its dictates with the unwritten custom of divine law gave to Sophocles the artistic motif of his drama, the *Antigone*, written and produced in the middle of the fifth century. The feeling of complete submission to the state and its *nomos* was also expressed upon the tombstone of the Spartan citizens who met their death at Thermopylae with Leonidas in 480 B.C. Though the sacrifice they made was futile as a military measure, it was necessary and unquestioned because it was in "obedience to the orders" of the Lacedaemonians, that is, of the Spartan *polis*. In acceptance of this view of *nomos* as the expressed will of the state, conceived as an ethical entity working to the end of justice, in 399 B.C. Socrates met his death with calmness, despite a personal conviction of guiltlessness. The idea of the *polis* expressed by Pericles in his funeral oration delivered in 431 B.C. (Thucy. II 34–46) has the same ethical content; and in the political teaching of Plato and Aristotle the state is the highest instrument and expression of justice, demanding and setting the environment for the individual morality of its citizens. It is true that only the outstanding thinkers of the late fifth and fourth centuries attained to and held this idea of law and statehood. The sophistic teaching of the individual as the source and norm of ethical standards helped to undermine its validity; and in the period of the completion of the democracy the voice of the *demos*, the concrete group of individual citizens, became dominant over the idea of the abstract "law" as ruler.

Among the separatistic city-states of Greece no general body of Greek law could develop, but a marked tendency is noticeable in the fifth and fourth centuries toward standardization in Greek law through the acceptance of the law codes of the mother cities by the colonies and the practise of many city-states of adopting special features of the laws of some one city. In the Delian League of the fifth century the

code of private law of Athens became the model for many of the cities of the league. A recently discovered papyrus has shown that even in Alexandria in Egypt, founded in 332 B.C., features of the Solonian constitution reappeared in a body of laws applying strictly to the city of Alexandria. Modern jurists are therefore justified in dealing with the city-state codes under the comprehensive term of "Greek law," as embodying certain principles generally accepted by the Greek world. In the period after Alexander the effects of the native law, and the process of amalgamation of Greek legal ideas with those long rooted in the countries then ruled by Macedonian dynasties, resulted in a differentiation of the codes into Syrian-Greek in the Seleucid Empire and Egyptian-Greek under the Ptolemies. The commercial city of Rhodes, however, developed in the Hellenistic period a code of the law of the sea and interstate commerce which was generally recognized throughout the Greek world.

The pan-Hellenic feeling of cultural unity never developed sufficient strength to produce either a pan-Greek nationalism or any great degree of pan-Greek patriotism. The fear of a common loss of freedom might at times unite a large part of the Greek world in defense of interests shared by all; but such unified action was always sporadic and temporary and the feeling of unity which a great crisis might have evoked was quickly dissipated when the danger was removed. The only patriotism which the Greek of the classic period felt or expressed was that toward his city-state. This, however, was intense and absorbing. It finds its highest expression in the words ascribed by Thucydides to Pericles in his oration over the Athenian soldiers who died in the year 431 B.C.: "Such is the state for which these soldiers have died in battle, in consequence of their noble decision not to be bereft of her; and for those of us who survive it is fitting to endure any labor in her service. For this reason I have enlarged upon the character of our state, in order to make clear that our struggle is of far greater moment than the contest imposed upon those who do not share in equal degree in such an inheritance." In the Periclean funeral oration the military glory of Athens is as clearly grounded in her victories over Greek enemies as in those over the hereditary non-Greek enemy, Persia. The Athenian teacher Isocrates in 380 B.C. wrote a pamphlet calling for unity of all the Greeks in a common war against Persia. There are two essential elements in his discourse: the first, that such a war was the best way to meet an economic-social situation in the Greek world; the second, that *his* state, Athens, had a more legitimate claim to the leadership in such a war than her rival Sparta. Pan-Greek patriotism was not involved. The young Macedonian king, Alexander, inherited from his father a league of the Greeks with the war against Persia as its first objective, and this was formulated as a pan-Greek ideal. The Greeks supported it only grudgingly and through force. Before his death Alexander himself seemed to have substituted in its place a new conception, that of Greeks and "barbarians" as coworkers in a state the culture of which was to be grounded upon Greek elements. Throughout the period of the preeminence of the city-state a pan-Hellenic cultural consciousness existed in the Greek world; but it was a feeling not comparable to modern nationalism. It lacked the element of religious unity found in modern nationalism; it lacked entirely the modern romantic element of love of country in the sense of the land and its scenery. Its devotion was civic. Its love was for the city-state as a political form and for the physical city through which it functioned.

Emphasis upon "individualism" as a marked characteristic of ancient Greek life has become almost canonical in the discussions of many of its best equipped exponents, with a few dissentient opinions. Greek culture must be depicted as highly diversified, but with a uniform background. As viewed from the standpoint of the city-states as corporate units, diversities must be conceded which may be classed as individualizing. In the funeral oration delivered by Pericles in 431 B.C. he makes claim to an individual character and to superiorities of the Athenians and of Athens as against other Greek communities. The comparison with Sparta, which was in his mind, does indeed justify the recognition of two entirely different group ideals as to the place of the state and of its citizens in the economic and political life of the time.

In the sense of a theory of the extreme rights of the individual citizen as opposed to the state, the term "individualistic" cannot fairly be applied to the Greeks of the fifth and fourth centuries. The Greeks did not at any time conceive the legal idea of a group of unassailable rights inherent in each personality, apart from the state. The only freedom possessed by each citizen was political freedom, which came to

him through his participation in the freedom of the state. Preeminently in the fifth century, and still in marked degree in the fourth, the Greek citizen was willing to subordinate himself and his interests to the needs of the *polis*, whether this subordination was to law (*nomos*) or to the group action of the citizens as the *demos*. As a striking example of this the liturgies may be cited. In undertaking the liturgies the wealthier citizens voluntarily took over the expense of maintaining certain public services such as the fitting out of a war vessel for the state, supplying the gymnasia with sand and oil, or training and fitting out the choruses in the dramatic productions at the religious festivals. In the Greek political theory this characteristic attitude toward the relation of the individual to the state is apparent. Within the limits of this subordination of the individual to the idea of the state a great measure of personal freedom, both in thought and in action, was permitted the individual in most of the Greek communities, whether citizen, metic or slave. In Sparta, however, the peculiar conditions of a state organized on the lines of a military body demanded a greater measure of state control as against the individual. But even in the Spartan state and in the city-states of Crete, where a degree of communistic action was developed which differentiated these political organisms from the majority of the Greek communities, the importance of outstanding individuals in determining the course of the political and cultural history of the social group is always evident. The conditions of Greek political and social life in general were such as to give to individuals of marked capacity in all lines a wide scope of expression for these capacities. It is significant that few of the names of the architects of the old Pharaonic temples have come down to posterity. Imhotep, the architect of the *mastaba* of the first dynasty of Pharaoh Zoser, a thoroughly historical individual known to us by a contemporary seated statue, soon lost his human individuality in a divinity which in the Hellenistic period equated him with the Greek god of healing, Asclepius. But scores of names of Greek architects, sculptors, painters, musicians and authors have become fixed in the Greek cultural tradition, and their names and works have been handed down with full appreciation of the particular contribution of each to the technique of his craft. Even in the sixth century this importance of the individual is emphasized in the case of potters and vase painters, the names of both artists often appearing upon the vase, as on the sixth century François vase in Florence—"Ergotimus made me. Clitias painted me." It is seen in the proud words which opened the *Descriptive Geography* of Hecataeus (*circa* 500 B.C.): "Hecataeus of Miletus speaks thus; I write these things as they seem to me to be true. For the stories of the Greeks are of many kinds and ridiculous, as it seems to me." It is this trait—recognition of the value of the social effort or opinion of the individual of whatever social, political or economic rank he might be—which particularly distinguishes the Greek social experience from that of the peoples who preceded them, and in lesser degree from that of the Romans who followed.

This personal freedom of thought and action is based on the practise, if not the theory, of laissez faire in economic and social matters on the part of the *polis* respecting its citizens; on the general lack of pressure of theological dogma on the expression of personal conviction; on a relatively high state of prosperity in the cities engaged in handicraft production in an expanding world of commerce; on the fact that there was no marked social class with exceptional privileges in the industrial cities of this type and that there were marked equality and fluidity of social status, though not of political status, between the classes of slaves, alien residents (metics) and citizens. Equally favorable social conditions did not obtain, however, in the agricultural communities, such as Sparta and Thessaly, which were founded upon the system of exploited serf labor. It was the good fortune of the Greeks that these conditions existed first for them, among all the peoples that have taken part in the development of the civilizations of western Asia and of Europe. It was their merit that they produced a surprising number of able individuals at this particular time. In many fields they were the first to express in written and lasting form things that other individuals may have thought in earlier times. Their enthusiasm, their passion of earnestness, their optimism as to the validity of their reasoned conclusions, are grounded in their priority in expression. It is these qualities of Greek cultural expression which have produced the romantic attitude toward the "joyousness" and the "eternal youthfulness" of the Hellenes of the classic period. The contrary observation that other qualities have dominated the thought of individual Greeks has given rise to an opposed theory, that of the essential "melan-

cholý" and "pessimism" of the Greeks. Both views are equally right and wrong; and both have tended to be panegyric in their modern expression.

The claim may successfully be supported for the Greeks that, as distinguished from their predecessors, they introduced into the world the scientific habit of mind. The pre-Greek peoples made many keen observations, and assembled a considerable body of empirical knowledge. They also applied this knowledge to the solution of the practical difficulties which confronted them. Individuals among them likewise approached their problems with marked powers of deduction and an ideal of systematization. Notable among such individual examples is the work of the Egyptian doctor who wrote the famous Smith medical papyrus (in the collection of the New York Historical Society) in the early part of the second millennium B.C. He made the heart the center of the human system, knew the places where the pulse beat could best be taken, organized and wrote down his observations and advice. But this is a single instance in the mass of magical formulae which predominate in the practise of Egyptian medicine. Greek physicians were the first to systematize medical knowledge, to insist that all diseases arise from natural causes, and to establish by observation of numerous recorded cases the probable course of a recognized sickness. Thus they formulated medicine as an empirical science. The Babylonians had assembled a considerable body of astronomical observations; but this knowledge was based on the notion that the gods determinedne refate of human beings through the stars, and it was used in the service of astrology. The Greeks systematized their knowledge of the movements of the heavenly bodies and founded the science of astronomy. Where the Babylonians and Egyptians had chronicled consecutive historical events, the Greeks established history as a discipline dealing with groups of related events through the application of critical and recognized methods of approach. In place of the empirical mathematical knowledge which the Egyptians used, the Greeks made a science of mathematics by establishing its laws.

The first appearance of this tendency toward free inquiry and investigation, detached from all theological teaching, occurred among the Ionian cities of Asia Minor in the sixth century. Contemporary with this movement there appeared in the mainland of Greece a revival and deepening of religious feeling which was unconnected with the public worship of the city-state gods, was peasant in origin and open only to the initiated few. This new religious current is shown in the rise of the Orphic and Eleusinian mysteries and the Dionysiac worship. All of these secret cults were characterized by their promise of a future life to the initiate, by their evangelistic character, by the idea of rebirth through the practise of rites of purification, by the belief in the personal approach of men to the gods in moments of religious ecstasy. Diverging sharply in their whole psychological and mental attitude from the tentative science of the Ionian school of thinkers, their ideas were nevertheless drawn into the movement toward scientific inquiry in the philosophic schools of Pythagoras and Plato. Well into the Christian era the Greek mysteries played an important role in the religious experience of the Greco-Roman world. The Eleusinian initiates had no congregation meetings and formed no social structure. Once initiated they scattered and were absorbed into their own state organizations, carrying with them the spiritual revelation which they had received. The Orphic worshippers, on the other hand, formed a definite social body, observing certain rules of abstention which differentiated them from their fellow beings. But from the societal point of view all the mysteries have one point of common interest and importance. All of them cut through the existing political, clan and family classifications of the time by admitting to initiation citizens, metics or slaves without differentiation.

The first evidence of the new Greek attitude toward the investigation of natural phenomena appeared when Thales of Miletus forecast an eclipse of the sun in 585 B.C. He was followed by a group of men who displayed the same interest in the fundamental problems of nature, and pursued the same general method of inquiry, with all its strength and also its inherent weakness: Anaximander and Anaximenes of Miletus, Pythagoras of Samos, Parmenides of Elea (in Italy), Empedocles of Acragas (in Sicily), Anaxagoras of Clazomenae (in Asia Minor) and Leucippus of Miletus (later of Elea). The insistent problems which they all attacked were these: What is the beginning and source (in Greek the *archē*) of all appearances in nature? What exactly is the form of the universe; and how did it come to assume its present form? In the varying answers which

they gave to these questions they substituted, in place of the mythological cosmology of the Greek religion, cosmic formulae based upon a considerable amount of observation and deduction and on free speculation. Their results agreed in the belief that the "beginning" was one material. They further agreed that this primary source, in whatever form it might appear to the senses, was material. To the earlier thinkers of the group this material was a sentient and dynamic thing, whether water (Thales), an undefinable stuff (the "unlimited" material of Anaximander), air, which by an inherent power of condensation and rarefaction formed the many appearances of nature (Anaximenes), or the sentient "fire" of Heraclitus, which was the god Zeus himself and was itself subject to the universal law of constant change. In the fifth century Anaxagoras was driven to separate sentient force from matter; this force he designated as mind (*nous*), an unemotional intelligence utterly disinterested except in the establishment of order in the universe. In opposition to this, which was potentially a dualistic theory, arose in the middle of the fifth century the school of the atomists, of which Leucippus was the originator, Democritus of Abdera and Diogenes of Apollonia his followers. Atoms moving about in empty space have, by an inward necessity, formed the universe as it is. This atomic theory was a purely materialistic explanation of nature, destined in the Hellenistic and Roman periods to furnish the cosmological foundation upon which Epicurus developed his philosophic doctrine and Lucretius his attempt to free the human mind from the specters of fear.

Out of this Ionian speculative use of intelligence came by divergent lines of development the philosophic systems of the followers of Socrates and an independent movement of strictly scientific thought. The cosmological speculation emanating from Ionia spread quickly, as the names and nativities show, to Italy and Sicily. In this fact are seen the cultural unity of the Hellenic world and the degree of mental intercourse then possible between men of higher intelligence. The movement is not characterized by group thinking. It came through individuals. Pythagoras alone established an actual "school," in the sense of a continuing group. In its replacement, by individual speculation, of the group prepossessions represented in the older Greek religious cosmology, Ionian natural philosophy displayed quite clearly its scientific character.

Conditions of life as they existed for the Greeks of the fifth century B.C. favored the popularization of the new intellectual movements which had begun in the sixth century. Technical methods in production had become more refined. In all fields, whether economic, artistic or intellectual, the rapid flow of this movement into all parts of the Greek world is apparent. The tendency to use literature as a means of political propaganda or public instruction, which can be noted in the verses of Solon of Athens (594 B.C.), expanded enormously. Crude processional choruses had long been produced by local talent among the peasantry of Attica, and the Dorian communities at the harvest festivals, in which the participants, dressed as goats or satyrs, delighted their neighbors with rustic and ribald humor. Under the hands of the Athenian authors Aeschylus, Sophocles and Euripides, these impulses toward dramatic presentation of some episode in the life of the god Dionysus were refined into a new literary form, the perfected stage drama, called from its origin *tragoedia* (goat song). Its importance in this discussion lies in the fact that the stage drama became an educative force of considerable importance in Greek life and a valuable medium for the expression of public opinion. Often the dramatists included in their plays political comment on the questions of the day as they were being discussed in the streets and markets of the city of Athens. The development of drama was, at the outset, purely Athenian; but the reproduction of successful plays in other cities and their publication for reading purposes gave to the authors a wide scope of influence over the Greek world at large. Comedy, which also developed at Athens, became a medium of violent diatribe and ridicule of political personages, of intellectual movements, of political methods and programs.

The fact that official documents and laws were painted on whitened wooden panels or were cut on stone slabs, and the output of books on many topics, necessitate the assumption of widespread literacy in the Greek city-state organizations of the sixth and fifth centuries. It is therefore surprising to find that the city-states did not interest themselves in mental training or take any responsibility for it, even in the case of their future citizens. There were no public schools. For those who could pay the fees there were private schools, taking care of some hundred and twenty pupils at

times, as we definitely know in one instance. The only compulsion that rested upon a citizen to prepare a son for his place in the state lay in public opinion, feebly supported by a law, ascribed to Solon, that a son who had not been provided with an education was not under obligation of support when his father became old. The subjects of instruction were reading and writing and the learning by rote of passages from the poets, especially from Homer. Beyond this came the playing of a musical instrument of the harp or the flageolet type. In the field of bodily training, since every citizen's son was a potential soldier, the state provided definite open spaces, the gymnasium and the *palaestra* (wrestling ground), and trainers in wrestling, running and jumping, with an overseer of general conduct. Equipment was furnished by the state through the semi-voluntary contribution called the gymnasial liturgy. Specialized training for the trades (*technai*) was obtained through the apprentice system, by contract between father or guardian of a free boy or owner of a slave, and a master craftsman. This system prevailed also in those trades which we differentiate as professions. The practising physician, for example, was a teacher of his *technē* at a stipulated fee.

Nowhere, perhaps, is the effect of the scientific attitude already established in the speculative physical philosophies of the Ionians so clearly seen as in Greek medicine. The practise of treating disease had been carried by the pre-Greek peoples to a fair degree of effectiveness. The claim that the Greeks were the founders of medicine rests upon the fact that they systematized it upon a basis of accumulated and classified observations of the phenomena of disease and made of it a profession with an established social attitude and a code of ethical behavior. Two "schools," that of Cnidos in lower Asia Minor and that of the island of Cos, had already differentiated themselves in the fifth century upon the basis of method of treatment. Of the work of the Cnidian school we have little left except in the criticisms of their opponents of the Coan school. From the Coan school there has come down a considerable body of medical literature, assembled in the early third century by Menon, a pupil of Aristotle. The Cnidian school was said to overemphasize the value of diagnosis and treatment. The Coan followers laid stress upon correct prognosis and the psychological result of the confidence to be engendered thereby in the patient. Something of the scientific character of Greek medicine at the end of the fifth century and the effect of its methods upon the educated laymen may be seen in the description of the plague which devastated Athens from 430 to 426 B.C. as it is given by the historian Thucydides (II 47–58). He begins with an account of the approach of the disease, from Egypt via Syria to Athens. He then states his purpose in describing the course of the sickness. This was to enable people to know about it in case it should again occur; and he gives, as the basis of his exact knowledge, the fact that he had contracted it and had observed the cases of many others who had had it. The medical description of the disease is accurate and detailed. Even more significant is his report of the effect of this disaster, which the medical practise of the time was powerless to combat, upon the mass psychology of the Athenians. "No one was eager to endure sacrifice to gain that thing called good repute, because it was uncertain that one would live to attain it. Whatever was pleasurable for the moment, whatever contributed to this end of pleasure, was accepted as noble and useful. Neither fear of the gods nor laws of men served to exercise restraint, because it was assumed to be a matter of indifference whether one respected them or not, since all men alike were subject to destruction" (Thuc. II 53).

The outstanding figure in early Greek medicine, and one of the great figures in the entire history of medicine, was Hippocrates of Cos, whose best years fell about 400 to 375 B.C. Historical criticism has not been able to take from him the honor of authorship of the Hippocratic oath (*Hippocratic Corpus* IV 628–33 L) which has fixed the ethical standards of the profession since his day. Under the methods of Hippocrates cases were carefully recorded and described. Nowhere is the struggle against the prevalence of superstitious formulae in medicine more clearly stated than in a pamphlet, *On the Sacred Disease*, found among the writings of Hippocrates, but probably from the hand of a clear-headed contemporary. He combatted a tendency among the conventional physicians to refuse to handle epilepsy cases as being of divine origin and beyond the healing power of human skill. Like all other sicknesses, he contended, this also had a natural cause and explanation. Men ascribe anything they do not understand to the gods. If epilepsy is a sacred sickness, so also are the recurrent fevers and sleep walking, since the practitioner is equally unable

to explain them. The author's contention was that all natural phenomena must be approached in the same way. His scorn of superstition mongers, miracle workers, purifiers and other medical impostors was vigorously expressed. Possibly by the same writer is a pamphlet (also handed down among the works of Hippocrates), *On Airs, Waters, Places*, which is characterized by unusual powers of observation and breadth of learning. From personal observations made in a wide range of travels the author of this pamphlet constructed a theory of the effects of climate and soils upon the pigmentation, physical size and spiritual characteristics of men in different regions. He was convinced that acquired physical characteristics were heritable. He believed in environmental influences—that the superiority of the European dweller over the Asiatic was due to the greater harshness of climate in Europe and the greater variability of heat and cold, rain and sunshine. Political factors also, he said, play a part in this result. Wherever monarchy exists there necessarily is slavery. For the souls of people are enslaved under monarchic rule, and they are unwilling to incur danger for the sake of another's power. But the self-ruling peoples, who fight in their own interests, are willing to undergo dangers. He further observed that in Asia wherever men, either Greeks or non-Greeks, are not under autocratic rule but are self-ruling, they are more warlike than their neighbors.

In the medical *technē*, as in other trades, the apprentice system continued to supply the need for specialized and exact knowledge. Here the old Greek family grouping and solidarity continued to display its social usefulness. The father of Hippocrates was a member of the Asclepiad priesthood at Cos. The sons of Hippocrates and his son-in-law followed the profession. Tradition reports that his grandsons and great-grandsons were also physicians of the Coan school. In the fourth century there is a noteworthy movement toward separation of the craft of healing from its traditional connection with the medical experience of the temples of the healing gods and the practise of their priests. Thousands of archaeological finds of dedicatory offerings to the healing powers of the gods made by grateful patients attest, nevertheless, the continuation throughout antiquity of non-rational medical treatment, chiefly by magical cures through healing sleep in the temples of the gods. The important elements in the history of Greek medicine are the differentiation made between temple treatment and a rationalized medical practise, the development of a craft knowledge and ethical standards by individuals, and the continuation of both knowledge and standards through private instruction by master physicians at definite places.

In the last quarter of the fifth century a group of individuals appeared as traveling teachers of the higher branches of knowledge to all who might have the interest and the money required in payment for their instruction. These were the sophists, professors of knowledge, as opposed to *philosophoi*, which means, literally, "lovers of knowledge." Three circumstances explain their appearance: the lack of public instruction; the greater demands imposed by the growing refinement of technique in all lines; and the public desire to share in the results of the intellectual awakening which was represented in the discussions of the natural philosophers. The prominent earlier sophists were Gorgias of Sicilian Leontini, Protagoras of Abdera in Thrace, Prodicus of the Aegean island Ceos, and Hippias of Elis in the Peloponnesus. Professing the ability to give a complete education in all branches of learning, their aim was to prepare men for practical life, particularly for successful activity in the political life of the time. The growth of democracy, the lack of any provision for a public prosecutor in the legal systems of the time and the want of a recognized legal profession demanded of the individual a knowledge of composition, of argumentation and of methodical and convincing presentation of facts. In meeting these demands the sophists founded the study of dialectics. In the study of language, particularly in its analysis, in the isolation of the parts of speech, and in the rejection of the speculative thought of the physical philosophers, the sophists deserve consideration as a group who furthered the development of the Greek sciences.

The sophists denied the possibility of absolute knowledge. Man is the measure of all things, of the existence of being or the non-existence of non-being. This enunciation of the subjectivity of all cognition was made by Protagoras. Good and evil, as the sophists in general taught, are purely relative ideas; and Protagoras stated that one might set up two propositions exactly opposed and defend each with equal justification. The sophists held that as it could not be known whether or not there

were gods, the "divine" laws in which Pindar, Aeschylus and Sophocles believed had no validity. Critias of Athens asserted that the gods were nothing more than a creation of some clever politician to restrain men from crime. The laws of states, likewise, were mere devices of social utility. Out of this assertion the more radical followers of sophism drew the conclusion that the right of the strong to rule and exploit the weak was a law of nature. Protagoras, however, found a rational ethical basis for individuals and states in the necessities of human association. He asserted (in Plato's dialogue *Protagoras*) that, without a portion of justice and a sense of shame in every man, human society could not hold together. In 443 B.C. Pericles assigned to Protagoras the task of working out the constitution for the colony of Thurii in southern Italy, then to be established. From this circumstance it is clear that the sophists were accredited in their time with something more than the mere academic knowledge of political science necessary for lecture purposes.

The intellectual significance of Socrates lies in the fact that he gave a new impulse to Greek thought out of the impasse into which it had been led by the sophistic teaching of the subjectivity of all human judgments. Socrates was convinced that truth is attainable. The judgments of individuals differ greatly as to the concept of "good," of "bad," of "beautiful," of "ugly." These differences have arisen from lack of clarity in thinking. By methodical analysis through discussion, by isolation of the essential elements of each concept, by agreement upon these essentials, the underlying truth of each judgment might be attained. Concepts thus attained Socrates held to be valid, and eternally so. Knowledge, therefore, could be both learned and taught. Through the definition of the "good" as that which is good for the person (advantageous in the best sense), Socrates came to the conclusion that goodness is the same thing as correct knowledge. The task of leading his fellow citizens along the pathway of correct thinking, particularly in its application to political activity, Socrates conceived as a mission imposed upon him by an irresistible inner impulse. He stood upon the same ground as the sophists in regarding the studies of the physical philosophers as useless, in his belief that the human being should be the sole object of investigation, and in the practical aim of educating the citizens of the state for political life. He differed from the sophists completely in the method by which he attempted to reach this end, through discussion rather than by *ex cathedra* pronouncement of opinions. The "Socratic method" was of considerable importance, therefore, in furthering the development of thought. Socrates wrote nothing. He developed no philosophic system. It is through his pupils that he became the founder of Greek philosophy in its broader sense, as a metaphysical system freed from the limitation to cosmological questions which had characterized the earlier Ionian philosophy. Through his attempt to educate his fellow Athenians toward true thinking, therefore toward virtue and efficient citizenship, he injected the problem of ethics into political theory and thus into philosophy.

In the Iranian dualistic religious teaching the powers of good and evil strive in the physical world for mastery; and this strife is waged also in the heart of man. From Iranian Zoroastrianism this doctrine was taken over into Christianity and so dominates modern popular moralism. To approach the social conduct of the ancient Greeks with this preconception would lead not to a correct understanding of their attitude, but rather to a blind condemnation of practises which Greek society did not condemn and which Greek law, in many instances, publicly recognized. The entire problem of sexual purity, for example, which dominates Christian morality, fell away from their ken. "Purity of heart," in its sexual application, had no meaning to them. They never recognized thought in itself as evil. In precept and practise, beginning with the traditional doctrines of the semi-historical Seven Wise Men of the seventh and sixth centuries, the ideals were temperance, self-control, balance, the *mēden agan* (nothing in excess) inscribed on one of the temples at Delphi. In the actual Greek life of Plato's day sexual relations outside of the institution of marriage were permitted and expected. Marriage, according to Demosthenes, is an institution for producing legitimate children. Concubinage was expected, the offspring of concubines legally acknowledged and legally protected in their freedom if the mother were free. In Greek society of the fifth and fourth centuries homosexualism was frankly recognized.

Equally alien to modern Christianized morality is the Greek practise of infant exposure. In Sparta the right of the ephors to determine whether a child should be permitted to live or

should be exposed, was a usurpation on the part of the state of the primitive family right of the father. At Athens, as in other Greek city-states, the old right of life and death held by the head of the family was maintained with respect to the newborn infant until diminishing population, combined with the Christian ideal of the sanctity of human life, did away with the custom of exposure.

Accepting the method of Socrates and his belief that absolute judgments were possible, his pupil Plato, fundamentally a visionary and a great artist, attempted an adjustment of the difficulty which seemed inherent in the Socratic theory of cognition because of the illusory nature of sense perceptions. By a transcendentalizing process and with captivating imagery he established a world of super-concepts, superimposed upon this world of concepts. To him the realm of super-concepts was the realm of actualities (*ideai*, "forms"). The material world contained mere quasi-truths, reflections of the everlasting realities, impaired and distorted by the bodily senses. By adding the Pythagorean doctrine of pre-existence he could assume that those who had in higher degree the finer qualities of soul retained a dim memory of the actualities which they had seen in a pre-existent state. By intuition, by contemplation of these actual things, rather than by processes of reasoning, they might reawaken the memory of the *ideai*. Only such persons, true philosophers who had attained to self-knowledge, were truly competent to rule. In one of the letters ascribed to Plato (*Ep.* VII 326 a–b) a passage occurs which explains the political orientation of his philosophy. By the conditions of his birth and material welfare, an active political career in the Athenian state would have seemed the natural outlet for Plato's energies. At first he had been eager to take up active political life, but he soon perceived that all the city-states were badly governed and that the voting of good laws, under the prevailing conditions, was a matter of chance. He was driven to the conclusion that justice for the state and for individuals depended upon the study of philosophy. Human ills would not cease, he thought, until either philosophers who were trained to think straight and truly should come to hold the magistracies, or until the magistrates should become true philosophers by the interposition of some divine agency.

Out of this belief in the possibility of applying philosophy to the government of society Greek philosophy assumed its complete form under the shaping hands of Plato and his pupil Aristotle of Stagira. The Academy founded by Plato in the belief that through philosophic study true statesmen might be trained, accomplished little, however, toward this end. The importance of the Academy and of the Lyceum later established at Athens by Aristotle is to be gauged by their history as organized centers of intellectual life in antiquity. In this respect their influence endured for a thousand years until, by order of the Emperor Justinian in 529 A.D., the philosophic schools at Athens were permanently closed.

Political thought was, from the outset, a fundamental part of Greek philosophy. Socrates had laid the foundation for the development of ethics. In his discussion of the problem of the good citizen he had introduced the idea of man as an ethical being. Plato's contribution to this branch of philosophy was the application of the criterion of ethical value to the social group, the placing of the good citizen in a state organization the aim of which was justice. Ethics thereby received its orientation in the general field of philosophy as a branch of political science; and political theory, which received both a keener analysis and a sharper and more scientific definition through Aristotle, acquired its characteristic ancient stamp as a systematization of social ethics. The practise of politics has constantly and widely deviated from this original philosophic standard. But in its theoretical treatment, whether the state be regarded as the end and embodiment of social morality or merely as a means of attaining certain practical objects such as public security, public order and general material welfare, political science has never departed completely from the Platonic conception of it as political philosophy.

Fundamentally Aristotle had a scientific mind. His tremendous powers were best displayed in his classification of the fields of knowledge embraced within the comprehensive designation of philosophy, in the establishment of scientific terminology, in the analysis of methods of approach, in the collection and arrangement of empirical facts, and in the hypotheses which he established on the basis of observed phenomena. In his metaphysics he remained under the influence of Plato's teaching of the "true forms." But it is characteristic of his mind that he sought these "realities" not in a supernatural, transcendental world with no bridge existing between it and the material world, as Plato had

done. These "realities" existed, for him, in the world of matter, immanent in the things of the sensory world. Equally characteristic is his treatment of the state (in his *Politics*). He starts with the proposition that man is inherently a social animal. Happiness can be obtained only by ethical activities of the soul; and the realization of a good life, and therefore of human happiness, is possible only in the setting of the state. The state form practically adapted to this realization is the city-state of the Greeks. In his *Politics* it is not the purpose of the realist Aristotle to describe a utopia but to formulate out of his knowledge of existing states a workable institution which will permit the practise of the "good life." Characteristic of his method is the fact that he had studied one hundred and fifty-eight separate state forms of the world of his day. He had described them in pamphlets, of which only one, *The Athenian Constitution*, has been preserved for us, found in the dry soil of Egypt and first published in 1891. The portion of his *Politics* which won for Aristotle the title of founder of political science is his division of the existing types of city-states into monarchy, aristocracy and polity, with their corresponding perversions—tyranny, oligarchy and democracy. This classification has been criticized as being based upon a purely quantitative principle applied to the ruling power. The criticism is valid from the standpoint of the inadequacy of the classification for present-day uses. If, as is more legitimate, Aristotle be regarded in the light of his own time, the criticism is found to be based upon the misapprehension that he was dealing with all the political forms extant in his day. He restricted his discussion, in fact, to the city-state form, neglecting the great territorial monarchies and the federations of his time. His division of the departments of government on the basis of function (*Politics* VI 14) into the deliberative, executive and judicial bodies, still retains its validity.

Social morality, as taught by both Plato and Aristotle, still betrays a fundamental tribal attitude in that the morality of the state does not transcend the relations of the individual citizen and his own state. In external politics Plato (*Republic* 469–474) warns the Greeks that only the barbarians are to be considered as natural enemies. Wars between Greek states are to be regarded as fraternal struggles in which extermination, wasting of the countryside, enslavement of a city and its inhabitants, are not permissible. But this is a mere concession to the idea of the cultural unity of the Greeks so much discussed in his time. Aristotle declared that without military power and the exercise of this power against outsiders the state could not maintain its sovereignty. The struggle of one Greek state for hegemony over other Greeks was justified in his eyes if the rule thus established was made advantageous to the subjected Greeks. The conquest of non-Greeks was a natural right falling to the Greeks because the barbarians were their inferiors and thus by nature destined for enslavement to them. The philosophers' theory of political ethics contained no discussion of right and justice as between Greeks and non-Greeks, or even, in the fundamental sense of international law, as between Greek city-states. A theory of international ethics had not yet arisen.

Significantly the word "history" comes from the Greek word *historein*, "to learn by inquiry," used by Herodotus. A curiosity of mind in respect to the peculiarities of peoples and places is noticeable in the few remaining fragments of the early Greek chroniclers of historical events, Hellanicus of Lesbos and Hecataeus of Miletus. This trait distinguished the early Greek annals from the lifelessness of the records kept by the pre-Greek peoples of antiquity. Hecataeus had applied the criterion of personal criticism to the tales of the past which had come down to him, but he was still "a writer of tales" (*logographos*). Historical research and methodical skill in its presentation —the conscious method and discipline as well as the art of history—are creations of two Greeks of the fifth century B.C., Herodotus of Halicarnassus, and Thucydides of Athens. Herodotus in his account of the Persian wars is not without marked subjective tendencies, one being to glorify Athens, a second to defend the oracle at Delphi against the accusation of having prepared a favorable position for itself in case of a Persian victory. Herodotus was unable to discern the political, economic and social forces which determine historical events. As in the Greek tragedies of his time, the will of the gods dictates the outcome of human events. With ruthless envy the gods strike down those whose overweening greatness has irritated them, as with their lightning bolts they strike the tallest trees. This is the explanation which Herodotus had to offer of the unexpected defeat of the Persian by the Greek forces. He had traveled widely in his earlier years, collecting materials on the

characteristic social customs of different peoples, in the manner of Hecataeus, and on their past history, in the manner of another Milesian *logographos*, Dionysius. He was the first writer who conceived the idea of investigating a great historical problem and of presenting his results as historical literature. He was fortunate in the fact that the problem—the series of wars conducted against the Greeks by the Persian kings Darius and Xerxes—happened to be a crucial one in the historical life of the Greeks. This combination of circumstances, aided by his honesty of intent and peculiar charm in narration, have given him the title of the "father of history." His earlier ethnographical studies as *logographos* have been patched into the body of his narrative as they seemed to be applicable. His purpose, as stated in his brief preface, was to save from oblivion the great and wondrous deeds of both Greeks and barbarians, and in particular to present the reasons for the war (historical causes). The causes which he presents are trivial; and he gives three conflicting reports, the Phoenician, the Persian and the Greek, without drawing a conclusion based on personal critical analysis. Nevertheless, by dealing even naïvely with causes, he isolated and consciously stated one of the essential elements in the investigation of historical sequences.

Thucydides wrote on contemporary events, and in particular on the Peloponnesian War, in which he was himself at first a participant. After his banishment from Athens in 424 B.C. he remained a keen and indefatigable observer of the course of the war. He was the first writer of historical events who analyzed critically the sources of his information and passed judgment on their validity. He realized the untrustworthiness of oral tradition, of the statements of eye witnesses, of his own memory and consequently of the memories of others (Thuc. I 22). Where Thucydides used official documents which have come down to us inscribed upon stone, he stands the test of general accuracy with credit. He distinguished the alleged reasons for the war from its fundamental or "truest" cause. This he considered to be the increasing power of the Athenians and the fear which it inspired in the Lacedaemonians. He was conscious of economic forces in history (Thuc. I 23). The gods, the oracles, all supernatural paraphernalia, are eliminated, except as the belief in these may produce a demonstrable effect upon the course of events through the psychological reactions of individuals or groups. He eliminated from his narrative everything of a purely episodical character which seemed to him to be unimportant, consciously sacrificing historiographic interest to historical importance. His careful methods in deduction from data which he had tested and accepted as trustworthy may still be profitably studied by historians. He was the first critical historian and one of the best.

In the business life of the Greek-speaking world the use of coined money as against barter economy had gone forward in the fifth and fourth centuries with amazing rapidity. The government of the great Persian Empire, covering southwestern Asia and Egypt, also coined money. But in the persistence of exchange in kind, in the custom of treasuring its surpluses of revenue in hoards of gold and silver, in the continuance of state monopolies inherited from the past, in the state ownership of great stretches of the arable land held as royal domain and worked by semi-serfs, the Persian Empire was unmodern in comparison with the Greek city-state world. In both agricultural and industrial production many survivals of the old royal and temple household (*oikos*) system remained, sanctified by centuries of custom. In Greece production and transportation were largely in the hands of private individuals, with little regimentation by the city-states as against their subjects. Private ownership of real estate and agricultural land was the rule in the urban industrial communities, although this general condition did not prevail in other places such as the socialized military state of Sparta, or in non-industrial communities like Thessaly and Macedon. In backward communities and on the periphery of the Greek world, in the more distant colonies of the Black Sea, for example, the functions of production, transportation and merchandising were, no doubt, often combined in one person. Of the industrial cities Athens was among the most important, as it is also the one best known to modern investigation. The Athenian situation may be regarded as representative of that of other large cities and of many smaller ones. In these communities investment opportunities for surpluses of capital accumulated in individual hands were chiefly farm lands (for olive and vine growing in Attica), handicraft industries, slaves trained to some trade and rented out to entrepreneurs, or loans made to professional merchants and owners of ships to finance their commercial enterprises. Since the city-state laws forbade

metics to own real estate, the accumulations of those metics who had been able to acquire any wealth were largely invested in small industries. The less fortunate earned their livings as skilled workmen or as petty tradesmen or engaged in transportation backed by loans for the merchandise which they carried. At Athens the overseas transportation was largely in their hands.

The importance of wealth as reckoned in terms of money and its interest-bearing capacity increased greatly in the Greek world of the fourth century. The money changer had necessarily been a prominent figure in all Greek markets because each of the multitude of city-states maintained its own mint and held jealously to its own coinage system as an important element of its independence. The extension of money-changing houses into banks occurred at Athens. It was largely due to a metic named Pasion and the successor to his business, a freedman named Phormion. Pasion established a deposit bank in which he received money and valuables from customers, paying interest on certain types of deposits. The accumulations he lent at interest. An important element in the financial transactions of this bank, and of others which rapidly arose in competition, lay in the technique of its bookkeeping by which payments of one customer to another could be made by transfer, on personal order, from the one account to the second. This was quickly extended to payments between customers of two different banks. Pasion made loans on valuable articles deposited in his storeroom, in the manner of a pawnbroker; and he was also a manufacturer on his own account and owner of his own shipping facilities. In the generation which followed him, however, banking became a more specialized department of business life.

Naturally there was considerable public suspicion of these early bankers, augmented by several disastrous endeavors in this new field of enterprise. This feeling is attested by the speeches of lawyers in suits entered against the bankers. Nevertheless the development of banking progressed rapidly. Either in the form of a state monopoly of banking enterprises, as in Hellenistic Egypt, or in private hands, as under the Roman Empire, deposit banks became an important feature of the economic life of antiquity. The social effects of the new opportunities thus afforded for safe reinvestment of accumulated surpluses cannot be traced with accuracy. It is safe to assume that the growing differentiation of propertied classes and the poor was affected by it, and that the new regard for money as working capital influenced the old willingness of the citizen classes to assume semi-voluntary tax burdens such as liturgies for the navy and for the public gymnasia. The philosophic-political theorists of the fourth century were entirely opposed to the new economic order. They had found it possible, though with important changes, to adapt the political form of the existing city-state to their hopes. Their opposition to the current economic order was more complete, their suggestions of change were much more sweeping.

In the legislation of Solon (594 B.C.) citizen obligations and privileges at Athens were still based upon a classification expressed in terms of income in kind (500 bushelmen, etc.). At the opening of the Peloponnesian War in 431 B.C. the adjustment to the new complexities of business, both private and public, had been successfully made. Records of the Athenian state are available from 454 B.C. onward which show that a practical system of state accounting had been established, based upon tribute and taxation paid in coined money. Pericles, as head of the administrative and military board of the ten *strategi* (generals) at Athens, had reorganized and simplified the treasury system, reducing the number of the treasury chests and concentrating responsibility for payments and records (decree of 434 B.C. published in Hicks and Hill, *Greek Historical Inscriptions*, no. 49). Discussions of economic problems began to appear thereafter which display a new understanding of the importance of economics, especially of state and private finance. Among these are the *Oeconomicus* of Xenophon and the pamphlet *On Ways and Means*—a suggested scheme for increasing the revenues of the state—which appears among his writings. Isocrates, an Athenian teacher of composition and rhetoric of the fourth century, in urging the Greeks to cease their city-state wars and combine for an aggressive war against Persia, was definite in his insistence that some of the economic and social ills then prevailing in the Greek world could be cured by the conquest and exploitation of the western part of the Persian Empire. The new knowledge of the importance of business expressed itself in the appearance of the word *oikonomia*, which means, literally, "household management." Despite their understanding of business relations in social life, the Greeks did not establish economics as a separate discipline.

In their treatment it remained consistently a branch of the study of political science, which again was not abstracted from the general field of philosophy. This orientation within a metaphysical system explains why the economic theories of Plato and Aristotle are so completely colored by the ethical aims imposed by them upon the state as the embodiment of justice.

Both in the political practise of the city-states and in the political theory of the philosophers the purpose of the polity was to look after the material and moral welfare of its citizen group, but of this group exclusively. Protection of the rights of the classes of metics and slaves was subordinated to the advantages of the citizen body. One effect of this differential treatment appears in the early custom of distributing the financial surpluses of the state to citizens only. A later and more practical application of the idea was made by Pericles when he introduced payment for citizen service in the *boulē* and on the juries. This policy finds its rational justification in the democratizing tendency of the Periclean party, which aimed to equalize citizen participation in state affairs among all representatives of the citizen body, whether rich or poor. The introduction by Pericles of payment, to citizens only, of the fee required for admission to dramatic performances, exemplifies more clearly the old attitude of the privileges of the tribal group.

The economic knowledge of the philosophers of the fourth century, as represented by Plato and Aristotle, included the definition of wealth as value in use or in exchange, and an understanding of the difference between material wealth in money or goods and immaterial wealth represented by trained ability in some craft. Plato is definite as to the advantages of division of labor in the handicrafts and is insistent on technical specialization in the financial aspects of business. In his reaction against the social values of the new commercialism he attempted to eliminate both wealth and poverty because of their disastrous effects upon the ethical well-being of the citizen classes. He could not do away with mobile capital entirely, but would permit its accumulation only to an amount four times the value of the land allotment to each citizen. He would not permit citizens to engage in commerce or handicrafts. He would permit them to engage in agriculture but not as a means of gain beyond a livelihood. Surpluses of agricultural production were to be at the disposal of the state. Prohibition of the use of gold and silver money by private individuals, of loaning at interest and of business on credit—these demands were designed to strike at the roots of the capitalism of his time. Economically the *Republic* and, in somewhat less degree, the *Laws* of Plato represent the attempt of a disillusioned mind to escape the evils of his own time by reverting to obsolete conditions of a past which could, in fact, no longer be revived.

In the political theory of Plato and Aristotle an attitude of contempt toward handicrafts and trade was established which dominated philosophic discussion, in its economic aspects, for three hundred years. Agricultural work alone was regarded as worthy of a citizen, the practise of the trades being relegated to non-citizen classes. This theoretical attitude toward industrial labor has often been accepted as representing a social feeling widespread among the general public of antiquity. Such was not the case. Where he was not under the compulsion of his general scheme Plato himself in his dialogues shows a high regard for good craftsmen as exemplifying purposeful devotion to the task in hand and a knowledge of the methods of reaching their ends which should be equally applied in statecraft. This more rational attitude toward labor goes back, no doubt, to Socrates who was himself a trained stonemason.

The political and social classification of citizen and non-citizen members of the perfected state in Plato's *Republic* and *Laws* is a free adjustment of actually existing institutions, especially those of the backward state of Sparta, to prevailing conditions of Greek life and to the necessities imposed by the larger metaphysical-ethical scheme in which this perfected state was set. Acceptance of the prevailing assumption of differences in the innate capacities of men seemed to give to the classifications of the theorists a rational and scientific justification (*Republic* II 370). The soul, says Plato, has three distinct faculties, those of reflection, of courage and of desire, or appetite. In accordance with the dominance of one or another of these parts of the soul, the citizens are to be divided respectively into three classes, the philosopher rulers, the warriors and the producers. The normal condition of warfare among the Greek city-states is accepted as a constant; and the task of the class of warriors is to provide for the defense of the state. The communistic feature of state support for the two upper classes and their separation from all connection with

productive enterprise is an adaptation of Spartan conditions. The elimination of the class of producers from any connection with the political or military functions, their reduction practically to a state of helotage, is Spartan. So also is the requirement of state control of the rearing and education of citizen children.

III. THE HELLENISTIC PERIOD. Outside the circle of the Socratic followers many other thinking men had lost the belief in popular rule by the citizen group which had motivated the internal politics of Pericles. By the historical student it may be questioned, as well, whether the entire system of the particularistic city-states had not proved itself unsuited to meet the changed needs of the Greek world. From the beginning of the Peloponnesian War to the battle of Chaeronea in 338 B.C. the tendency toward unity in larger groupings and the old ideal of the self-sufficient city-state had been pitted against each other in constant and destructive warfare. Hegemonies, established by *force majeure*, succeeded one another rapidly and passed away without justifying themselves by any new political idea capable of replacing the city-state separatism. One practical and promising effort toward solution was, however, attempted in the fourth century. This lay in the formation of localized federations of city-states in various parts of Greece, among them the Chalcidic and Boeotian Leagues. These combined complete autonomy and freedom from interference in local administration and legislation with the possibility of unified action over larger areas. It is a tribute to the political realism of the Greeks that they worked out in these leagues the practise of representation in the federal legislative body and in federal administration on a basis roughly proportional to the population and the tax paying and military strength of each unit. It is a singular fact that neither Plato nor Aristotle mentions the idea of the federations of city-states which had sprung up about them. Just as they failed to envisage the possibility of the life of happiness and moral elevation, the "good life," amid the new economic realities of the actual world of their time, so also they clung to the outward form of the city-state, though vitally changing its inner content. This inability to conceive the state except in the form of the small *polis* may be explained by their purpose, which was to place the individual as an ethical being, the state form being merely the organism in which the individual must meet these problems, and therefore only a necessary side issue to the major problems. The city-state was the form within which Greek civilization had developed, and in their minds, perhaps, the only organization suited to the temperament of the Greeks with whom they were concerned. These suggestions may offer a satisfactory explanation of the fact that Plato and Aristotle did not deal with the possibilities which lay in the city-state leagues of the time.

When he had the Greek peninsula securely in his power (338 B.C.), Philip II of Macedon paid his tribute to the reality and power of the city-state as a Greek ideal and to the possibilities inherent in a federal organization of city-states by uniting all of the Greek states except Sparta in a comprehensive League of the Hellenes. There is little doubt—and this applies equally to Alexander at the outset of his career—that he intended to make the League of the Hellenes of essential service in the world which might be created as a result of their activities against Persia. Alexander's conquest of the Persian Empire resulted, after his death, in bringing under the sway of dynasties of Macedonian nobles a great territory with old and well established cultures. Their peoples had long been accustomed to the government of autocratic monarchies. Alexander had wisely adopted autocracy as the necessary basis of his rule over his Asiatic and Egyptian subjects. In this he was followed by his Macedonian successors, the Seleucids in Asia and the Ptolemies in Egypt. In Macedon, however, the monarchic power was never able to discard the limitations upon it which were traditional to the country.

Although in the new conditions of the Hellenistic age the city-states declined in political importance, their cultural significance still persisted. We know that Alexander requested his former tutor Aristotle to write two treatises for him, both lost to us, one on *Monarchy*, the other on *Colonization*. These were the two principles which he used in his great plans for the world he had conquered—monarchy as the form which Greek rule was to take in the newly conquered world, and colonization of Greeks and Macedonians as the means of maintaining that power and disseminating Greek culture within its bounds. It is a splendid tribute to the city-states of the Greeks, and to Alexander's understanding of their value, that he organized his colonies from the outset in the city-state form, each with its Macedonian-Greek citizen

body, its elected officials and its electoral-legislative assembly. It was a recognition of the fact that the Greek culture which had been created in the city-state could only live and work effectively in the atmosphere which had produced it. The independence of these new city-state creations was one of mere local autonomy and freedom from the oversight of provincial governors; but as a concession to the cultural value of the city-state and to the intensity of the Greek feeling for it, its use by Alexander is significant. In this policy of colonization by city-states Alexander was necessarily followed by his Seleucid successors in Asia. Their territory included Asia Minor, in which free Greek cities had long been established and the demand for independence remained alive. The numerous cities which the Seleucids founded in Syria naturally were in close contact with these older Greek cities. The Seleucid foundations, in consequence of this proximity, developed and maintained a considerable amount of independence as against the Seleucid state in the second century B.C., when the kingdom of Syria was breaking down under the pressure of Roman advance from the west and Parthian attack from the east.

In Egypt the situation was entirely different. Outside the old free city of Naucratis at the mouth of the Nile, Greek polities were unknown. Alexander had founded the one Greek city of Alexandria, giving it the customary government of a city-state. It became the residence city of Ptolemy I. As the royal residence of an absolutistic monarchy of the old Pharaonic type its city-state freedom was from the outset a mere shadow. Only one other free Greek polity was founded by Ptolemy I, at Ptolemais in Upper Egypt. Macedonian and Greek settlers came into Egypt in swarms, attracted by the wealth of the country and by the amazing opportunities for advancement which the bureaucratic and military service of the Ptolemaic state offered them. The Greeks recruited for the Ptolemaic armies throughout the countryside were settled as holders of land allotments. Though many of the Greek immigrants lived in cities and towns and established therein Greek temples and the customary externals of a Greek cultural life, these cities and towns did not become self-ruling Greek polities. In those territories, however, which the Ptolemies held outside of Egypt, they were compelled to compete with the Seleucids, and their colonization took the customary form of the "free" city-state. Although the city-states of the Hellenistic period retained the organs of the democratic *polis* and continued to pass laws and resolutions, it is obvious that their actual dependence upon the great autocratic monarchies left them only a limited range of independent action. They serve, however, as a recognition, by Alexander and his followers, of the cultural value of the Greek *polis* and of their belief that the life which the city-state had created could be best perpetuated through its agency.

It is clear that the old Greek type of *polis* patriotism must, in the new world conquest, give way to a wider conception. The result is seen in the rise of a supernationalism which the Greeks called cosmopolitanism (world citizenship). It corresponded to the new cultural situation which actually existed in that part of the world lying within the eastern coastline of Spain and the Indus River. One language, the Greek, in a standardized form called the *koine*, would carry a man from its eastern to its western limits. This is seen in a recently found Greek papyrus of the second century after Christ, in which an Egyptian proclaims the praises of the Egyptian-Greek syncretized worship of Imhotep-Asclepius. He had translated into Greek the tale of his religious experience, explaining his reason by addressing the god thus: "Every Greek tongue will proclaim your story and every Greek man will worship Imouthes, son of Phtha." Other agencies likewise tended toward a certain standardization of external aspect in this Hellenized world, the Hellenic forms being the standardizing and universally accepted elements. The urban communities which were not Hellenic city-states were eager to obtain the outward signs of Hellenic culture. When Antiochus IV, the Seleucid king, was in Syria and Palestine, envoys from many communities came to him petitioning that the king set up a gymnasium, form a body of ephebi (semi-military clubs with a definite social standing) and register the inhabitants of these communities as Antiochenes, which meant that he was to establish their cities as autonomous city-states under the name of Antioch (*Maccabees* II. 4: 9). In 58 B.C. Julius Caesar found that the records of the Helvetians of Switzerland were written in Greek letters. The apostle Paul, preaching in Lystra, a town of southern Asia Minor, made his remarks in the *koinē* Greek which the local population understood. His hearers reverted, however, to their own Lycaonian dialect when excited by a faith cure

performed by Paul. The tendency toward universalism expressed itself in the philosophies of the time, particularly in stoicism, and in the appearance of histories which dealt with the general world conditions at a given time rather than with a single country or people. The new historical outlook appears notably in the historians Polybius and Posidonius, and it is later marked in the work of the universal geographer Strabo.

It is true that Greek culture, in the period from Alexander's conquest to the establishment of the Roman Empire, attained a position of preeminence over the minds of cultured men in modes of thought and modes of expression such as no previous civilization had approached. This preeminence differentiates itself from that later won by Islam in that Greek culture penetrated all the Semitic and old oriental areas which Islam later conquered and in addition bridged successfuly the ethnic and cultural divergences which separated the mental world of north Africa and southwestern Asia from that of Europe. This feat Moslemism could not accomplish. In the latter half of the third century B.C. a king of Ethiopia (modern Sudan) is reputed to have "had some tincture of Hellenic education" and to have studied philosophy (Diodorus III 6). In the process of their spread the Greeks and Macedonians themselves were in time gradually assimilated by intermarriage with the local populations. In Egypt they became Greco-Egyptians, in Syria, Greco-Syrians, in distant Bactria, Greco-Bactrians. The mother of Antiochus I, son of that Seleucus who founded the Macedonian dynasty which ruled in western Asia for two hundred and fifty years, was an Iranian princess of Bactria. Although the Jews on the whole resisted the intrusion of the modern Greek culture of the time with fanatic zeal and although intermarriage with Greeks must have been extremely rare among them, the question of the adoption or rejection of Hellenic life became the central political question in Palestine in the second century B.C. Under Antiochus IV of Syria (176–164 B.C.) two of the high priests of that time bore Greek names, Menelaus and Jason. Through the Greek papyri it is now possible to follow in Egypt the actual process of intermarriage between Greeks and native Egyptians. The net result is that after 150 B.C. the appearance of a Greek name in Egypt implied only that its bearer was of the upper and educated class. The Ptolemaic ruling family maintained its blood untainted by Egyptian elements. Nevertheless the surrender of this dynasty to non-Greek standards is clearly shown in their adoption for political purposes of the old Pharaonic custom of brother-sister marriage. The custom in one authenticated instance was also followed by a Seleucid king. To the mind of the Greeks before Alexander's day this was incest, and as such abhorrent. It is significant of the local differences which continued to exist in the Hellenistic world that this practise was never adopted by the Macedonian kings and was never regarded with favor in Greece itself.

In the process of its spread over the ancient Near East and its acceptance by the preponderant body of natives living there, Greek culture necessarily suffered vital changes other than those exhibited in the substitution of universalism for local patriotism and the general acceptance of governmental absolutism in place of city-state freedom. Such changes might be the result of original Greek conceptions which were altered in the process of adaptation of the Greeks themselves to circumstances which were fundamentally different. They might result from the adoption by the Greeks of older ideas of the pre-Greek Orient. Or they might be the outcome of a combination and amalgamation of both Greek and oriental tendencies into a new belief or a new approach to the problems of life. The process and result of the transformation of Greek culture into Hellenistic culture is clearly seen in the changes in religious life and thought. New to the Greek world and significant of the process of derivation from both Greek and oriental points of view, is the rise of the Hellenistic king-god cult. Alexander the Great was the first Greek monarch to receive and to demand worship as a god. In 332 B.C. he entered Egypt, then a satrapy of the Persian Empire, but smoldering with the spirit of revolt. Alexander was hailed as a liberator. The country fell to him with no resistance. His most significant act was to take a journey of some twenty days to the temple of Ammon in the great western oasis of the Libyan desert. Upon his arrival there he was hailed by the priests of the temple as the son of Ammon, whose oracle had a prestige in the Greek world almost equal to that which it enjoyed among the Egyptians. To the Egyptians this act of the Ammon priesthood was a necessary and customary procedure in the legitimizing of their Pharaoh, by recognition of him as son of the sun god. Eight years

later Alexander sent out from Susa a demand to the Greek city-states that each city place him among their city gods. The origin of this demand, to which the Greek cities agreed, is purely Greek. The distance between gods and men had never been great in the anthropomorphic polytheism of the Greeks. To add one more god to the list of their divinities was not impossible or even difficult for them. The founders of colonies had customarily received the honor of cult worship after death. Sophocles, the dramatist, had in like manner been honored with a shrine and a cult worship. Isocrates had written to Philip of Macedon that if he should unite the Greeks and lead them in a national war against Persia he would indeed be a god. Aristotle had taught that a gifted ruler of incomparable virtue was like a deity on earth. Alexander's demand from the Greek states was therefore Greek. It implies nothing as to any personal conviction on Alexander's part of his own divinity. The explanation is now generally accepted by historians that the measure was political. It relieved him of the embarrassment caused by the independence of the Greek city-states, which Alexander had himself recognized in the League of the Hellenes and of which, as *hegemon* of the league, he was the defender. If recognized as a god in each of the city-states, he was thereby placed above the laws which its citizens might pass. The whole method and attitude toward this Greek divinity by decree of man differed from that which had created the divinity of the Pharaoh. The Greek ruler-god became such by virtue of an apotheosis. The Egyptian god-ruler was such by special investiture and by an act of divine grace.

Greek city-state polytheism had suffered by the attacks of Ionian physical philosophy in the sixth and fifth centuries. The followers of Socrates in the fourth century had assumed the function of ethical guidance of individuals for which the city-state religion provided no machinery. The *polis* had lost its importance as a political factor in the Greek world. With the decline of the city-state, the *polis* religions also lost the remainder of their spiritual hold upon the Greeks. The Macedonian Seleucids who ruled over western Asia, the Greek kings of Bactria, the Macedonian Ptolemies in Egypt, were monarchs in countries which had been accustomed to religious control, exercised by the state and guided by strongly established priestly classes. The tendency of the times, both by natural growth and by conscious effort of the rulers, was toward the growth of syncretistic religious forms which might appeal both to the Greeks who colonized Egypt and western Asia, and to the natives, and give to the two ethnic elements a common ground of worship. In this process of amalgamation, identification or equation of a Greek god with an oriental god, it was the spirit of the oriental deity which dominated.

The best example of such a growth was the worship of Sarapis, which spread widely and far beyond the boundaries of Egypt where it originated. Out of a previous worship of the dead Apis bull as Osiris-Apis in the ancient city of Memphis, evolved the Greek divinity Sarapis as a god of the underworld. There is some reason to believe that this cult was a creation of Ptolemy I as a part of his religious-political policy. Certainly the cult was a matter of deep interest to the first two Ptolemies. Promising immortality, sometimes in the triad worship of Isis, Sarapis and Anubis as at Delos, sometimes alone, Sarapis attracted worshipers over the Greek world; and his cult was destined to endure for seven hundred years, until Christianity was strong enough to eradicate it.

With the conquest of Persia Iranian religious ideas began to penetrate westward. We now know that a sanctuary of the Persian god Mithras existed in a town in middle Egypt in the third century B.C. Although Greek cults were carried throughout western Asia along with the Greek colonists, the Greeks were more prone to accept the oriental worships than to impose their own. In 256 B.C. in Egypt the entire Greek retinue of the treasurer-general Apollonius, himself a Greek, ceased work at the time of the celebration of the purely Egyptian festival of Osiris-Isis. The final result of this process is to be seen in the first two centuries of the Roman Empire when the Egyptian Isis and the Persian Mithras worships were dominant religions in the Roman world. The methods by which they were spread can no longer be followed in detail; but suggestions of the organized propaganda which brought it about have appeared. A list has been found in Egypt, compiled apparently in the first century after Christ and kept in some Isis temple, in which the countries and cities are named where Isis cults then existed. The list includes India, Babylon, the Aegean islands and Italy.

Despite its formal continuance as expressed in temple building, festivals and sacred processions, the complete inadequacy of the Greek

city-state religions to satisfy the religious needs of the Hellenistic age is everywhere apparent. Nowhere is their complete lack of a spiritual content adequate to meet the new religious demands more clearly seen than in a book of Euhemerus of Messana, called *The Sacred Writ*, which appeared about 280 B.C. Euhemerus expressed his views on the rise of religions in a genetic-sociological study presented in the popular form which the utopias of the fourth century had taken. He asserted that he had been cast out upon an island located in the Arabian Sea, and had found there an inscription which recorded the names and deeds of the rulers of old who, by virtue of their activities for the welfare of mankind, had been deified and were now worshiped as gods. The origin of the gods was therefore explained in pragmatic-historical fashion as lying in the self-deification of mortal rulers or their apotheosis by a grateful posterity. The deification of the dead Alexander had obviously given a background of actuality for this theory. As proof of the Greek interest in sociological problems it may be noted that Euhemerus in his *Sacred Writ* found occasion to give a survey of the cultural development of mankind. In agreement with sophistical teaching he believed that mankind had slowly progressed through the civilizing activities of the oldest kings, of whom Zeus was the greatest, out of a primitive stage of unorganized living to the ethical and cultural conditions of the civilized life of his own day. *The Sacred Writ* of Euhemerus had little effect upon religious or philosophic thought in the third century B.C.; but in the second century it was widely read in Roman circles merely as a charming literary production attractive to the religious skepticism which was permeating the Hellenized circles of Rome.

Arising as a political expedient with a Greek background, divine worship of the living ruler found in Egypt a fertile soil for its further development. Ptolemy II Philadelphus was the first of the Hellenistic rulers after Alexander who dared to establish a cult of himself as a living god. In its Hellenistic practise the custom implied no belief in the divinity of the person worshiped, on the part of either the worshiper or the recipient of worship. It was an expression of loyalty to the ruler. In this form and with this meaning the Greek cities established cults to their Roman conquerors in the first century B.C. Among the Romans who thus received divine honors were Sulla, Lucullus and Cicero, who was amused by it. Formulated by the founder of the empire and given a definite place in his new state organization, this practise of ruler worship, in the cult of *Roma et Augustus*, had far reaching effects in the Roman imperial period, particularly on the official relations of the Roman Empire with the Christian converts. The Christianized Roman Empire of the fourth century was forced to reject it; but in the weakened form of the political theory of the kingship by divine right it gave powerful support to the theory of monarchic sovereignty throughout the Middle Ages.

When the Greeks came into intimate contact with the many peoples of the old Persian Empire, the Greek conviction of the natural superiority of Hellene over non-Greek necessarily broke down. Intermarriage with native women must have done much in this direction. Through such contacts, indefinitely multiplied, there came to the Greeks an appreciation of the long established civilizations of the peoples among whom they lived. Berossus, a Babylonian priest of Bel, dedicated to Antiochus I a history of Babylonia which he had written in Greek. Manetho, an Egyptian priest living under the first Ptolemy, opened to the Greeks the knowledge of Egyptian history, which he chronicled in the Greek language. By these means and, more subtly and firmly, through the thousand minor pressures of daily intercourse, the new age developed a broader conception of humanity than that contained in the old antithesis of "Hellene" and "barbarian." The passing of *polis* patriotism displays itself in many and divergent forms—in the willingness with which Greek mercenary troops changed after a losing battle into the service of the victor; in the confidence with which the new master hired them; in the stoic teaching of the basic brotherhood of all men, of whatever racial stock; in the non-local character of the scientific spirit of the time. Eratosthenes of Cyrene, eminent geographer and librarian at Alexandria in the last half of the third century, expressed these new relations in his statement that men were to be differentiated no longer as Hellenes and barbarians but according to their excellent or their bad qualities. The Aristotelian view of the inborn superiority of Hellene over non-Hellene had broken down for intellectuals like Eratosthenes. But the new classification, by criteria of intelligence and character, did not find a like acceptance among the masses of the people dominated by Macedonian dynasties and by

Hellenic culture. Native reactions against the rulers and their policies, which bear many resemblances to modern nationalism, shook Egypt as well as Palestine in the second century B.C.

The view that the differentiation between Hellene and barbarian was no longer valid was generally characteristic of the time. Its philosophic formulation is to be ascribed to stoicism. This school was founded at Athens in 301 B.C. by Zeno, whose native city was Citium in Cyprus. Despite his Greek name his place of birth implies that he was a Semite, probably a Phoenician. If this be true, the fact that a Semite could establish a school in Athens, the center of Greek philosophic studies, gives early evidence of the denationalizing of "Hellenic" culture after Alexander's conquests had brought Greek and "barbarian" together. The political theory of the early stoic school agreed with the Aristotelian in the belief that man was a social animal and that his activity must be directed to the betterment of the social group to which he belonged. But stoicism abandoned completely the city-state, springing from it to the concept of a world-state in which all men were fellow citizens. "We do not dwell in separate cities or demes, each group bounded off by its own rules of justice; but we consider that all men are fellow demesmen and fellow citizens, and that life is one and the universe one" (von Arnim, *Stoicorum veterum frag.* I no. 262). To Zeno the reformed *polis* of Plato was "laughable." With the few fragments of the *Polity* of Zeno which have come down to us it is scarcely possible to offer more than conjectures as to its relation to the actual Greco-Persian Empire. No doubt the reality of Alexander's great empire, brief as its unity was, had inspired the idea of a single state which would embrace in a comprehensive citizenship the entire world penetrated by Greek culture. Zeno could not have regarded it otherwise than as a utopia, unrealizable but corresponding to justice based upon reason (*logos*), and to the divine law of brotherhood implanted in the heart of every person. The stoic world-state, therefore, in its broadly conceived and idealistic formulation, cannot be treated as political theory. Both the continuance of the city-state and the exploitation of the subject peoples by their Macedonian monarchs weakened the conclusions which must logically have been drawn from the original stoic ideal of cosmopolitanism and brotherhood. These logical conclusions the stoic did not insist upon. Soon, in fact, stoicism compromised its teachings with the monarchic principle, so that the stoic believer could accept political preferment, even under absolute monarchs, if by his service he could feel conscious that he, individually, was working toward ethical ends and the good of mankind. By virtue of this compromise of its principles stoicism became an active force in the politics of the Hellenistic world. Antigonus Gonates, who in 277 B.C. established the new dynasty of the Antigonids ruling Macedon, was a stoic by training under Menedemus of Eretria and by friendship and admiration for Zeno. He played the game of politics as the exigencies of his situation as ruler of Macedon required. On the whole his political methods and the conduct of his task reflect credit upon the religious-ethical system in which he believed and upon his spiritual adviser Persaeus the stoic. In his attempt in the latter half of the third century to revive the old communism of the Spartan state by cancellation of debts and nationalization and distribution of the land, Cleomenes of Sparta was advised by the stoic Sphaerus. It is in the first two centuries of the Roman Empire, however, that the spirit of stoicism attained its maximum of practical value. Having adopted the monarchic principle, with the constant hope that the monarch might be permeated by the spirit of devotion to his task as a social duty, it became a guiding force among the higher classes who ruled the Roman Empire. In the person of the Emperor Marcus Aurelius the stoic devotion to that duty which a chance position in life might impose, reached its highest expression.

In its statement of the equality of Greek and barbarian and of man and woman, stoicism echoed thoughts which harmonized with two social tendencies prevailing at the time of its origin and throughout the Hellenistic period. The logical consequences of the stoic doctrine of the equality of slave and free man were not realized in antiquity in attempts to discard slavery as an economic and social system. It had its influence, however, in the time of the Roman Empire in shaping the public attitude toward slavery; and it may have influenced imperial legislation which afforded greater protection for slaves and materially lessened the former harshness of the Roman treatment of them. As to the new position of women which stoicism reflected, it may be that this represented a general revival in the Greek world of

the older Homeric Greek social ideal which had survived in the more primitive life of Macedon. A close intellectual bond existed between Alexander and his imperious mother Olympias of Epirus. Traces remain of his constant correspondence with her; and after his death she obtained a position of political influence such as no woman had previously held in the Greek world. During the following three centuries the Macedonian dynasties of the Ptolemies in Egypt and the Seleucids in western Asia produced numerous women of striking ability. Their power in politics is expressed in the names given to many of the Greek city foundations. The Seleucid cities Apamea, Nicaea, Laodicea, and the Ptolemaic towns Berenice and Arsinoë, are named after women of the Macedonian dynastic families. Arsinoë, the sister of the second Ptolemy and his wife from 273 to 270 B.C., was deified after her death, and an official worship of the two as "the brother-sister gods" was founded throughout Egypt. The images of the Ptolemaic and Seleucid queens appear on the royal coinage beside those of their husbands. So also the head of Cleopatra, the last of the Ptolemies, appeared on her coinage beside that of her Roman husband Marcus Antonius. Even under Augustus Caesar the heads of the feminine members of the Roman imperial family began to appear on the coins from the mints of Rome. In this practise, which is distinctly non-Roman, the imitation of the Hellenistic coinage practise is symbolic of the adoption of a greater freedom of action by women during the Roman Empire and the acceptance of the Hellenistic attitude toward them by society at large. The change in the position of women in the Hellenistic age was not confined to the teaching of stoicism and the political influence of the ruling classes. Women appeared among the Hellenistic poets and painters. A young woman, for example, was numbered among the students of the founder of Epicureanism. The Hellenistic city-states, in taking over endowments for the education of freeborn children, included the education of girls, establishing "supervisors of women" who appear in a number of official city documents which have come down to us.

The greater freedom of women evidenced in Hellenistic social life is connected with the higher value which that age accorded, in general, to the individual. This may be seen in the stoic teaching of the maintenance of man's spiritual freedom and his superiority to pain and degradation through his will. It is also seen in the teachings and actions of the wandering preachers of cynicism. With them the cult of freedom of individual action and of disregard for all social conventions sometimes went so far as to take the form of vulgar indecencies. In the Epicurean theory, corresponding to its completely materialistic view of the universe, the state was regarded merely as a useful invention, a thing established by chance, by force or by contract in the interests of public security. The criterion of personal happiness was therefore dominant in their teaching. This new emphasis upon the individual corresponded to actual conditions of the century which followed Alexander's death. The first fifty years were a time of meteoric careers characterized by the sudden emergence and disappearance of powerful single personalities. The worship of the Hellenistic kings as "gods manifest" was a characteristic of the new individualism. So also was the rise of biographical literature and the belief of Polybius, the outstanding historian of the second century B.C., that the great personality is the determining force in history.

It may be that the increase in consciousness of the worth of the individual, which is notable in the Hellenistic period, was a psychological compensation for the loss to the Greeks of their *polis* patriotism and of that feeling of importance which political activity in the old city-state had given them. There was room enough in the service of the great Hellenistic monarchs for the abilities of ambitious and able men in every line of work. There was a constant market for Macedonians and Greeks as mercenary soldiers in the many wars and in the standing armies of the Hellenistic rulers. Throughout the third century the higher offices in the tremendous bureaucratic service of the Ptolemies were completely filled by them. The pay was good and opportunity for self-advancement of the individual was great. But the old loyalty to the citizen group and the feeling of participation, as decisive and free agents, in the activities of the state, were gone. The compensatory theory may also help to explain another phenomenon markedly characteristic of the Hellenistic age. This is the appearance of a tremendous number of private associations and clubs which were entirely non-political, and professional only in the sense that those engaged in one *technē*, soldiers, artists or poets, tended to group together. They exemplified the cosmopolitan spirit of the time in that membership was not

confined to Greeks alone. A recent bit of information from the time of Augustus Caesar is highly characteristic, namely that a club for women existed in the Egyptian capital Alexandria.

The Hellenistic civilization of the three centuries preceding the founding of the Roman Empire must be approached as a composite of many types of local hybrid cultures: Greco-Egyptian, Greco-Asiatic (which must be subdivided into numerous forms such as Greco-Syrian, Greco-Bactrian, Greco-Asia Minor, etc.), Greco-Italian. The penetrating and dynamic agencies on the whole were Greek; but the degree of the Greek penetration necessarily varied in each country and between the urban and rural districts of each locality. In the urban centers, where the Greeks congregated in large numbers, the Hellenic externals of life, as represented by temples, gymnasia and the adoption of the Greek style of dress, were marked. In the rural districts even these external Greek manifestations would decrease in number and variety, probably to the vanishing point in the countryside which was far removed from the great lanes of travel. Official use of the Greek language in all of the Hellenistic kingdoms made a speaking and reading knowledge of Greek a necessity for every man of culture and of official position. It is clear that the amount of literacy was greater in the oriental states after they had been taken over by the Greeks than it had been previously. The upper and middle classes could read and write Greek. The lower classes made use of professional scribes for their letter writing and for the preparation of their contracts and petitions to be handed in to the government officials. The knowledge of writing in the old scripts, the Babylonian cuneiform and the hieroglyphic and demotic scripts in Egypt, was beginning to disappear after 200 B.C. In a fragmentary letter of the second century B.C. a mother writes to her son, both being "culture Greeks" and possibly Greeks by race, that she is glad to hear that he is learning the Egyptian letters and is to teach Greek to the children of an Egyptian physician and thereby earn his living. In the time of the Roman Empire the knowledge of the old Egyptian hieroglyphs was retained only by the priests of the old Pharaonic religion. There, too, it disappeared completely in the second century A.D. When the Egyptian language was taken up again and used as a literary form in the Christian propaganda in Egypt, the alphabetic symbols used for the writing of Coptic Egyptian were largely taken over from the Greek.

In the great Hellenistic monarchies of Egypt and Syria general education still remained a matter of private initiative, without state support. In the city-states of the Greek peninsula and of Asia Minor it became customary for wealthy men or the monarchs of the time to grant endowments for the education of the freeborn children of a city. In such cases the city governments necessarily took over the problem of investment and management of the fund, appointment of teachers, methods of testing or examination of the pupils, and the subjects to be taught; but the cities made no grants in aid out of the city taxation. The mental disciplines were the old ones—writing, reading and literature. To these were added harp and lyre playing and musical theory, with a rather disproportionate emphasis upon physical education as represented by semi-military exercises such as javelin throwing. The further training of young men in the Hellenistic period was under a system called the ephebate. In the late fourth century in Athens the sons of citizens in their nineteenth and twentieth years, called ephebi, had been given a probationary training for military service under the direction of state officials. The system was widely adopted by the free Greek cities and in the great monarchies of the Hellenistic period. We have no proof of state support for the ephebe system. For Ptolemaic Egypt one certain instance of its support through private endowment is known from a contemporaneous document. It centered about the gymnasia of the cities and seems to have retained some connection, along with the gymnasia themselves, with the right to qualify its members for military service. That it was open only to the class of "Hellenes," which no longer denoted Hellenic blood, is certainly established for Ptolemaic Egypt. Inclusion among the ephebi was a mark of social distinction. In Egypt the ex-ephebe was freed from the poll tax paid by all the Egyptian lower classes, and he was set apart as a member of a social aristocracy. The class cleavages of Hellenistic society were therefore no longer those of native-born and alien. The new classifications were economic and cultural—those of poverty and wealth, participation in Hellenic culture and the lack of it, or the standing which one might have attained in the service of the autocratic monarchies.

For the progress of Greek higher studies, particularly in the fields of Greek literature, linguistics, medicine and geography, the museum at Alexandria was an organization of outstanding importance. Founded by Ptolemy I and directly modeled in its organization upon the philosophic schools at Athens, it differed from them in being primarily a place of research rather than a school for instruction. Under support from the Egyptian state, scholars and literary men carried on their work there. The library established in connection with the museum was the first attempt that had been made on a large scale to assemble the complete output of Greek scientific and literary activity. The idea certainly came from the modest collections of rolls which had been made at the philosophic schools at Athens. About 240 B.C 490,000 rolls were said to be in the Alexandrine library. How many volumes this would represent in the modern sense cannot be estimated, because we have no knowledge of the number of duplicates which were included. It is known that the first three Ptolemies went to great trouble to procure copies of all available books written in the Greek language. A library was established at Antioch by the Seleucids and one at Pergamum by the Attalid rulers of Asia Minor. The directors of the Alexandrine library in the third and early second centuries B.C. were distinguished literary or scientific figures in the world of the time. Zenodotus of Ephesus, the great Homeric critic, was the first librarian. The poet Callimachus of Cyrene was active in the cataloguing of the rolls. Toward the end of the third century B.C. Eratosthenes of Cyrene, an outstanding figure in the science of geography, was followed as librarian by Aristophanes of Byzantium, another Homeric scholar.

The importance of the Alexandrine museum and the libraries mentioned above as recognized and continuing centers of higher studies, with collections of materials available for the use of scholars, must have been great. Unfortunately we do not know what conditions were imposed upon the use of the books, nor can we prove to what extent they were used. Under the government monopoly, established by the Ptolemies, of the manufacture of paper out of the papyrus stalk, the increase in the output of paper must have been enormous. The process had been known and used by the Pharaohs from the beginning of the third millennium B.C.; and the use of papyrus for books and accounts was customary in Athens in the fifth century. But it was in the third century B.C. that papyrus assumed its position as the common writing material of the Hellenistic world. This position it held until the eighth century after Christ. The actual connection of the increase in paper manufacture with the enormous increase in the number of authors and books which marks the Hellenistic age cannot be established in detail because of our lack of the necessary data; but it seems to be obvious that the increased manufacture and use of papyrus sheets for writing was both a sign of the rise in the general level of culture and an agency which helps to explain the increased facility of literary expression.

As soon as Alexander had crossed into Asia Minor to carry on the war against Persia, and had begun to free the Greek city-states of the Aegean coast from Persian rule, one problem of immense administrative and economic importance immediately confronted him. This concerned the system of agricultural landholding of the Persian Empire. According to the system which the Persian kings had inherited from their predecessors in western Asia and in Egypt, much of the arable land was royal domain. Other great stretches were in the possession of the temple organizations. Both of these types of holdings were worked by the peasants of the kings or of the temples, living in villages which were the chief administrative units for the payment of their crop rents and their sundry taxes. To these villages and to their task as king's cultivators or cultivators for the god of the temple, the peasants were bound, their names appearing on the royal records with their village connection. In certain parts of Asia Minor, where Persian overlords had been assigned large domains, the system had taken on a semi-feudal character. Alexander wisely decided that he could not disturb this tremendous administrative machine which had functioned so long. An official letter which he wrote in 334 B.C. to the small Greek city of Priene has come down to us in a copy inscribed upon stone. In the letter he announced his decision that the city should be autonomous and free, owning its own land, both the city real estate and the farms of its citizens. "The countryside I recognize as mine, and that they who dwell in villages there are to pay the rentals." In other words, the royal domain and the peasants of the king were to retain their old status. In Egypt, which Alexander conquered

in 332 B.C., similar great complexes of royal and temple domains existed; and his decision there was necessarily the same.

The idea of ownership of land by the state and its cultivation under a system of helotage, as in Sparta and Thessaly, and that of the large estate system owned by nobles and worked by renters, as in Macedon, were familiar to the Greeks. The dominant system of the city-states, however, had been one of free private landholding. In this most fundamental and important economic feature the background of the new Hellenistic society differed, therefore, from that of the city-state. No single pattern can be constructed, no one formula enunciated, which will adequately cover the vicissitudes of the royal domain system in the Hellenistic monarchies. In western Asia the Seleucids adopted toward their domain a free policy of alienating it to members of the royal household or to important individuals whose support they required. Sometimes the lands thus alienated were held as revocable grants, sometimes sold outright. The Seleucids disposed also of large stretches to the new city-states as the essential agricultural hinterland of their city foundations. There are indications that it was a recognized method, employed by important Greeks in the troubled period of the forty years immediately following the death of Alexander, to obtain grants of land, mortgage these to a temple for what ready cash they would bring, and allow the mortgage to be foreclosed by the temple treasurers. In this and in other ways the land complexes held by the temples, especially in Asia Minor, became very large. As a rule, however, the requirement was made that land alienated from the royal domains to individuals must be enrolled upon the land register of some city for taxation and record purposes.

The entire political situation of the Ptolemies in Egypt was different from that of the Seleucids. Egypt was a compact unit geographically; and it offered the possibility of complete control by the rulers such as was out of the question in the widespread, loosely knit empire of the Seleucids. Hence we find an economic absolutism established over almost all phases of production in Egypt such as could be attained nowhere else in the world of the time. According to the Pharaonic tradition, firmly rooted in a practise of hundreds of years in Egypt, the arable land belonged to the god-king, not to the peasants who worked it. The Ptolemies had no reason to break with this tradition. They accepted it, emphasizing in every possible way the theory of their ownership, particularly as against the lands cultivated by the temples. Most of the king's land was held by the Egyptian population as crown renters (royal peasants) under direct lease with the king. A lesser amount was given out to the Greeks, Macedonians and other aliens who formed the mercenary armies of the Ptolemies, to be held and cultivated by them so long as their active service under the king continued. Land reclaimed under the skilful Greek irrigation engineering of the time was given out, under Ptolemy Philadelphus, in immense tracts to wealthy and energetic men for development, this "gift land" being revocable at the king's will. The status and management of one such great tract, comprising 6250 acres situated in the Egyptian oasis called the Fayum, is now known to us in intimate detail. The rents which the Ptolemies derived in wheat and barley from the royal domains, under whatever classification these might be held, made the royal household of Egypt by far the greatest grain merchant of the Hellenistic world.

The same system of domains owned by the king was widespread also in the Pergamene kingdom of western Asia Minor. Inside the limited boundaries of the old Macedonian kingdom private ownership continued to be the dominating system, the peasants owning in fee simple, for the most part, the lands which they tilled. But in the lands of the Balkans outside of Macedon proper which were brought under Macedonian control by the Antigonids, the theory was widely applied that the state, i.e. the king, owned the land. The royal domain system, therefore, was widespread in the ancient Near East when the Roman Republic extended its control into that region in the second and first centuries B.C. Technically these lands became the public domain (*ager publicus*) of the Roman state. In 30 B.C. Cleopatra, the last of the Macedonian Ptolemies to rule Egypt, had failed in her ambitious effort to reestablish Egypt as a great imperial power through the help of Marcus Antonius. The problem of the royal domains of Egypt then faced her conqueror Augustus Caesar, as it had faced Alexander the Great three hundred years earlier. Augustus' solution was that he, as representing in his magisterial position the Roman state, should keep the control of Egypt in his own hands and with it the control of the royal domains. With that decision the problem of the state as great landowner and agricultural pro-

ducer in the lands bordering upon the eastern Mediterranean was shifted to the shoulders of the Roman emperors and their administrative advisers.

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III
The Roman World

I. ORIGINS AND EXPANSION. During the second millennium before our era several successive waves of migrants invaded Italy from the Danube and Swiss valleys. These immigrants before 1000 B.C. drove off most of the sparsely settled non-agrarian savages from the arable lands of north and central Italy. The invaders brought with them bronze implements and weapons, employed domesticated animals, cultivated cereals and were beginning to acquire a knowledge of grape culture. In historical times they are found speaking dialects of a common Italic language with a conservatism that seems to imply the absence of extensive race mixing. Apparently they had come in compact hordes, had seized and settled the land, and made it possible to preserve a fairly uniform culture through the larger part of the peninsula.

The new settlers took possession of the Roman and Latian plains about 1000 B.C., at a time when iron was beginning to displace bronze for weapons in Italy. The Latins settled in villages on defensible hills that had springs of water, and apparently divided the lands about the villages into individual lots for cultivation. In historical times (and probably this was an early institution) they usually set apart a portion of the land for public use, and hillsides unfit for cultivation were kept as common grazing grounds. The institution of private property in land seems to have been very old among these people, but details for the early period are lacking; we know only that as early as 450 B.C. the twelve tables recognized an owner's complete testamentary powers as regards his property.

Of the government before the regal period we can learn very little. Apparently, to judge from survivals, the villages annually elected praetors (foremen) and aediles (temple keepers) in town meetings. The communities that made up the Latin tribe also had an annual festival of the tribe and at this festival elected a tribal praetor who could summon and lead the tribal forces in time of danger. Since the Latins had better lands than the mountain folk on the east and south, common defense was probably very important. The old Roman fetial institution reflects the fact that the plain-lands of Latium were subject to invasions, for the fetial law concerned itself entirely with wars of defense and the procedure of demanding restitution.

When the neighboring regions were settled and raids became frequent, many of the lower village sites were abandoned and the villagers migrated to the stronger communities. Thus, because of danger near by, some seven or eight cities grew up in Latium in place of the many villages. Thus originated the city-state in Latium. The farmers thereafter had farther to go to reach their plots of land each morning, but their families were at least safe in walled towns.

With this important social change—which seems to belong to the ninth, eighth and seventh centuries in Latium and Tuscany—the form of government changed here and there. Some of the Latin cities simply developed the old town meeting and continued to elect annual praetors. In Rome, however, which because of its favorable position received a particularly large accretion of settlers, three villages united in a common government within an extensive earthen rampart. And since one village at least consisted of a non-Latin group, it is likely that a firmer government was needed at Rome than in some of the other Latin towns. Here the town meeting (*comitia curiata*) consisted of three times the ordinary ten curiae, and the elders were organized into a council (the senate) to give advice to the magistrates. Finally, probably during the seventh century, a chieftain (*rex*), holding office for life, was substituted for the annual magistrates. Since the legends regarding the kings are unreliable, we do not know whether this change came by usurpation or rather by choice of the people at some time of great danger. As only the names of the last kings, the Tarquins, are certainly Etruscan, the change seems to have taken place before the Etruscan conquest of Latium in the sixth century. Tradition was very firm in the belief that the advisory council of elders existed through the regal period and that the people elected the kings. What the principle of organization of the town meeting of the thirty curiae may have been we do not know. Clan feeling was

very strong at Rome, as is shown by the late survival of *talio*, and tradition held that the heads of families made up the assembly, but that does not prove that it was organized according to *gentes* (clans). The word *curia*—derived from *con* + *vir* (meeting of men)—is quite noncommittal. At any rate, during the regal period this assembly lost much of its importance, for when the republic was restored a new assembly by hundreds (*comitia centuriata*), consisting of property-holding men of military age, constituted the town meeting. This is apparently a military assembly that had grown up during the period of warfare inaugurated by the Etruscan usurpers.

During the later regal period, at least, Etruscan princes were autocrats in Rome. About 500 B.C., however, these foreigners were expelled by a revolution, and the old republican form of government was restored. This new republic of Rome attempted (as we learn from the first Punic treaty) to control the whole of Latium, but the treaty of the Latin league, signed a decade or so later, shows that it failed in this attempt. Rome had to be satisfied with less than half of Latium and with a treaty that recognized the equal status of the other Latin cities. However, Rome's leadership was recognized in time of danger, and it became the dominant city in a league which after some time was strong enough to repel all attacks.

The government of the city was now of the old Italic type with a few modifications. The men capable of bearing arms constituted the primary assembly, but since the wealthier, who could provide good armor and horses, had to bear the brunt of the fighting, these were also given the weight of influence in the assembly. That is to say, while the people were divided into five classes according to property, the votes accorded each class were so weighted that the centuries of the first class together with the horsemen controlled the assembly. This assembly elected the magistrates and also made all important decisions. The two annually elected consuls were the executive magistrates. They had at their service for advice a senate of about a hundred nobles, normally including the ex-magistrates.

Under the last of the kings Rome had grown to be one of the largest cities west of the Adriatic Sea. But with the severance of Etruscan connections, the banishment of the court, the loss of Latian subjects and the lapse of building operations and of commercial enterprise, Rome fell into a long decline, during which the mountaineers raided far into her territories. After a century of hazardous experience, however, Rome at the head of the league slowly began to make territorial advances into Etruria and then against the Samnites. Rome now formed a new and larger federation on lines that seem to have been novel in the ancient world, a federation whose strong support is largely accountable for Rome's unusual success. There are two simple but important principles apparent in this federation: one, that in all compacts signed by it Rome was to retain controlling power in any common action; the other, that the members of the federation were not to be affronted by the exaction of a tribute or by any other visible sign of inferiority. Colonization was carried on by the federation as a whole; the newer municipalities were incorporated in the Roman city-state with local autonomy and yet with full participation in the Roman assembly; municipalities farther away, not yet ready for such participation, were placed in a probationary stage with half-citizenship; while the outer circle of cities or tribes was given defensive alliances which provided the protective power of the whole federation in their defense. This was a federation based upon an intelligent self-interest seasoned by a comprehension of partners' interests that in time made Rome very strong.

However, the result of the expansion of the federation was of course that its frontiers abutted on a very large number of barbaric tribes; so that quarrels were apt to arise on some border at any time, and the temptation to use the great force put at its disposal for the advantageous adjustment of such disputes was naturally irresistible. As a result its forces were usually engaged in warfare at some point or other, and before the federation had been in operation for a century it had absorbed the whole of Italy from the Arno to the heel of the peninsula, and the Roman city-state, which was still a small fraction of the whole, was the controlling element throughout. It is a curious fact that this period of rapid expansion was precisely the period during which the plebeian element gained the right to hold magistracies and to organize a new legislative assembly based not upon wealth but upon local groupings where the principle of equal manhood suffrage was recognized. It was in a period of popular sovereignty that the city-state of Rome made its most daring ventures in territorial expansion.

Rome's arrival in the south brought her into contact with new neighbors who soon presented

her with a set of tangled problems. Whatever the underlying forces were that impelled Rome and Carthage to clash, it is clear that Rome found it difficult to avoid the logic of the situation in which she was placed. When, at the request of Messana, she entered the First Punic War, it was evidently to protect from the encroachments of Carthage a city (Messana) that had appealed for admission to Rome's league. An important factor in the beginning of the Second Punic War seems to have been the plea of Marseilles, Rome's close friend and the commercial rival of Carthage. At the end of one war the senate was induced by a war-incurred debt to abandon the ancestral policy of exempting new acquisitions from tribute, and made of the cities of Punic Sicily not allies and "equals" but tribute-paying subjects that had to be held by a standing army against revolt and invasion. At the end of the second war Spain, which had been occupied for strategic reasons, was reduced to the same status. Rome was now an imperial democracy. The success in these wars had changed the very nature of the Roman constitution.

Rome's expansion eastward was in many ways even less fortunate. Her intervention in the affairs of the Greek states was an ill managed experiment in sentimental politics. It cost her both trouble and prestige, and led through a series of bickerings, treaties and revolts to the destruction of Corinth and the reduction of Macedonia to the status of a province. This experience was followed by a period of caution, during which expansion was out of favor. But with Pompey expansion of a new kind began (67 B.C.). The Gracchan system of tax gathering had raised up a strong group of capitalists who profited from public contracts. When the revenues of Asia were menaced by the raids of Mithridates, these capitalists advocated the pacification of the Orient and the inclusion into Roman provinces of as large a part as possible. This financial power found a sympathetic agent in Pompey, who was sent east ostensibly to check the invaders but actually to pacify the oriental world and lay it open to the financial operations emanating from Rome. He did his work thoroughly. The contract system of tax gathering was extended—although in a milder form—over all the Asiatic provinces, so that the revenues of the state were nearly doubled and the operations of the capitalists enormously increased.

Caesar's invasion of Gaul (58 B.C.), on the other hand, was a simple act of military aggression, instigated by personal motives rather than by the desires of a class or by large considerations of state. His plans and preparations show that he was primarily bent on raising an army with which to make himself the most powerful man at Rome. Thus the inclusion of the last great province was in a measure an accident. However, with Caesar we reach virtually the end of territorial expansion. Since there were no longer any strong powers to fear, nor the need of winning distinction and prestige through military achievement, the emperors could safely limit themselves to finding and adhering to sound frontiers. Such frontiers were established by Augustus and were in general accepted by his successors.

The conquest and organization of a vast empire by a city-state was a unique event in history. The secret of success seems to have been the capacity to form and control an expanding federation of autonomous peoples while the whole of Italy was being secured. Eventually, when success had blinded the senate to ancestral methods and many of the nobles had fallen into the temptation of political exploitation, the state could nevertheless continue to expand successfully because of the momentum won by the sacrifices of the fourth and third centuries.

II. SOCIETY AND ECONOMIC CONDITIONS: THE REPUBLIC. The republic was founded and organized by "patrician" landholders who considered themselves superior to the common folk by reason of their descent. At the time they alone could hold magistracies and priesthoods and they alone had a vote in the senate on the most vital matters. This does not necessarily mean that they owned large estates. Many seem to have been active farmers and, with the intensive hoe culture of the day, a man could hardly till more than ten acres of land. Legend, at least, insists that some of the old consuls, like Cincinnatus and Curius, worked their own lands. When the plots were larger, we must assume that they employed renters, free laborers and to some extent slaves.

The "plebeians," who could vote but could not at first hold office, were apparently numerous. The origin of the class is obscure. It is usually assumed that they were Latins who had in the course of time lost their farms by ordinary economic processes and had, especially during the Etruscan occupation, become laborers and artisans and dependent renters. It may also be that some of them were liberated serfs. There is

no support for the old-time hypothesis that they belonged to a conquered race.

Since Rome's power and resources dwindled after the restoration of the republic, and commerce and the crafts declined, there was much economic distress during the fifth century. And since custom permitted enslavement for debt, and the patrician possessors were not inclined to give relief, there was a steady demand on the part of the plebeians for political recognition whereby they might improve their condition. Not much progress was made until after Veii was captured in 392 and a large part of its land distributed to Romans. The humbler citizens apparently received these allotments, for we learn that four new country *tribus* were then made. This increase in the number of property-holding plebeians apparently gave them the prestige that enabled them gradually to win complete equality with the patricians. Thereafter the term patrician represented only a hereditary distinction of no great significance, for in the third century a new social *nobilitas* of more practical value in politics grew up, a nobility of families, whether of patrician or plebeian origin, descended from anyone who had ever held the consulship.

From the capture of Veii (392) to the First Punic War (264) the aspect of Roman society did not greatly change. Agriculture continued to be the chief industry. There was relatively little maritime trade, if we may judge from the evidence that archaeology has left. Rome developed no distinctive craftsmanship, though here and there nearby towns like Palestrina made their mark in fine metal work. However, a fairly large artisan class grew up for the supplying of ordinary household ware, farm implements, arms and armor. And the activity of Appius Claudius in his censorship (312 B.C.)—building an aqueduct for the poorer district of the city and enrolling the urban poor in whatever ward they might select—indicates that the free urban proletariat was strong enough to demand attention. But in general the outstanding fact of this period is that a gradual colonization of lands taken in wars kept Roman society directed landward, and society on the whole remained of the type associated with the name of Cincinnatus. It was a society such as Thomas Jefferson considered the ideal for his day.

During the first period of foreign wars (First Punic War, 264–241; Second, 218–202) there was again no great change at Rome except that in assuming direction of these critical conflicts the senate grew in importance and prestige, and the senatorial nobility came more and more to stand apart in the esteem of the commons. It is in this period that the new aristocracy, by sheer accomplishment in an epoch of very great danger, established the tacit custom that, except in very unusual cases, only the political nobility was to be trusted with high office.

The spread of the plantation system as a result of the Second Punic War led gradually to a very great social change. During the war small farmers had been cut down mercilessly in battle, so that much land was on the market and more fortunate survivors could expand their estates. Moreover, as a result of the devastation caused in southern Italy and in the Po valley, the state expropriated extensive areas. Only a part of these could be colonized at once; naturally the northern portion, which was in danger of being reoccupied by the Celts, was settled first. It was usually settled in moderate-sized lots. In order to make the southern lands productive to some extent at least, they were rented out in large tracts at low rentals to those who would take them. The senators, who made this provision, were largely the ones who took the leases. The lands went into grazing and to some extent into wine and olive raising and, since free labor was scarce, the landlords purchased war captives and Greek slaves for the development of their ranches and plantations. It is very likely that some of the expansion in Spain, in Liguria and in Epirus was pushed with greater vigor than political policy required simply because the generals in command were aware that Italy could absorb a large number of slaves. Thus during the period between Scipio and Tiberius Gracchus the aspect of Italy changed to a considerable extent. Plantations spread rapidly over the better lands, and in the south large ranches extended up into the hilly country. Small farmers were still quite numerous, however, especially in the foothills and mountain valleys of the central Apennines. During the first thirty years the agrarian youth—none too numerous—who found opportunities denied them at home took colonial plots in Cisalpine Gaul. When these plots gave out (about 170 B.C.) it became the custom to cross the Po and try one's fortune among the Celts of Lombardy.

Apparently there was still not much maritime commerce among the Romans. The Greeks of south Italy and the Greco-Oscan population of the bay of Naples were active on the sea, and some Roman funds seem to have found place-

ment in their enterprises, but not many. The inscriptions of Delos—which was the center of Mediterranean trade after the destruction of Corinth—give a clear picture of the commerce of this period. They reveal very few traders from Rome before the first century B.C., but very many from Asia, Syria, Alexandria, Greece, and not a few from the Greek cities of Italy that were allied to Rome and that profited by Rome's policy of requiring open ports for her allies. The fact seems to be that the opportunities in land exploitation opened by the Punic War and by the new system of farming with slaves attracted most of the Roman capital landward again. When Tiberius Gracchus—a young aristocrat who had read widely in stoic philosophy—reached the tribunate in 133 B.C., he observed that those parts of Italy which had formerly been occupied by numerous freeholders now chiefly supported slaves, and that because of the scarcity of free men of property Roman consuls had difficulty in making up their levies when a war broke out. He also remarked that many Romans had grown wealthy by illegally squatting on public lands or occupying the public lands which their fathers had enclosed, and that all this time an urban proletariat was growing up which found no way of making a living.

One might expect that, with the increase of wealth in the numerous large households and the herding of poor free labor to the city, some distinctive industry might have arisen at Rome as at Capua. But this did not occur. Indeed the artistic bronze and silver work for which the neighboring Praeneste had been known—and one of the finest pieces found bears the signature of a Roman—actually ceased to be made at this time. The explanation for this trend seems to be that, on the one hand, the recent campaigns in Greece and Asia had attracted attention to the beautiful wares and articles being wrought in the East, so that imports from there captured the best markets at home, and that, on the other, large households frequently had skilled slaves who supplied the rougher articles. Villa slaves certainly were trained as smiths, masons, carpenters, joiners, cobblers, makers of clothing and to some extent even as jewelers. It was also true that emancipation was very common at this time and that skilled slaves set free often became humble craftsmen who supplied articles of mediocre value in small individual shops. Conditions, in fact, were not at all favorable to the rise of an industry that could compete with those which had been established long ago in the more advanced East and in the old Greek portion of Italy.

Roman society remained agrarian-military. The aristocracy, drawing its livelihood from slave labor on large estates, not infrequently from a general's share in booty, and occasionally from a shrewd marriage, and basing its claims for social distinction upon ancestry and political office, remained a close corporation of less than a hundred outstanding families living in one city. The men were generous in their devotion to political and military service, laboring incessantly—whether on foreign missions or arduous campaigns or conscientiously attending the sessions of the senate and the courts. For the most part they still revealed themselves as men of integrity in dealing with subject nations, and as men of puritanic instincts in their social relations at home. But they were also growing imperious toward provincials, harsh toward their "allies" in Italy, inconsiderate in their treatment of their slaves, and they were beginning to insist upon the preservation of the status quo and to interpret the political practises of their own day as unalterably final. A middle class still existed, to be sure, consisting of those landholders who had not broken into the ranks of the nobility, certain state contractors and a few men who had made some profit in money-lending and in commerce, but it was not strong enough to receive much attention from the ruling class. A lower class of poor farmers and shopkeepers also clung to the civilized fringe of society. Below were the large hordes of slaves, ready to do what old Romans considered "dirty work," but emerging by gradual emancipation into Rome's populace.

The Gracchans tried to alter this state of things by colonizing the urban poor on lots to be reclaimed from the squatters' estates, by organizing a strong middle class of *equites* who were to have the privilege of profiting from more state contracts and of being recognized in the panels of the law court, by encouraging Roman commerce in the colonies planted at Carthage and in south Italy, and finally by restoring some governmental responsibility to the tribal assembly and at the same time reducing the powers and pretensions of the senate and the aristocracy. The program was carried through, but received no fair trial because after the murder of Caius Gracchus no leader arose to direct its machinery. The middle class, however, became a power through the Gracchan reforms and frequently checked the aristocracy, but being built up on the privileges afforded by state contracts this

group became in time a menace to good government by leading the way in the exploitation of Rome's subjects. As we have noted above, it was these contractors who were largely accountable for the expansion of Rome through Asia and who used Pompey as their agent. The last half century of the republic was to no small extent a struggle between the senate and the equestrian order for an advantageous position from which to harvest the profits of imperialism.

By Cicero's day all Italians were citizens of Rome. The body politic then included not only the classes mentioned above but a much extended group of small farmers of the hill region, the merchants of the south and the industrialists of Capua, Tarentum, Puteoli, Arretium and other places. These new peoples, however, were too far away to be effective influences in the Roman primary assembly, and the men who controlled Roman politics were not so eager to give up their power as to substitute a representative assembly constituted from the whole of Italy for a docile primary gathering. Caesar, when he became dictator, was the first to recognize these new elements in the city-state, and in his colonization and in his economic program he considered the needs of merchants, artisans and manufacturers as well as of agrarians. His death, however, checked progress along these lines.

Indirectly Caesar's rejection of the tax-contract system instituted by Gracchus damaged Roman commerce severely. The publicans had gathered the tithes in kind and had been compelled to build up a shipping and distributing machinery to dispose profitably of the produce, and this had drawn them into trade. But Roman shipping was as coy as American shipping has recently been. When the immediate necessity vanished, the carrying trade fell away to the easterners who were more accustomed to it, and the Roman *negotiatores* then confined their activities to financing estates that were falling into Roman hands. In the early empire Rome was living not on commerce and industry but largely on returns from capital invested in Italian and provincial lands and mortgages.

III. LAW. Rome's foremost gift to civilization was a great digest of laws. That digest was made at the end of a thousand years of legislation, but even at the beginning the Romans seem to have revealed a striking respect for orderly procedure. Nowhere else can one point to a government resting upon a primary assembly which during several hundred years worked out a series of civil revolutions by reasonable compromise and without bloodshed. We do not yet know enough about racial inheritance to explain such behavior. One may of course point to the influence of environment and recall that centuries of experience in defending fertile lowlands against hungry mountaineers would naturally breed respect for property rights; that early experience with world wide commerce in the days of Etruscan domination compelled the Romans to devise liberal forms of contract; that the traditions of individualism which long prohibited the formation of a strong central government elevated the patriarchs and the patriarchal family, which in turn encouraged the formation and safeguarding of estates, and that this evoked well considered laws of property and of inheritance; and finally that the long survival of an aristocracy insured continuity in legal conceptions. We may admit all this and still be compelled to assume that the ancestors of the early Latins who invaded Italy had already, by some hard process of environmental elimination of the discordant, coalesced into a racial group possessing fairly uniform physical and temperamental characteristics. Archaeology has shown that the invaders were land seekers who came and took their land in compact groups; and linguistics, by contrasting the conservatism of early Latin with the wreckage that occurred in the race mixtures of the early Middle Ages, supports the conclusion that the Latin groups long remained relatively homogeneous. It may well be that what we consider traits of Roman character were in large measure a common inheritance of the Italic peoples from prehistoric times.

In coming to a survey of Roman law it is not worth repeating what Roman antiquarians said of the putative laws that antedated the decemviral code. The evidence is too infirm. The fragments of the twelve tables, on the other hand, give a fairly reliable picture of the legal customs of the middle of the fifth century B.C. They are so thoroughly Roman in character that the old hypothesis of a possible borrowing from Greek need not detain us. This code contains a somewhat broad collection of civil, criminal and religious law. Some of the sentences on civil matters are more advanced than one would expect from a people in their state of culture. For instance, the formal mode of purchase in the presence of five witnesses applied only to land, slaves and cattle; all else could be sold by informal *traditio*; contracts, loans, mortgages and trusts were provided for by fictional forms of

sale, and in all these the rule applied that the spoken word (witnessed, of course) was valid. The law of the twelve tables did not spring out of the primitive rural economy imagined by Mommsen's day but out of the experience of the early commercial city which the spade has now disclosed to us. The fifth table seems to permit a father to leave his property by legacy outside of his family, a progressive measure which may have arisen in an aristocratic society eager to conserve estates in the hands of some responsible person who would thereby be able to meet the political obligations expected of landowners. On the other hand it is a mark of a strong democratic feeling that early law did not recognize primogeniture or distinction of sex in inheritance.

In criminal law we meet with a conservatism that is due to the lack of an executive machinery belonging to a strong central government, which in turn reflects the survival of patriarchal customs. For instance, theft, fraud and personal injuries were still left in the civil code for private initiative to deal with, and although retaliation was not recognized, the right of *talio* is kept as a factor of compulsion in order to force the culprit to submit to judgment. This is doubtless due to the very slow acceptance of administrative obligations on the part of the government and to the long survival of patriarchal customs. Peonage for unpaid debt was still permitted, but the assumption that the creditor could slay the debtor has been proved to rest upon a misinterpretation of the evidence. We also find that at Rome as elsewhere custom was slow to substitute civil procedure for what could be accomplished by religious awe. A sentence of the eighth table reads: "He who burns another's grain shall be under the curse of Ceres." That is, the culprit was outlawed. The state did not assume obligations where old religious traditions were still effective.

This codification of custom had a certain retardant effect in that it tended to stereotype procedure and precedent. However, in several instances where the publication of custom revealed incongruities with progressive experience, it helped to provoke criticism and thus promoted precision in legal thought. So, for instance, the prohibition of marriage between a patrician and a plebeian was presently corrected by statute. Similarly, in the next century, when the institution of coinage led to easy money, speculation and debts, the people passed a bankruptcy law which indirectly discouraged the enslavement for debts permitted by the code.

In 366 B.C. the consul was relieved of judicial duties, which were then assigned to a praetor. This new magistrate could give his whole attention to administering justice. He was not necessarily a legal specialist, but he was a senator and as such was supposed to be familiar with much of the law. The early praetors apparently won the confidence of the people by their judgments, for the primitive custom of according discretion to the judge was not later hampered by regulation. In fact the praetor's powers were tacitly permitted to grow and were actually enlarged by the Aebutian law until he assumed considerable liberty, by means of legal fictions, to interpret old laws in conformity with contemporary ideas. These interpretations would be recognized in formulae set forth in the annual praetorian edict, which came to be considered valid in law unless abrogated by statute. Thus Roman law was largely judge-made and was kept abreast of changing conditions.

In the third century (242 B.C.) a new court was instituted to pronounce judgment in cases arising between citizens and foreigners and also between two foreign litigants. This proved to be all-important in the development of Roman law. Since the civil law was applicable only to citizens, foreign trade would be discouraged unless non-Roman commercial practises were recognized as valid in the Forum. The institution of a court for foreigners was not a Roman invention, for several Greek trading cities, as well as Carthage, had the custom of keeping an official arbitrator at the harbor in order to settle disputes and thereby encourage trade. The institution, however, gained special importance at Rome because Rome's civil law could so readily absorb the liberal customs of the peregrine court, because Rome's stable government gave an unusually long term to such a process of absorption, and because Rome's management of her federation also assumed the necessity of equitable dealing with non-Romans.

It is a mistake then to suppose that respect for *aequitas* and *jus gentium* came in with stoicism in Cicero's age. To be sure, we find the phrase *jus gentium* first in Cicero, but we do not happen to have any pre-Ciceronian prose in which it could well occur. Since ninety-five percent of republican Latin has been lost to us, we dare never draw conclusions *ex silentio* regarding the dates of republican customs. In Cicero's day the phrase was well established with two distinct meanings, the one here referred to, in which *jus gentium* includes the accepted customs of civi-

ized peoples in commerce and communications, the other in which the term refers to the accepted practises of civilized peoples in wars. In the rules of warfare Rome showed a sensitiveness to foreign custom at least as early as four centuries before Cicero; in commercial practises it is probable that trade with Carthage and Sicilian Greeks created a recognition of *jus gentium* as early as the sixth century B.C. Certainly the institution of the peregrine court in 242 assumes the existence of a term with which to designate the body of custom which the court was expected to respect.

Similarly there can be no doubt that the recognition of *jus gentium* was associated with a respect for *aequitas* long before these two phrases occur together in Cicero. That the whole Roman federation was based upon the principle of *aequitas* is shown by the fourth century treaties of *aequo foedere*. And most of the strangers with whom Romans had to deal in the peregrine court were in fact members of states which had such treaties with Rome. The very aim of the institution was to prove that such treaties meant what they said even with respect to minute dealings between individuals. The historian of Rome must accustom himself to find Rome's deepest thought embodied in institutions rather than in philosophical formulas. In other words Rome had assumed and put into actual practise the principle that *aequitas* was superior to *lex* long before philosophic teachers had formulated a theory to that effect.

Nevertheless stoic philosophy also played an important role in the shaping of Roman law, though this came later. Stoicism in Greece took no part in politics until after Alexander's conquest of the East gave Athenians some knowledge of a great territorial state, and the subjugation of Athens itself suggested the desirability of a humanitarian philosophy with which to check Macedonian autocracy. Then it was that Chrysippus began to teach universal brotherhood and to insist upon the instinctive nature of justice and equity. That such theories should spring up among the misgoverned and suffering victims of tyranny is to be expected. But that the jurists of a proud and victorious people like the Romans accepted them as the basis of their law is more surprising. In his *De republica* and *De legibus* Cicero very explicitly accepts these stoic teachings, using them as a foundation for his political doctrine; and it was probably his friend Sulpicius, the keenest jurist of the day, who first adopted the stoic theory of a natural instinct for iustice as a basis for juristic philosophy. But Cicero is careful to show that Roman government had a definite historical continuity in native practise. He gladly adopted the newfound stoic phraseology, but he was well aware that in juristic as well as in administrative practise the principle had long been recognized at Rome that statute must conform to the dictates of *aequitas*. This is why Cicero is so ready to do deference to what he calls *jus gentium*, why he holds that justice rests on intuitive right reason and that law not based thereon has no real endurance. By the day of Gaius *jus naturale* is quite regularly the synonym of *jus gentium*.

The jurists, whose *responsa* were extensively rescued in Justinian's *Digest*, continued the work in the spirit of the republican praetors, drawing anew, however, from the stoic writings which were again popular in the second century A.D. Thus it came about that throughout the *Digest* discussions are apt to go back of laws, edicts and rescripts to principles of "equity" and "natural law," and that the code was based upon general principles which were universally applicable.

In international law a tendency in the same direction was hindered by Rome's rapid expansion. Here too a *jus gentium* (i.e. the accepted customs of nations in war) had sprung up, which, protected by religious awe, was well on the road toward an international code, when Rome's dominance interfered. Autocrats do not arbitrate within the sphere of their supreme control, and Rome controlled the world. However, in the early days of the federation Rome's principles in dealing with her allies had been very much like those which she expected to be applied in the Forum. And Roman writers like Livy and Cicero are not aware of a theory (popularized in modern times) that magistrates working in behalf of the state are excused from obeying standards of conduct expected of private individuals. The statement frequently made that Cicero considered Roman provinces national *praedia* to be exploited at pleasure simply is not true. In the passages that are usually cited to substantiate the view Cicero is not speaking of whole provinces but of limited public areas. It is not an accident that Rome's history reveals relatively fewer rebellions on the part of subjects than any other history of ancient times. Rome did not write an international code comparable to her civil code, but on her practises as recorded by Livy and Cicero, and on the apposite interpretations provided by the

Digest, the early founders of international law were able to base a respectable code of rules.

IV. GOVERNMENT. In the construction of their own constitution the Romans were far more apt to feel their way through experiments than to devise well-rounded documents on tablets like the Greeks. To one principle they adhered for many centuries: they felt that they were capable of ruling themselves and they rejected an absolute monarchy as unendurable. Every citizen must have a voice in the government. However, the early government laid the heavier burdens of responsibility, in the army as in the government, on those who possessed property and distinguished ancestry. The slow emergence of the plebeians, who at first occupied a very inferior place in the assembly, led through compromise—and compromise was distinctive of Roman politics as compared with Greek—to an illogical excrescence on the constitution, i.e. the tribunate with a separate plebeian assembly. In order to preserve a timocratic magistracy and lawmaking body without incurring civil war, the aristocracy, after two centuries of slow yielding, allowed the tribal assembly of plebeians who elected the tribunes (personal advocates of the poor) to assume full legislative functions (287 B.C.). Theoretically a part of the people—though a very large part—might now legislate for the whole. Perhaps the discrepancy in logic was excused by the fact that the tribunes as members of the aristocratic senate were conceived of as representing that body. Be that as it may, the important points were that the new assembly voted by wards without property qualifications, and that its acts were not amenable to senatorial veto. In theory, therefore, Rome was now ready to try absolute popular sovereignty. However, since all ten of the tribunes had to acquiesce before plebiscites were proposed, and since tribunes who offended the senate could readily be kept from political advancement, the possibility that this assembly would initiate radical measures was not great. It proved indeed to be a safety valve to prevent rebellion, a kind of popular referendum during periods of great stress, and finally it served in times of concord as a convenient body in which the senate could expedite needed legislation.

Soon after this assembly won its great power, the foreign wars began and the people, recognizing their limitations, quietly allowed the senate to assume responsibility and leadership. During that century (260–150) the assemblies usually voted as the senate requested. In the middle of the second century Polybius, an intelligent Greek statesman who had lived for years at Rome, first as a political hostage, then as a friend of the Scipios, wrote down his impressions of the Roman government. He was greatly pleased especially with its "checks and balances"—a phrase which by a devious route has come to us from him. He observed that the executives were practically autocrats at the very points where power was essential, but that otherwise they were checked by limitations of time and by senatorial courtesy; that the aristocratic senate (the administrative body) had enough power and continuity practically to direct the policies of state without the liberty to go to extremes of conservatism; finally that the democratic assemblies (electoral and legislative) were in theory sovereign, though so well tied in by veto and parliamentary rules that they could hardly run amuck as the assembly of Athens had done.

Polybius is not far from correct in this description which, through its influence upon Cicero's writings, has also left consequences in modern politics. His observations were somewhat too much affected by Greek political philosophy, especially by that of Dicaearchus, who had advocated an ideal combination of monarchy, aristocracy and democracy. Fortunately for Polybius, he happened to see Rome at the very time when the senate was tacitly usurping functions beyond its legal powers, and when the Gracchans had not yet fully revealed the capacity of the assembly. He happened in fact to find something resembling the ideal state of Dicaearchus in operation.

In one respect Polybius' analysis came short of acumen, for by describing the Roman constitution in terms of Greek theory he somewhat dulled his own version and thereby hampered political thinking later. In Greek politics economic motives had played a very important role. Forms of government were associated with economic classes. When in Greece a political battle was waged between aristocrats and democrats, it was usually a battle between possessors and paupers, and too frequently revolutions resulted in a complete change of property. Polybius knew of dozens of revolutions of that kind. Hence he thought in terms of classes and functionaries representing classes rather than in terms of functions of administration. At Rome there had been class struggles, but the purely economic motive had never been strong enough to lead to bloodshed. Aristocracy had not as yet

become plutocracy. The senate was after all a group of ex-magistrates once elected to office by popular vote. The centuriate assembly which elected the consuls was not a horde but a gathering of citizens with votes weighted according to property. But the most important point that Polybius failed to recognize was the fact that the Romans had slowly built (unconsciously perhaps) toward a classification by function. In separating the praetorship from the consular office in 366, they had somehow discerned that judicial and executive functions were and should be kept distinct. In permitting the senate, consisting of ex-magistrates, silently to direct foreign policy and to become an administrative body, they had shown prudent comprehension if not acumen, for thus an administrative group grew up separate from the executive as well as the legislative group. And finally when they kept the old assembly chiefly as a conservative electoral body while allowing the tribal assembly to organize as a legislative body, they had again felt their way toward a wise division of functions. Had Polybius been a very keen observer, he might have made the fruitful distinctions recognized long after him by Montesquieu, who advanced from a study of Polybius to an examination of the English constitution. Cicero unfortunately followed the flattering description which Polybius had made, and Roman political thought suffered thereby.

The Gracchi also, too much influenced by Greek ideas, thought of the plebeian assembly as an organ of social redress, working in its own interest. They strove hard to reestablish the theory of popular sovereignty, whether or not with a view to greater reform when their immediate aims were accomplished, we do not know. At any rate their revolution inaugurated a new class struggle in which material ends came to be the chief prizes, and Caesar took advantage of the schism to vault into power.

V. HISTORIOGRAPHY. The attitude of the Roman annalists toward their records and their own observations changed from time to time. The beginnings are quite different from those of Greece. In Greece literary epic and narrative for popular consumption came early, whereas the keeping of full official records came later. At Rome the archives were stored with accounts, laws, treaties and priestly annals for three centuries before any one wrote Roman history for general readers. This distinction marks a difference which is worth observing in considering the early annalists. In general we find in Roman historiography the following epochs that can be distinguished by general tendencies: (1) the period of the early statesmen-annalists before the Gracchi; (2) the period of the romantic popularizers working in the manner of Hellenistic writers; (3) the period of the antiquarian researchers in the days of Cicero and Varro; (4) the period of Livy and Tacitus, who while profiting from the methods and fruits of research insisted that history should be literature.

In the first period the writers were all senators who had been trained as lawmakers, judges and administrators. Schooled for their tasks in a day when there were no convenient compendia, they were accustomed to memorize the twelve tables word for word, and to keep in mind for use in senatorial debate the gist of the treaties made with scores of neighboring states. They were conscious of the importance of the official word. Of primitive legend there was, to be sure, no criticism, and when they chose to record this, as Fabius Pictor did about 200 B.C., they set it down as it came to them. But when dealing with the early republic, where some archival material was available, they adhered to it quite closely and avoided dressing it up with oral tradition. For the period that fell under their own eyes and the eyes of old witnesses still living they supplemented archival materials with what they saw or heard from reliable men. Although, in discussing the causes of contemporaneous wars and class contests, they naturally revealed the prejudices of their class and their nation, they seem to have made as serious an effort to be objective as they would have made on the judge's bench and in the council chamber. The antiquarians of Cicero's day found the books of these first historians exceedingly dry and crabbed, but recognized them as good storehouses of facts. Only fragments have survived from these writers, but Polybius, who based the Roman part of his valuable history upon them, has preserved the substance of their work for the century preceding his own activity. Since Polybius came from Greece at a time when historical standards in his own country were at their lowest, it is probable that he, despite a conviction that Fabius was sometimes blind to Punic arguments, learned his method and acquired his respect for the exact wording of records from Fabius, his chief source. Polybius, the foreigner, could readily attain objectivity in relation to Roman affairs and, having at hand Punic documents which

were not available to Fabius, he could correct Fabius. Unfortunately when he wrote of his own Achaeans he too was swayed by nationalistic prejudices which must be discounted to some degree.

The second period of Roman historiography marks a very serious decline. Primary education was now general and a growing public of readers demanded popular histories. Many writers sprang up to supply the need. Greek historical romances of the worst period were taken as models of how to be picturesque and dramatic. To get the necessary substance the writers searched out the legends of the heroic age that circulated in the households of old noble families. Many of these legends might have been confuted by reference to the archives, but if the legend was more interesting than the facts, it was too often preferred. We need not necessarily assume that the legends were far from the facts, for these families themselves possessed valuable archives of their own, two or three hundred years old, containing speeches made in the senate, minutes of senatorial discussions, sometimes also military instructions. Furthermore the Romans were legal-minded and were not given to inventing elaborately. But the point is that the numerous writers of the second period had frankly adopted the ideals of Hellenistic history, using no adequate critical standard for their work. Hence we are helpless when confronted with much of the history that covers the fifth and fourth centuries—the period which received the heaviest padding in the Gracchan days. We should also add that this was a time of very bitter class struggles when several of the leaders wrote autobiographies purely for apologetic purposes. And these also lowered the standards of accuracy and provided biased materials for later writers.

In the third period there was something of a reaction against the popularizing romancers, since men of better education had grown suspicious of what was being provided, and statesmen needed reliable books of reference. The encyclopaedists of Varro's day rescued from the archives much material which later historians could use. The methods of criticism, however, were not of the best, especially as linguistic science had not developed to the point of providing reliable criteria. And no great historian arose to demonstrate what could be done by adhering to exacting standards of accuracy.

Yet the wholesome effects of this period of research were not lost. Livy, who followed, was not an antiquarian—he wrote with too great speed and he desired to produce good literature. He is not to be judged by his first books, however, for he frankly states that in this part the available story is legendary and that he tells it for what it is worth as a story. Here and there we find that he has made serious mistakes. And although he often makes a serious effort to be objective he is also very nationalistic, as all Romans were in his day. For biased judgment, however, he probably has no passage that can compare with Mommsen's amazing portrait of Caesar. What he has learned, even when he has not the patience to delve in the archives, is that for the historical period the popular story which passed current in his youth is to be checked up by the constant use of the dry early annals. That he had not time for independent research is comprehensible when we recall that his history was about twice as large as the first six volumes of the *Cambridge Ancient History*. His value lies in his employment of the best secondary sources for the historical period, in his ability to reproduce the fervor of Rome's political energy, and in his vivid literary art.

Tacitus had about the same attitude toward his sources as Livy, although he more frequently went to primary documents. His personal prejudices in the selection of material and in his partisanship are more patent; his dramatic qualities are given freer play; and his powerful style, adapted to satire rather than to historical narrative, reminds one of the more epigrammatic pages of Gibbon. After these two writers historiography again suffered a decline. The two Greek historians who wrote on Roman history later, Appian and Cassius Dio, followed the romantic tradition of Hellenistic history without its capacity for literary composition.

VI. MONARCHY. When Caesar had defeated Pompey in the Civil War, it was a foregone conclusion that he would not surrender his power as Sulla had done. The empire, stretching from London to Damascus, from the Rhine to the Sahara, must have frontier garrisons along a line of several thousand miles, and these garrisons must have an unquestioned master if the civil wars were to end. The primary assembly of citizens within reach of the Roman polls was wholly unfit to govern such a vast empire, the provinces were in no way ready to share in the rule through representatives, nor could they quickly be Romanized in spirit with the slow means of communication of that day. No more

could complete power be trusted to the senate, a group of jealous and ambitious nobles who had so long been severed from direct responsibility to the people that they had lost popular respect and confidence. The time for a monarchy had obviously arrived, but it was very dangerous to say so in the face of five hundred years of popular government.

Caesar forced the expiring government to grant him a temporary dictatorship, for which there was abundant precedent. Then he set at work discreetly to devise means by which he might wean the Romans away from republican traditions toward a monarchy that, unlike the dictatorship, might give him an unlimited term. Absolute monarchy seemed to be the only form that would be strong enough to override attempts at popular revolution and to keep all the armies in leash, and the history of Alexander and his successors taught Caesar that the only monarchs who had succeeded were those who claimed and imposed the claim of superhuman descent or inspiration. Mysticism and religious awe must be called into service. Hence, as Eduard Meyer has shown, Caesar, like Alexander, encouraged rumors of divine descent and invited the bestowal of divine honors. Before his death the senate had proclaimed him of divine origin and voted him the attributes of divinity. But Caesar had acted too speedily. The Romans (except for the urban rabble) were not ready for oriental mysticism. They might have grown accustomed to the required phraseology had Caesar given them time to find apologetic interpretations for it, but he was in a hurry to begin his conquest of Mesopotamia. The revelation of his intentions shocked the senate and he was struck down.

After thirteen years of intermittent civil war Augustus secured complete control of the empire by defeating Antony. He was too shrewd to invite disaster by following Caesar's road to theocracy, although in the first struggle he tried to profit by calling himself the son of the *divine* Julius—presumably hoping to be accepted in time as a divinity himself. However, after the world was tired of warfare and few of the nobles remained to resurrect old traditions of liberty, Augustus, made all-powerful by his victory at Actium, realized that he could take his time to work out an acceptable form, and that there was no need of offending the nobles. He then laid aside extraordinary honors and titles and, after some experimentation, decided to rule by means of the traditional magistracies, using the proconsular office over the border provinces for the control of all the armies, and the tribunician power for the control of legislation. He could then safely permit the senate to continue as an administrative body in control of the government of pacified provinces which had no armies, and the republican magistrates could be elected as before to perform their duties within the circumscribed field now remaining. Nothing was defined regarding the succession, the question being left open in order not to offend those who still hoped that the theory of a republic was not wholly annihilated. But no one need have doubted that the man in whose hands Augustus should leave the proconsular command at his death would become his successor.

Mommsen has called this new government, designed in 23 B.C., a "diarchy," as though the world were divided under two associated and equally powerful heads; and Meyer, going even farther, has held that Augustus had in a real sense attempted to restore the republic—as in his *Res gestae* he claimed that he did. It requires a great effort of faith in forms and phrases to accept either theory in all seriousness. In 1927 there came to light several inscriptions from Cyrene, a small senatorial province, which show that in the years 7–4 B.C. Augustus not only freely gave advice to the senatorial governor of the province but that he reformed the local courts there. We have known, of course, that Augustus had the proconsular power in his own provinces and that he was also voted the *majus imperium* over the rest, but we had assumed that Augustus had avoided the exercise of this power except when invited to do so by the senate. It now appears that this *majus imperium* was exercised over the least significant senatorial province upon the slighest provocation. Augustus had in fact established a monarchy, distributing just enough offices and authority among the old organs of state to keep the senate content. And after a number of years (apparently about 12 B.C.) he again began to reveal aspirations for Caesarian autocracy. In the provinces assemblies were already holding festivals at which the deities "Roma" and "Augustus" were worshipped, and indeed temples were erected to them. In Italy there were to be no temples (though a few were erected), but the "Genius" of Augustus was to have a place with the public *Lares*, and the new cult was to be in the hands of a select group of freedmen in each city. Only after death, however, did Augustus expect the canonization, which Caesar had in-

vited while still alive, to take effect in Italy.

The imperial cult had some value as a contrivance for smoothing the way of government and eliciting devotion in the oriental provinces, where such things were customary, and among the freedman (ex-slave) classes in Italy, which were largely of oriental origin. It also had some influence in keeping the heterogeneous elements of the army loyal, since constant deference to portraits of emperors borne on standards was a daily reminder of the majesty of the person to whom the soldiers had sworn obedience. Among the old stock of Italy, however, the imperial cult never gained any real religious meaning. In the European provinces, from Greece to Gaul and Spain, it had just as little import. The occidentals went through the forms on stated occasions and raised honorific inscriptions as they were told to do, but in the home and in the private gatherings of the indigenous peoples the imperial cult never gained any real significance. The cult in fact seems to have been of dubious value west of the Aegean, and was doubtless imposed by some courtier who without due study had concluded that the mystical devotion observed in the imperial temples of Asia could be transplanted to the West. For two centuries the cult was generally confined to the "canonized" dead emperors, the *Divi;* in fact both Caligula and Domitian, who invited the title of *Deus* while living, met a violent death. Aurelian and Diocletian, who found the cult weakened in the army because of the civil wars that in quick succession had revealed the fragility of emperors, reorganized it among the troops by connecting it with the Mithraic religion, which was powerful among the eastern troops in the army. In this new cult the emperor called himself the representative on earth of the "Unconquered Sun," and himself a *deus*. Diocletian, who kept his capital in Asia, was the first who succeeded in ruling as a god. His successor Constantine, who recognized as legal the religion of his Christian subjects, could not consistently assume the titles of his predecessor though he did not refuse all the formalities. The later theory of rule "by grace divine" does not therefore descend directly from the Roman imperial institution, but was again invented to serve as a counterpart to the assumption of divine vicegerency by the popes.

VII. IMPERIAL ADMINISTRATION. The administrative machinery developed by the emperors differed much from the haphazard system of the republic in which consuls had held office for only a year and could not, therefore, effectively supervise permanent governmental bureaus. Augustus, while feeling his way out to a more effective system, had at first employed the trusted servants of his own household as secretaries and treasurers of temporary departments of state. Since as proconsul he was excused by custom from rendering his accounts until he laid down his office, he in point of fact never did make a full statement for the *fiscus*, though he went far toward organizing it effectively. In the frontier provinces, where armies were needed, the emperor was proconsul. His place in the various provinces was held by his *legati*, chosen by him for indefinite terms from the senatorial class. These *legati* commanded the garrisons as well as administered the affairs of the province. Their judicial duties were not onerous, since the cities and districts enjoyed a large degree of autonomy and Roman law did not become operative until after Caracalla's edict. Needless to say, however, appeals to the governor became ever more frequent. The *legati* were usually chosen with care and held to strict account by the emperor and, as the tax gathering department was severed from the administrative, the temptation to abuse power was far less than before. Rome's provincial administration improved everywhere under this system, since the imperial appointees set a standard for the senatorial governors as well, and since the emperor occasionally exercised his *majus imperium* in calling to account any delinquent governor of a senatorial province.

The provincial tribute in the republic had usually been about a tenth of the crop, a single tax which was supposed to adjust itself over the cities since, when this tenth was shipped to Rome, the farmers could sell the rest of their surplus in the cities at a higher price. However, special poll and sales taxes were in time devised to catch the urban population. Much later, revenues from monopolies were introduced from Egypt. Julius Caesar had already gone far toward abolishing the tithe in kind because it entailed heavy costs in the collecting and invited dishonesty. Since he intended to do away with the annual change of magistracy at Rome, the time was ripe for the institution of direct tax collecting. The money saved to the state by the new system went to the taxpayer, for Caesar estimated the fixed tribute at about two-thirds the average value of the tithe.

The core of the army (over 100,000 men) was made up of citizen legions. These were sup-

ported by about an equal number of provincial auxiliaries who were given citizenship at the close of service. During the early empire conscription seldom had to be used. The pay was about the daily wage of laborers and, after twenty years of service, a grant of land or of money equivalent to about one-half the sum of the stipends earned. Army casualties were much reduced, since the imperial policy during the first two centuries was in general to protect the frontier and not to advance it. The principal legions were stationed on the Rhine, the Danube and on the Syrian frontier. After Vespasian's day recruiting for legions was seldom carried on in Italy. There were enough citizens and "Latins" in the provinces for the purpose, and the custom increased of enrolling suitable auxiliaries who were given citizenship when transferred to the legion. The army was perhaps the most important factor in the spread of Latin speech and of Roman customs.

Much has already been written about a putative imperial policy of Romanization and urbanization in the provinces. Direct evidence for this is very thin. It is, of course, a remarkable fact that in three centuries of Roman rule in Gaul, for instance, Celtic speech was almost entirely displaced by Latin whereas, fifteen hundred years after Roman rule, the one corner of France which later received an enclave of Celtic-speaking people still remains so largely Celtic in language. Nevertheless the evidence favors the old theory that the Roman government followed a policy of laissez-faire and seldom concerned itself as to whether or not the people in the provinces were adopting Roman speech and customs. In Africa, Spain and Gaul the stimulus seems to have come from the provincials themselves rather than from Rome; while in the East the native culture remained undisturbed. In Africa Rome's garrisons stopped seasonal nomadry in the interest of peace and security. As a result the nomads settled down to agriculture and, preferring to live in compact communities, they formed towns which invited trade and in time grew to the point where they could be granted municipal status. In Gaul the process was different. Here cities grew up near good harbors and at points where the army could conveniently receive supplies. But in the central part the Celtic tribal organizations long remained undisturbed. The Roman government did not concern itself with the nature of social organizations so long as the tribute was forthcoming. Normal economic processes gradually divided the natives into large landholders (who invited Roman culture for social reasons) and renters. In Gaul the manorial villa with its group of dependents usually formed the nucleus of new cities. There were other ways in which Roman culture spread, but these instances will perhaps illustrate how without purposive pressure from Rome internal social and economic factors furthered the formation of Romanized municipalities.

VIII. ECONOMICS: IMPERIAL PERIOD. The economic system did not alter much during the first two centuries of the empire. In the making of a few articles like pottery, glassware and bronzeware certain old industrial centers in Italy continued to produce large quantities for world wide distribution. Cloth weaving of wool, however, remained a domestic industry in Italy, and implements of iron and steel were usually put out by the individual smiths, though occasionally there was concentration of numerous smithies in one firm. In southern Gaul large factories sprang up for the making of glass and pottery, and Egyptian state factories, which had long made fine linens, continued to do so under Roman dominion. In a word, although capitalistic production was maintained, it did not make great strides under the *pax Romana*, despite its open ports, safe seas and extremely low tariffs. It is difficult to see why. To be sure, Roman law discouraged the formation of corporations of unlimited liability, but that law was not applied to foreigners. In Asia, Africa, Spain and Gaul non-Roman manufacturers had the right to form joint-stock companies to increase their production but they seem not to have done so. Capitalism was not kept down by heavy taxes or tariffs. There was no graduated income tax to frighten mounting dividends, and harbor dues ranged from two to five percent. Italy, of course, was devoted to agriculture and foreign investments in land, and never suggested the need of mercantilistic policies. The extension of the empire in fact opened the doors of Italy to foreign goods carried in foreign ships, and this was certainly one of the chief reasons why the larger Italian industries of the republic dwindled by the time of Marcus Aurelius. And those foreign goods were largely produced by slow free manual labor working in small units, as was the case with Anatolian rug weaving until recently. The world of trade, which had promised in the days of Augustus to create a new industrial era, settled back gradually to the old small-shop system to

which so many European cities still adhere. It was a harmless, congenial system which worked the artisan hard for small profits but left him a free individual; and it permitted the consumer to satisfy his own tastes without having to submit to the tyranny of standardized factory goods: the psychological explanation of it is not to be disregarded. The system, however, did not create much free capital to serve as a balance wheel at times of political crises, and during the empire sudden invasions always found the state lacking in economic resiliency.

With the establishment of the empire piracy came to an end, not indeed through any direct effort to police the seas, but because Augustus insisted on complete orderliness in the provinces, and it was in the misgoverned provinces that the pirates had fitted out their crews. Maritime commerce now increased. Ships were not large—indeed few harbors could have received large ships—and the emperors did not undertake to build harbors except at Ostia; but the Syrians, Alexandrians and Greeks in the East and the old Punic towns of Africa and Spain—especially Cadiz—shared in a very busy maritime trade. It was also about the time of Augustus that the periodicity of the monsoons south of Arabia became known, so that ships could sail from the Red Sea ports of Egypt to India and back by a route much shortened. A voyage from Rome to lower India and back was now considered quite feasible within a year, and it could be made wholly by water after Trajan connected the Nile and the Red Sea by canal. Indeed in the second century ships setting out from Egyptian harbors not infrequently visited the coasts of China. But since there was still no compass, shipping had to cease during the rainy season when the stars were usually hidden; and skirting the shores in order to keep directions entailed much danger of shipwreck.

Land routes were still popular with traders. And Rome was above all else an expert road builder. These roads were apparently never built primarily for commerce. They had been made straight and solid to carry the armies with their heavy baggage trains to and from the outer rim of garrisons. However, they had also been surveyed with a view to the speedy provisioning of the garrisons, so that they usually connected important cities. As a rule the government constructed the great thoroughfares and called upon the communities to build the connecting links which served for local intercommunication. Commerce, of course, quickly availed itself of these open and safe arteries, and trading posts which grew into cities sprang up wherever they went.

In agriculture the drift toward large plantations continued in Italy except in the Apennines, where there were still many small holdings. Large farms often specialized in one chief product and depended upon the market for the clothing and implements needed. "Domestic economy" was not the rule. In Italy orchards, vineyards and ranches increased. In the neighborhood of Rome this was in part due to the fact that provincial grain came by way of tribute and was sold in the city below market price. In other parts of Italy it was in some measure due to the fact that the soil was weary of cereal raising and that the people had become accustomed to a more varied diet. With the rise in the price of slaves and a certain political objection to slavery—which we first notice in the legislation of the Gracchi and Caesar—the tenantry system was becoming increasingly usual on large estates. By Hadrian's day there were probably more tenants than slaves on Italian lands. On imperial estates, which had become very extensive through the brutal confiscations of Nero and Domitian—Septimius Severus later surpassed even Nero in expropriating property—the tenantry system was customary. On these estates an imperial contractor managed the plantation, supervised the tenants, collected and marketed the thirds which they paid as rental, and drew his own profits from the exploitation of a part of the estate which was worked without cost to him by the tenants.

Many of these renters were very humble people; in Italy not a small proportion were ex-slaves, set free and turned into tenants when it was noticed that compulsory labor on land was inefficient and expensive to watch. In the provinces many of the rudest and dullest of the natives were among the small renters. In the third century, during the fifty years of civil wars and invasions, the tenants suffered severely. Taxes rose and rents were increased to the highest possible point. Tenants then began to slink away from their holdings to such an extent that the emperor, in order to secure his returns from his own rentals as well as from the taxes on private land, issued an edict which ordered farm tenants to observe their contracts. When this did not suffice, another edict followed commanding the sons of tenants to take up the contracts of their parents. By this time the renters were already in such humble station that

they failed to rise in insurrection, and henceforth they were bound to the soil in quasi-serfdom. Of the exact process by which all this took place we have no record, but an edict of Constantine, dated 332 A.D., shows that the process was then nearly complete. Something of the same kind occurred simultaneously among the artisans when at a critical moment the state insisted upon the conscription of the labor guilds for government service. Then urban labor, as well as rural, had to accept a permanent status of bondage.

IX. SOCIETY: IMPERIAL PERIOD. Gibbon and Mommsen have pointed out that during the second century there was more general prosperity and happiness than the world had seen up to that time or was due to see again for many centuries. The number of slaves had diminished to such a point that the remainder were treated with much consideration. Even if stoicism and Christianity had as yet exerted little practical influence in teaching humanitarian doctrine (and neither went so far as to outlaw slavery), prudent considerations of self-interest advised the placing of slaves under the protection of the courts. With the decrease in slaves there was, before serfdom entered, an increase in the class of free shopkeepers, artisans and farm renters who, in view of the constant growth of the cities and the lavish expenditure of money, must have found life tolerable. Charitable institutions were so numerous that there need have been little suffering from want. There are many inscriptions that contain some record of foundations and trust funds devoted to the support of the poor, the building of schools, baths and theaters, and to the financing of public festivals. The state, too, was interested in such benefactions. Not to mention the "bread and circuses" provided to keep the poor of Rome in complacency, Nerva and Trajan also placed productive funds in the hands of committees throughout Italy to provide for the support of the children of the poor. This might be termed a motherhood pension, but since these funds were regularly invested in land mortgages the institution provided at the same time "rural credits" at a low rate. It has been estimated that the equivalent of about one hundred million dollars of state funds was thus placed.

Wealth was abundant in the second century and the rentier class enjoyed leisure in most of the cities of the empire, patronizing the arts, especially those that might contribute memorials to themselves. Pliny, who owned several extensive estates, was a typical citizen of this period of prosperity. He held the usual offices of state, visited his properties, hunted, supervised and endowed charities, gave purses to impecunious writers, bought works of art, wrote salacious verses and moralizing letters and almost daily attended literary readings. An enormous amount of polite writing was done. If it were true that economic prosperity stimulates cultural production, that period should have created a dozen Shakespeares. In point of fact it created not a minute fraction of one. It filled gorgeous cities with busy, generous, contented epicures who were sure the millennium was just beyond the threshold. We now know that the thousand years which they inaugurated were the most dismal that history has recorded.

The student of sociology will find one of the greatest of mysteries in attempting to analyze this strange second century A.D., a period which displays a charming material façade over cultural futility. Art was floundering back and forth between baroque lavishness and academic exactness. In literature experimenters were trying the boldest effects in "new styles," while others were working on established models. In religion the new mystical cults gained many adherents, while the educated classes turned to every form of philosophy as a substitute. A kindly humanitarian stoicism had the favor of the court, but teachers of Epicureanism, of the Academy and of various forms of hedonism also had respectable audiences. There was diversity enough, and a widespread eagerness to find intellectual satisfaction, but no directing force, no definite cultural trend. It would seem that Rome, after pacifying the world and building the roads that connected east and west, north and south, was being overwhelmed by the confusion of faiths, creeds, temperaments and tastes that rolled back upon her. An absorbing fellow-sympathy and open-minded humanitarianism, neutralizing all initiative, seems to have been the only outcome of the all-pervading race mixture that was Rome. It may be that this might have proved to be a fermenting period for a new vital culture, had there been time for its emergence; we cannot say. It was at least futile in cultural accomplishment, and the government broke down before anything came out of it.

The only significant products of the periods were in the realm of jurisprudence. The rapid spread of citizenship, which culminated in the grant of universal citizenship by Caracalla, called for the adaptation of Roman law to diverse

peoples in all corners of the world. And the emperors called to their service the keenest minds of the age, men like Papinian, Ulpian and Paulus, to write "responses" in their names. These men labored in the spirit of the old republican jurists, endeavoring always to find a logical basis in "natural law" for individual decisions, and they were the more eager to do so because they were deeply versed in stoic thought and also knew the needs of the new peoples who had grown up under non-Roman custom. When long afterwards Justinian ordered the codification of all law, his jurists fortunately went back to these *responsa* as the soundest body of juristic thought. The result was that his *Digest*, which became the foremost textbook of later European jurists, disregarded many of the aberrations of the fourth and fifth centuries, which had made a different law for *honestiores* and *humiliores* and which had accepted the word of the monarch as absolute. The *Digest* reverted to the earlier theory that the prince's power was derived from the people, that all free men were equal before the law and that law was the science of justice. It thus became one of the most powerful factors making for modern liberalism.

X. ROME'S LEGACY IN THE FIELD OF THE SOCIAL SCIENCES. In the social field Rome's thinking was generally reflected in practise rather than in philosophic discussion. Where patriarchal tradition is strong and where the organs of government are completely occupied with the administration of a world wide empire, one does not expect the government to take up the burden of social amelioration. Paternalism appeared far less frequently at Rome than in Greece, and is seldom to be found except in the empire. Caesar, eager to save the old stock of Italy, had attempted to enforce the employment of free labor on the farms and to colonize the urban freedmen in the provinces. Augustus, when he found that the family institutions were disintegrating and that "race suicide" seemed imminent, made some very drastic experiments in legislation, limiting the freedom of divorce, taxing celibacy and childlessness and giving rewards to families of three children. Then, fearing the consequences of race mixture, he placed a moderate limit upon the manumission of slaves. Now and then the socialistic theory had cropped out that the state must provide a living for indigent citizens, a theory which probably arose because the republic for a long time had had an abundance of public land available for anyone who was in need of a livelihood. The Gracchi had so far accepted the theory as to institute regular doles of wheat in the city for the poor citizens who could not be given land, and this became a regular institution. Nerva and Trajan went much farther, in that they created a large state foundation, mentioned above, which was at once a motherhood pension and a provision for rural credits.

However, it was especially in institutions of gradual native growth that Rome's social experiments reveal situations deserving of careful observation. The remarkable political aristocracy that survived for hundreds of years, based primarily upon unpaid distinguished civil service, stands out as one of the most striking phenomena of Roman society. To be sure, ancestry as an important consideration in defining the group and property qualifications were not disregarded, but in every case personal capacity in public office was the determining factor. This aristocracy, though it grew selfish and overbearing at the end, performed without remuneration very remarkable services at times of great stress. No less peculiar to Rome was the high position accorded the matron in the family. The family, tied together merely by a contract that could be severed by consent or by either member for good cause, nevertheless remained effective up to the time of the civil wars, resting as it could upon mutual respect. Not until ecclesiastical authority became dominant in the government of decaying Rome was the matron compelled to accept a different code of conduct with respect to divorce. Useful also for study is Rome's remarkable experiment in race mixing. Because of the heavy importation of cheap labor over the slave-block, which crowded free labor to the provinces, and because of the ease with which slaves entered citizenship through manumission, the population of Italy was largely transformed racially between 200 B.C. and 200 A.D. We do not yet know what this unparalleled displacement of a native stock had to do with the change of spirit that took place in the dominant state. Perhaps we shall never know; but the fact must not be lost sight of in a consideration of Rome's social experiments. There are those who consider it a very important factor in Rome's decline.

In the field of economics Rome produced no important writers. Yet the civil code bears the marks of sound economic thinking, especially in its respect for the rights of private property, its progressive handling of contracts and its de-

finition of partnerships and associations. For despite a certain distrust of corporations of limited liability, the Romans developed for civil purposes an adequate corporation law. Indirectly it was a gain for commercial law and precedent that the state which ruled the Mediterranean was so little concerned with the commercial success of its own citizens that—unlike Carthage—it could advocate open ports and the freedom of the seas. The examples of Rome's behavior that Grotius was able to draw from Livy made an impressive argument against *mare clausum*. As a striking example of national interference in economic laws, one may refer to the later imperial "conscription" of labor guilds and farm labor which led to the colonate of Constantine's day. On the other hand, the theory that slavery releases energy for cultural advancement —once advocated vigorously in our South, and not wholly dead—does not occur in Roman writers, though it is supposed to draw support from Roman example. The institution of slavery as found in Rome deserves very deep study from the economic side, for nowhere else can it be observed in its most natural aspects. On this subject R. H. Barrow's recent study, *Slavery in the Roman Empire* may be consulted.

Of Rome's contributions to the art of government the books of the eighteenth century—when modern political theories were taking shape—are the best witness. Rome provided several examples of governmental forms. The successes and failures of aristocratic administration and of pure democracy—a democracy somewhat saner in its behavior than that of Athens—could be studied in Livy and Polybius. The efficiency of the liberal monarchy of Augustus and the oppressive bureaucracy of Diocletian's absolutism are well described in the imperial writers. The outstanding accomplishments of the middle republican period have been among the most significant contributing factors to the building of modern states. Here we refer especially to the demonstration that liberalism in the administration of a large federation enabled an orderly democracy to win extensive cooperation from its neighbors. No less remarkable was the spirit of compromise—the willingness to "play the game"—that at Rome won a long series of class reforms without bloodshed. It was this capacity to see the other man's point of view, to yield by adaptation before striking, that finally created the constitution of "checks and balances" which evoked the enthusiasm of Polybius. Again, the record of a society submitting to the severest discipline for the common good, a discipline that brought into being the Roman legion, that insisted upon durable roads, aqueducts and public buildings, and that took its share in the exacting civil service of Trajan's day—this record constitutes one of Rome's most lasting contributions to civilization.

The effects of Rome's territorial expansion were diverse. It was not wholly beneficial that one state should have become the carrier of a world's culture. The cultural rivalry that has arisen from a segmented Europe has been fruitful, just as it was productive of thought that Athens and Sparta worked upon separate theories of state and with differing ideals. World unity under Rome was in danger of creating stagnant uniformity, and there was also the danger that when the one cultural state fell, all culture would go under. The fact that the western provinces assimilated so quickly all that Rome could give is a demonstration of what value lay in unity. But against this must be matched the fact that this very centralization seems to have stifled rather than stimulated the frail and dying culture of Greece. As an illustration of the value of imperial unity, one may perhaps point to the rapid spread of Christianity. Taken simply as a cultural phenomenon it is difficult to see how a religion springing up in a nook of Asia could have spread over the civilized world in three centuries but for the fusion and confusion of peoples that Rome's imperialism had brought about.

In the domain of jurisprudence the early Romans did not indeed produce penetrating analysis, yet by combining a temperamental respect for law and order with an incomparable accumulation of experience in government which they patiently studied, they were able to evolve a practical code of universal applicability that more than matched the abstract constructions of the Greek thinkers. A prudently liberal self-interest, applied in the government of subjects as well as in participation in a world wide commerce, led them to respect the "customs of nations" and thence to infer the universality of a sense of justice before ever they learned that stoic philosophers had invented such ideas. They even preceded the metaphysical Greeks in creating such abstractions as juridical persons and corporations because their rapidly expanding state could not operate with the ideas of the single-cell *polis*. And conceptions created in order to facilitate intercourse with their municipalities were readily extended to other quasi-public

and to private bodies until corporation law was soundly based. Reading their experiences logically the Romans also conceived of the individual as a legal personality in his contacts with the state, and consequently assumed that the state conferred rights upon the citizen which must be protected by law even against the encroachment of the state. This is only one illustration of how the practical-minded Roman, averse to metaphysics, would nevertheless pursue an abstract idea to a very remote corner when experience compelled him to think. It was this practise of driving to the logical core of legal concepts that enabled the jurists to shape an enduring code. The permanence of their work is apparent when we consider that "most of the basic principles of the Anglo-American law of Admiralty, Wills, Successions, Obligations, Contracts, Easements, Liens, Mortgages, Adverse Possession, Corporations, Judgments, and Evidence come from the survival or revival of Roman law in English law. The fundamental conceptions of Habeas Corpus and Trial by Jury as well as many principles of the law of Torts are of Roman origin" (Sherman, C. P., *Roman Law in the Modern World*, 3 vols., Boston 1917, vol. i, p. 387).

Finally, though Rome's supremacy temporarily removed the possibility of what we optimistically call international law, her contributions to its code have been considerable. Until the civil wars shattered respect for custom, Rome observed strict rules of international dealings. It may be that the early fetial rules won a moral aspect only because morality was profitable to a people who had to be on the defensive. Nevertheless the spirit of the fetial law lived on in the customary rules of what was permissible behavior between nations in war and peace, a set of customs which was also called *jus gentium*. It is frequently said that those rules had not the force of a contract. But the fact is that they had a greater force than a contract that is broken as soon as a treaty is annulled. By a very old belief Jove was the guardian of those rules, and whether or not the consul believed in Jove, he did not dare to permit his army to believe him accursed. Added to this was the fact that statesmen laboring in their offices for the state were still considered to be bound by the same moral code as when acting as individuals. The Hegelian theory of a state that is superior to the moral obligations which bind individuals may have been implicit in fragments of the code, but it was not made explicit and never was accepted as justification for international misbehavior. Accordingly it was possible for Grotius to connect the *exempla* from Livy with the sentences of the *Digest* and draw up a proposed code of international practise still superior in some respects to modern usage.

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IV
The Universal Church

I. The Middle Ages may be considered, for our purpose, as starting with the reign of Theodosius (379–95) who, after a line of rather hesitating and ineffectual emperors, took charge of the undivided empire. The importance of his reign can be gauged from the fact that a year before his death he established Christianity as the religion of Rome and that he forbade any government official in the future to hold the pagan religion. The importance of this act can be better understood when it is remembered that the Christianity he "established" was that form of it which accepted the orthodox faith as determined by the popes. Some of the earlier emperors had supported Arianism. Theodosius proclaimed the Catholic faith in 380, declaring it to be the law of the empire that all his subjects should hold "that religion which the divine Peter gave to the Romans and which it is clear Pope Damasus follows and Peter, Bishop of Alexandria, a man of apostolic holiness." We can fairly look on the public and political triumph of the papacy as the dominant historical fact in that age. Through its rise and consolidation the failure of the Roman Empire lost much of its danger to western civilization. There grew up in place of that empire a central power around which could be grouped the fortunes of the new political organization that emerged out of Christendom.

The disintegration of the Roman Empire was inevitable—"the inevitable decay of immoderate greatness." The specific causes to which it was attributable have been the subject of a good deal of speculation; but in several directions there seems to be something of a consensus. Rome's dominions had expanded too widely for them to be defended except with an immense army; and though the organized armies of most of the provinces were undoubtedly valuable from a military point of view, the East, where most of the trouble was to be met, never did its fair share in furnishing recruits to the Roman arms. The eastern provinces, while accepting the imperial ideal, would never fight for it. On the other hand the Roman administrative system could not be easily imposed on the western provinces. In Gaul, for instance, the Roman municipal system never took root; the tribal system in existence there, ancient, customary and vigorous, would not accept the restrictions imposed on it. Therefore, while Gaul provided the most numerous military recruits for Rome and the most successful in war, it was always the center of revolts and disturbance.

The economic basis of Italy was being undermined by transformations in the agrarian order. The conquest of the great grain districts of the world had made wheat imported into Italy so cheap that Italian small holdings had languished and finally had given way to enormous grazing farms with the usual sequel of unemployment. The price of slaves went up so high that they could not be used economically on the latifundia. The small landholders were therefore no longer dispossessed, but remained as servants of the overlord who had purchased them. In this way a new class came into existence, a servile population locally employed, attached to a farm, dependent on a superior lord, and falling into a customary service for which it received in return food and a home. But although these farmers stayed on and were now in subjection, they had no longer the same interest as before in the land they cultivated. The land itself became exhausted through the lazy ignorance of the worker and his failure to continue that orderly rotation of the crops and general art of agriculture which figured so charmingly in the "Virgilian litanies." Italy itself came to be on the edge of starvation.

At the very time when the country was poor the bureaucracy was extravagant in both size and spending. Moreover the old landlord class had largely failed with the collapse of agriculture at home, and its place was taken by a new, wealthy industrial class that did not trouble itself with local responsibilities, refused to continue the unpaid public service formerly ungrudgingly performed by the aristocracy, and thus drove the municipalities into either debt or increase of taxation in order to support the social services which up to this time had been

carried on without any expense to the public.

Under the financial difficulties and burdens thus beginning to weigh heavily on the ordinary populace, and still more under the unsound economic measures (debasing of currency, etc.) passed by the later emperors to remedy the ills, the restless population began to wander from their districts in search of surer and less oppressed conditions. Laws were therefore passed forbidding first the imperial tenants and later any tenants to leave their holdings, and also forbidding the guildsmen to leave their guilds. The enfeeblement of the empire was becoming obvious to all who lived in it.

Then came the series of invasions. At the outset Theodosius rendered service to Rome by inaugurating the new principle of settling the barbarians in the empire, but the failure of his successors to follow this policy was among the complex set of causes which led finally to the disruption of the empire.

II. The stage of western Europe was left to the papacy, which, together with the empire and Mohammedan power, shaped the course of historical evolution in the Middle Ages. The emergence of the papacy was most clearly seen in the life and work of St. Gregory I (590–604), surnamed the Great, who was forced to deal with the Lombard invaders as though he were a sovereign and indeed as though he represented the old power of Rome. His tribune protected the inhabitants of Naples from tyranny, his commanders defended Sardinia, and his ships carried from Sicily the grain needed by the Romans. Moreover his domestic policy favored the old established *coloni*, so that he was able in some degree to restore Italian agricultural prosperity. His short reign of fourteen years is typical of that public and political guidance given by the early popes to the West which saved it from ruin. Still another sign of their width of vision can be seen in the more spiritual side of the pontifical policy, namely in the vigorous effort to convert those newer nations which had never known the Roman discipline and were destroying the old Roman order. The British bishops who refused to attempt to convert the Saxons represented in their views a considerable body of Christians who looked on the faith as only coterminous with the empire and who therefore refused to regard as worthy of faith those who had brought destruction on the empire. It was against such an attitude that, two centuries earlier, St. Augustine had written his *City of God*, of which one thesis, at least, was the right of the new nations to the inheritance of Christ.

The conversion of the Anglo-Saxons by the other St. Augustine (597) and finally by the Irish monks, and of the other newborn nations, inevitably added to the public greatness of the papacy. These newer peoples cared nothing for the eastern emperor nor for his exarch at Ravenna; for them the outstanding figure in Europe was the pope. It was the pope whom they traveled to Rome to see, and it was around the tomb of "the divine apostle Peter" that their own tombs were laid.

Even the literature of Rome, which retreated to Ireland during the invasions of the continent and of Britain and which returned again to the continent through England at the time of the renaissance under Charlemagne, represented no longer the language of old republican or imperial Rome but a new language. It had lost its old technique and some of its older grammar and syntax, but it had become more flexible and more vivid. It was now fit to inaugurate the *dolce stil nuovo* of the Middle Ages.

The Mohammedan influence began after the Hegira (622) when Mohammed fled from the pagans who were roused to fury by his preaching, only to return to Mecca in triumph eight years later. Surrounded only by disunited and disorganized peoples, the new religion found success easy enough; it went out to its apostolate with a sword in its hand. By the eighth century Christendom was ringed by a steadily advancing circle of Arab Mohammedan states—Syria (conquered in 634), Palestine (637), Egypt (640), North Africa (695) and Spain (711). Even here Mohammedanism did not seem to have found the limits of its domain, for though it was crushed in 732 under the walls of Tours by Charles Martel, its armies remained encamped on some of the southern districts of France (whence were later to come the heresies of the Albigensians) until Charlemagne drove them out nearly three-quarters of a century later. One effect of this circle of enemies was to keep Christendom together under the menace of invasion.

There were troubles, however, within Christendom. In all the West, besides the papacy and the distant islands, there were only two important secular powers—the Lombards and the Franks. These were both Catholic peoples, but with both the papacy continued an intermittent strife. By the eighth century the

greater part of Italy was thoroughly under Lombard domination, and the greater part of old Gaul was under the rule of one or another branch of the Franks. The Burgundians were a lesser people farther south who were later to emerge into prominence with apparent capabilities for achieving real nationhood.

Meanwhile under the old name of Rome an entirely new empire had been organized on the shores of the Bosporus. When Constantine the Great had transferred thither the central authority of the empire (330) his object had been to establish government where it was most needed, within striking distance of the weaker frontiers, the Danube and the Euphrates. It was here that the undisciplined hordes of the outer paganism were most likely to attempt to break in. The new seat of government was to be a bastion on the defensive wall against the troubled East. While Constantinople always remained imperial, it ceased gradually to carry the old Roman character and became slowly impregnated by Greek ideas. More swiftly than Rome itself it became wholly Christian. By its complete intermingling of elements, Roman, Greek and Christian, the eastern portion of the empire continued, in a character entirely its own, the work of old Rome. This it did largely through its inheritance, first, of centralized government and of jurisprudence and, second, of the function of defending the common culture against an outer world. Of course, to the end, in the mind of the Byzantines and of the westerners themselves for a very long time, the empire was never a divided one, even when two emperors ruled separately over East and West. This division was part of the old scheme of Diocletian, intended to be merely an administrative division and not to imply a political separation of independent powers. In point of fact, however, the two parts of the empire were forced off from each other by the inability of the East to show any effective power in the West except spasmodically. Justinian (527–65), almost alone among the emperors, managed to make his power felt in the West.

The germs of both the weakness and the strength of the eastern empire were contained in its imperial inheritance of centralized autocracy. Thus in Byzantium a strong emperor was able to effect union, while a weak and incompetent emperor could do nothing at all. The lack of feudalism or some such wide-flung decentralized organization made it impossible for the emperor to gather a baronial council to his aid and still less a legislative body or a band of advisers. In this way the nobles, shut off from constitutional methods of protest or advice, had no other way of meeting imperial oppression than to submit or rebel. The result was that the imperial line had an unhappy record of revolt, mutilation and murder. Yet the old bureaucratic system inherited from the Caesars alone held together the Byzantine Empire; it was enlightened, industrious and orderly. Although under a weak emperor little was ever effected, within or without, the empire continued as a whole to be perfectly stable and tenacious throughout all this period. Even at the end of the period when the Normans (1096) and the Venetians (1203) attacked it and were able to tear off provinces from it, setting up within its old borders princedoms of their own, the administrative success of the bureaucracy prevented any internal weakness from destroying it as would certainly have happened under similar circumstances in any corresponding state of the West.

The particular importance of Constantinople in our study is the importance of an alien example over against the adventurous West. With their inexperience and restless constitution making, the feudal states of Europe recognized the success of the long-lived autocracy and even tyranny of the eastern emperors. Always by their side was the spectacle of a political organization continuing to exist without having the support of much greatness or success other than hereditary greatness, the accumulated and stored wisdom of the past and the persistence of an efficient civil service. Moreover the personal government of the emperor included a sway over the church which, while it shocked the crusaders, at least gave new ideas to a Barbarossa or a Frederick II. Not merely did Frederick II have his Arab friends to point out to him the greater political power of a sultan who was also a caliph, but he had as well the rumor from the East which told him of a Christian sovereign who was also the supreme head of his church.

Apart from their interference with the creeds, the emperors undoubtedly provoked among the later national kings in the West an admiration for their system of government. French and English sovereigns cited the emperor by name as their particular ideal. His government was orderly and stable; they envied him his venerable power (*cf. Orient et occident* by Jean Eversolt, Paris 1928). We see

that influence reaching France through trade, through a desire to possess the rich relics of the saints to be found in the East and of course, later, through the crusades. But even before the crusades the prestige of Byzantium in the sixth century, the rise of the Mohammedan armies in the seventh, the modifications in Islamism in the eighth and the routes to the Sepulcher in the tenth and eleventh centuries kept the connection between East and West real and intimate, and enabled some knowledge, not wholly apocryphal, of the eastern empire to reach and inspire the kingdoms of the West. The naïve accounts of their visit left by the crusaders and the comments of Anna Comnena prove the influence of Byzantium on western political and social utopias.

A weakness of the eastern emperors was their inability to make use of the popes. On the whole, the papacy was for centuries true to its political allegiance to the East and remained true even when the Lombard had overthrown in Italy the representative of Byzantium and, boasting himself a loyal Catholic, claimed to be independent of the semi-schismatic East. The emperors themselves forced the popes from their submission and by their poor statesmanship drove into opposition the only power of the West that had any inclination to accept their sovereignty. In 751 the Lombards destroyed the exarchate, in 754 the Franks marched on the Lombard capital of Pavia, and in 757 the pope received the Donation of Pepin, leader of the conquering Franks. From that moment the temporal dominion of the popes was a public fact, recognized publicly and publicly proclaimed.

Within a generation of this act the popes had replied to the Donation of Pepin by transferring to Pepin's son Charles the empire of the West. As Charles knelt on Christmas Day in the year 800 at the shrine of St. Peter in Rome, the pope (Leo III) came over to him, placed on his shoulders the purple robe of empire and on his head a golden crown. Thus came back to the West a Caesar, this time appointed by the pope although acclaimed by the people. Not that anyone then thought of the pope as the political master of the emperor; the pope himself had been protected by the emperor and reinstated by him, and indeed on Charlemagne's election the pope, in token of his own political submission, had sent him the keys of the tomb of St. Peter and the banner of the city. Yet the fact remained embedded in the memory of Christendom. The successor of Peter had transferred to the Franks the empire of the Caesars. The relationship of these two powers was to cause trouble enough later, but Charlemagne in his greetings to the pope after his election in 795 had already expressed his view of their relationship: "It is ours externally to defend the church and internally to fortify it by acknowledging the Catholic faith; it is yours to pray for the victory of Christendom and the magnifying of the name of Christ." But the problem could not be posed so easily as that. Under the Carolingians, however, the difficulties were few, largely because the successors of Charlemagne were never great enough in actual power to come in conflict with the papacy.

When, however, Pope John XII transferred the empire from the feeble descendants of Charles to the new Saxon dynasty, crowning Otto I in Rome on January 31, 962, the way was open for a quarrel, for there were many new features in this later Europe that made spiritual and temporal loyalties sometimes difficult to adjust. The German princes, for instance, used the church to extend their German dominions ever eastward and to find princely benefices for their younger sons. Thereby the new feudalism forced these prelates into a double subjection: as prelates they were under the jurisdiction and appointment of the See of Rome, as barons under the jurisdiction and appointment of the emperor. These conflicting claims soon involved a breach of the peace. Both sides had reason in their quarrel. Thus Gregory VII stated boldly, "The pope is master of the emperors"; thus Alexander III, in view of the facts, not unreasonably asked, "From whom does the emperor hold the empire if not from the pope?"; while Innocent III answered the question with complete assurance: "It was the apostolic See that transferred the empire from the East to the West, ultimately because the same See confers the imperial crown." These statements of course were true; the popes had certainly proclaimed, annointed and crowned this later empire, since there seemed to be no other power that could do it. The popes were thus recognized as the public voice of Christendom with its responsibilities and its greatness. Adrian IV, the Englishman, declared that he loved the tiara "*because* it burnt like fire." Yet there was no tradition in Christendom that the pope was a temporal sovereign except over definite territories and then only by the grant of an emperor, as in the case of the fabled Donation of

Constantine or the more real but no less mysterious Donations of Pepin and Charlemagne. Between these two sets of facts it was difficult to find a solution of the problem. Each of these two supreme, though differing, powers had often requested confirmation by the other. There seemed an age-long custom that neither was to be recognized until the other had approved. Hence the conflicts between them were violent and significant, arising over such questions as investiture, the alleged right of the papacy to recognize and authenticate temporal sovereigns, the alleged right of the emperors to nominate the popes, the power of the crown over criminous clerks and, a little later than our period, the right of the crown to tax the clergy. But the source of most of these later disputes was the system of feudalism that was now rebuilding the world.

III. Feudalism is a system that is to be found everywhere as a stage in social development, though the exact form it takes will differ with the variety of local custom and even local religion. It was based on the principle of commendation by which one man took charge of another or put himself into another's charge. From the point of view of its duties it was a contractual system whereby the nation, represented by the king, let out its lands to individuals who paid rent by doing military service and civil suit; and as regards its rights it was a land system whereby, in Stubbs' phrase, "every lord judged, taxed, and commanded the class next below him."

Supplying a cohesive force when none other was possible, this system further introduced a wide sense of legality where everything was settled by custom and law and little was left to choice. Moreover it provided an armed force of provincial and even national usefulness which saved Christendom from invasions from both East and West. It solved for a time two of man's perpetual problems—his social organization and his land system. But it demanded a heavy price for these advantages, for under this system the central government lost touch with the lesser people and directly commanded only its highest vassals. On this account the cohesive force often proved useless. The independence and local sovereignty which the feudal system accepted encouraged civil war, and it was a matter of mere chance whether a rebellious baron might not have as many followers to his immediate call as had the king himself. France and Germany were glaring instances of this. The entanglement of the church in the system prevented it from acting as a restraining force, and the perpetual dynastic controversies swept the bishops and clergy into one side or another, and soon degraded excommunication by making it not the least effective of the instruments of war between baron and baron, or king and king.

Besides feudalism, however, there was another world wide system that bound Christendom together—the institution of monasticism, which was gradually becoming a more tightly knit organization. At first St. Benedict and the Irish monks were its two chief representatives; to them more than to any other power, except perhaps the papacy, was due the recovery of the culture of the West, for it was in the monasteries, on their hills or in their remote deserts, that the tools of civilization—art and books—were to be found. In addition there was the great sprawling canonical organization, in which each house was even more independent than those of the Benedictines and accepted the vague and indeterminate rule of St. Augustine together with some local constitutions usually drawn up by the ordinary of the diocese. These canons regular and monks of various kinds were contemporaneous from the fifth century onwards and between them formed the chief centers of Christian piety and intelligence. They represented different ways of Christian life, being unlike in their ideals; while the canon was essentially a cleric and even a priest, the monk was not necessarily a cleric and at first was very seldom a priest. Indeed St. Benedict in his rule obviously looked on the priest as an unusual feature of the monastery. Hence it happened that while the monks preserved the older learning and were artists, architects, writers of chronicles and commentators on Scripture, the canons were the pioneers of theology. St. Augustine (430), their first promoter, was the great theologian of the church and his followers continued his work of illumination and thought. To St. Benedict we owe the culture of the West, to St. Augustine its philosophy and "divine sciences." Thus curiously it will be found that both Paris University and Oxford University began with a group of Augustinian canons and that the Lateran Basilica, too, had its theological school formed in the same way. Even the hospitals of the Middle Ages were chiefly Augustinian, including the famous ones at Smithfield and Bruges

and high up on the Pass of Great St. Bernard.

More, however, than the earlier form, it was the later developments of monasticism, Cluny and Clairvaux, that actually welded Europe into one. The earlier form, as St. Benedict saw it, was a series of independent abbeys, held together only by community of spirit, ancestral leadership and a rule. But these newer forms, born in an age of organization, were consolidated into a unity of government and visitation. They were new also in that they aimed chiefly at an intellectual ideal; the monks were now to be scholars, and the older ideal of mere monasticism gave way before the intellectual vigor of the time. This very eagerness, however, proved in the end their undoing. The monasteries were crowded, but not all could satisfy themselves with books or learning. For the rest new liturgical offices had to be created to keep them occupied. Thus the tenth and eleventh centuries are the period when the most elaborate Catholic ceremonies and a multiplication of votive offices were introduced. Religious zeal thus turned into formalism and in the end declined.

The earliest of these new monasteries was Cluny which, establishing its system under the name of "the customs of Cluny" (910), was a congregation of abbeys joined under discipline and placed under the power of the abbot of Cluny to correct and amend. Its most famous abbot was Peter the Venerable (1156), the friend of Abélard. Also to the same Burgundian province where Cluny was, came Bernard of Citeaux (1153), the great leader of another organized form of Benedictine monasticism. Its "charter of charity" laid down the principles that were to govern it, and among these were poverty in life and worship, remoteness of site, agricultural work (i.e. not the clerical sciences), coordination of all the monasteries under Citeaux, and then annual visitation of all of them by the abbot of Citeaux, himself to be subject to correction by the abbots of the four oldest daughter abbeys.

The movement undoubtedly gathered most of its first fervor and importance from the leadership of St. Bernard. Although he was preacher, mystic, saint and scriptural commentator, he came nevertheless, as perhaps no other saint had come since Gregory and before him Augustine, as the public champion of Christian ideals in every form—in politics, in philosophy, in agriculture, in art, in war. He was not great in all these ways, to be sure, but he insisted on the need for Christendom to remember that its only justification in such worldly activities lay in its devotion to the faith. An age eagerly waking to the stirrings of the spirit in man was swiftly reaching out in every direction for things new and wonderful, in art and thought and political thinking. St. Bernard stood for these ideals, too, but only as inseparably united to Christ. Although, as we read his works, he seems to us sometimes to have misunderstood his age—the philosophy of Abélard, the royal dreams of Henry II, the rich effulgence of the early artists—nevertheless he did point to the danger of these pursuits and their disruptive tendency unless pursued in harmony with the general ideals which their promoters professed to serve.

While monasticism thus helped to unite Christendom, a contributing force equally characteristic of its age and in its way no less effective, was the adventure of the crusades. The geographical results of the first three crusades were of little permanence or importance. However, the crusade effected the holding off of Islam and the coalition of all Christian princes in a sense of common brotherhood. These adventures also served to introduce into the West elements of eastern and Greek art and literature. Not the least of their effects was the undying memory of a great spiritual romance which survived out of all the failure and distress of the campaigns, and gave a common note of splendor, width of vision and faith to the poets of the time.

While many influences were working to make the unity of Christendom apparent, the vigor of heresy was no less evident, so that for the first time men began to be afraid lest this unity should be broken. The last Christological dispute was settled when Monotheletism was repudiated by the church (Council of Constantinople, 680). The next great point was the discussion of Berengarius on the doctrine of the Real Presence, culminating in the definition of transubstantiation as the orthodox statement of the mystery. Berengarius (1088) denied the Real Presence of Christ in the Eucharist, because his particular philosophy denied the possibility of any separation between form and substance. Lanfranc (1089), whom Berengarius had hoped to have as his ally, was his most vehement opponent. The dispute turned on a philosophical question. It was not a point that in itself ever roused or interested the common people. Such purely abstract discussions, except where it was felt that they

might somehow weaken popular devotion, were left to the emergent scholasticism as topics for dispute. The attacks of Peter Abélard (1142) on his old masters also roused only academic opposition. It was not mere freedom of discussion that he demanded. Mediaeval scholasticism had this in plenty. Nor was he a freethinker: "The rock on which I have founded my conscience is that on which Christ has built His church." His point was a much more subtle one, namely that philosophy might be able to deny what theology had taught. He wished to divorce altogether Christ and reason, faith and science, and believe what his own logic could prove to be untrue.

The other great center of disputation was the violent group of eastern religions that grew up where the Saracens had settled in the wide rich plains of the Touloussain. There the whole position began with a principle in violent conflict with the doctrine of the incarnation, namely that matter and therefore all material things are essentially evil. It was not even Mohammedan but Zoroastrian. It was the old gnosticism that had first captured and then repelled the imagination of St. Augustine, a permanent frame of thought that has haunted even the idealist followers of Christ. The heresy of the Touloussain became the focus of other points of dispute. The princes whose names were involved in the common condemnation of the heresy were always anxious to deny that they subscribed to it, and their opposition to the crusade against the heretics was due probably to the fear that their own political independence would be threatened by the papal army. Pope Innocent III (1216) alternately coaxed and denounced Count Raymond of Toulouse, while Count Raymond alternately denounced and coaxed the heretics. But Christendom was chiefly struck by this heresy because it was the first since Arianism that really threatened to involve the West in any serious loss to common Christendom. Furthermore it was not amenable to apostolic preaching, even by St. Bernard, and it was growing wealthy. The sudden fear thus engendered began the new era of the inquisition. Force is nearly always the result of fear. The use of suppression was new because the fear was new. From that time on, the menace of this heresy hung threateningly over the Christian world, and the idealist writing thereafter regards the apparently solid unity of Christendom as being once more in danger.

IV. The system of education had badly lapsed during the long era of the invasions except in the western refuge of Ireland where the apostolate of St. Patrick (464) had prepared a way for the only Roman conquest Ireland was ever to know—its conquest by the Roman faith. Here monasticism found in the impulsive and aloof spirit of the Celt a rich soil for its development, severe, vehement, artistic and missionary. Almost at once it became the refuge of western culture. Classic literature, which Augustine had studied and Jerome had feared, became in the end the possession of the Celt. He grappled with the inheritance as he received it, and restored it to the West a new instrument for a new purpose. By the time the empire had begun to fail, conversational Latin must have been very different from the golden literature of the Augustan age or even the brilliant paradoxes of Tacitus. In the next generation the language must again have declined, if we are to take as a fair example of it Jordanes the Goth (551), the chronicler, with his cumbersome solecisms, which yet manage to make his story live. Between his style and that of Boethius (524) or Cassiodorus (575) there is a great gap. It is Cassiodorus, the founder of the trivium and quadrivium, who was the master of mediaeval education, and he brought to his task a learned, overornamented and not very satisfactory Latin. Yet at the end of our period, by careful use and especially by austere thinking, a language had been formed out of Latin suited to express clearly the abstract notions of philosophy. Latin had always been rhetorical rather than philosophical. Now its rhetoric was replaced by a frugal diction expressive of sustained and logical argument.

Apart from philosophy, mediaeval education included exercises in "rhetoric." This was one of the subjects included in the trivium; it involved a certain acquaintance not only with such classic authors as Virgil, Horace and Ovid, and with post-classic writers like Seneca, but also with the whole field of patristic study, especially St. Augustine. How beautiful the mediaeval use of words could be, how much like Tacitus set to music, is evidenced by the liturgical prayers and some of the more exquisite hymns. Beyond these sweet and woven sentences packed with sense and fragrant with hints of Gospel and classic intertwined, such as the *Media vita* from St. Gall or the *Laetabundus* of Sedulius, there came the first hints of our modern languages. In the northern sagas, the

song of Caedmon and the Arthurian cycle we have the early stirrings of poetic muse; after them came unrivaled pieces of fairy beauty like *Aucassin et Nicolette*, or trumpeting battle songs like the *Song of Roland*, or the later sagas and the *Anglo-Saxon Chronicle*. There is also a Celtic literature of Ireland, Wales and Brittany, touched with sadness, brooding usually over the sea and the sea birds, or speaking with Greek delicacy of nature's beauty and the lift and fall of the passing seasons. All these hint at what we know already—that popular education was gradually climbing up under the inspiration of the monks and the growing schools of grammar and logic. Just how learned or unlearned were the people we shall perhaps never know; it cannot well be maintained that the age which planned and built and lived under the shadow of Chartres Cathedral was really brutalized and ignorant. Printing has completely altered and falsified our standard of education; we imply by the word illiterate that those who cannot read or write lack education. But that is only because we now limit education to a knowledge of facts, instead of seeing as its purpose the production of good taste. Taken at his best the dweller in the Dark Ages and in the early Middle Ages was above all a man of taste. Not even the thirteenth century can rival the twelfth in taste, although it surpassed it in dexterity and skill; the tenth and eleventh centuries show the spirit of man climbing up to the heights he has often reached before and after, but perhaps with a depth and richness and sound fancy that have never been eclipsed.

In the realm of thought, although we find much coarseness and truculence of expression, we can see minds hard at work grappling with problems sincerely and truly. It was never an age of servile submission either to popular taste or to hierarchic discretion. The early schoolmen worked steadily at their problems—Johannes Scotus Erigena (875) with daring, Lanfranc (1089) and Anselm (1109) with a richer feeling, Abélard (1142) with a swifter and more incisive wit, the great Victorines (Hugh, 1141, Richard, 1173) with a more mystic understanding. Ambrose (397) was familiar to them, and Augustine (430), to judge by the many quotations from his works, must have been known by heart. Gratian the monk (1151) inserted St. Augustine in great pieces in his *Decretum* and thereby influenced all the ages to come. So finely were the principles of war and peace settled by St. Augustine that modern social primers often quote him verbally, not knowing whence they have borrowed their phrases and explanations.

Certainly such schools as these, grouped by chance around monasteries and cathedrals, and such instruction as could be picked up in the parish churches were gradually forming the minds of the leaders of the people. In his *Institutions of Divine and Human Study* Cassiodorus (575), as we have said, laid the foundations of education—indeed of our own education—since he bequeathed to the mediaeval world the trivium and quadrivium. It was through him that the Middle Ages touched hands with the older world. Nor was he content merely to describe education in the abstract; he described only what he had actually begun to do. He wrote out of experience. Although he was no Benedictine, his influence was no less important on that account; he started the mediaeval world on a system of education based on literature and the arts. This was widened through Spanish influence. Europe was especially affected by two Arabs, Avicenna (1037) and Averroes (1198), and two Jews, Avicebron (Ibn Gabirol) (1058) and Maimonides (1204). When we look for sure proofs of schools and a *scolasticus* (Paris University does not properly begin until after our period, in 1215), we find a definite system in existence before Charlemagne, with studies and a curriculum apparently in undisturbed possession as though it were a venerable and already well-worn thing. How it grew we have not yet discovered; that it was already operative in the seventh century we know. The greater names, besides those we have already mentioned, are Isidore of Seville (636), Bede (735), Alcuin (804), Rabanus Maurus (856), Luitprand (972), Gerbert (1003), Fulbert of Chartres (1028), Alain of Lille (1203), John of Salisbury (1180) and Anselm of Laon (1117).

V. The study of canon law toward the end of our period developed not merely education, clerical and lay, but also what there was of social science. By the eleventh century there were already very rich collections of decrees and decisions, drawn from everywhere, canons of general councils, papal letters, extracts from the fathers and the *Liber pontificalis*, anecdotes, even tags from Roman law, some genuine and some forged by Frankish clerks. These decrees and decisions are naturally concerned with the very matters that interest us: the social rela-

tionships of men, adjustable and to be adjusted, marriage, property, trade, usury, competition, wills, crime. Moreover general propositions bearing on the relationship of law to custom, of general law to particular laws, of common law to local privileges, were discussed by unnumbered commentators. Clerics whose business lay with particular men and women (whose lives were known to them to be full of difficulty) are found endeavoring to bend some rigorous phrase of Roman law or barbaric usage to suit a hard case come up for adjudication.

Roman law itself had lingered on in southern France and in parts of Italy, surviving in a more or less corrupted style. But the later introduction of the *Corpus juris* of Justinian, largely under the inspiration of Irnerius of Bologna and also his four disciples, Bulgar, Martin, Hugh and James, threatened to overwhelm the old barbaric usages and the capitularies of the Frank and Lombard kings. The detailed study of Justinian's work shows that it not merely recorded a host of cases already tried and settled but also contained the principles of law upon which judgment might directly be based. Moreover it did more than merely settle cases; it trained minds. It was an affair of thought and argument, of nice precision, and in this respect went beyond the cumbersome compilations that were all the barbarian codes had to offer

In time a reaction, mainly influenced by the new national spirit, set in against the code, and the swing of popular fashion turned once more in the direction of local custom. Between this and canon law there had already been much affinity, due in part to the fact that lawyers often had to be prepared to plead in both civil and spiritual courts. These lawyers were practically all clerics. The result was that the two kinds of law reacted on one another. Roman law trained the canonist to logic, while canon law gave a bias to the Roman lawyer in favor of regarding the sovereign as an arbitrary legislative power. Papal supremacy thus led on to royal supremacy, for those who accepted papal legislation as beyond appeal were likely to treat as reverently the decisions of any other monarch.

The administrative as well as the legal mind of the time saw grave implications in the mutual influence of the two codes. The imperial ideal had never failed in Europe. Even when the title of emperor seemed in abeyance in the West, and before the pope had revived it to grace the glories of Charlemagne, we find St. Bede in his *Ecclesiastical History* using it freely. Thus he destinguishes between *imperium* and *regnum*, applying the former only to a ruler who had power over other kings. The Anglo-Saxon kings continued, in their coronation service, phrases that linked their sovereignty with Rome. It may have been for this reason that the pope chose an Englishman (St. Boniface) to anoint and crown Pepin, whose accession represented the final overthrow of the old Merovingian line. The very fact that the Merovingians had been allowed to go on reigning but not ruling suggests a veneration for mere theoretic kingship that in so fierce and rude an age is unexpected. This may have been not Roman so much as barbaric; at least it shows a respect for mere royalty of blood.

Yet from the beginning the royal power and prerogative were held to be limited; in early society the force of custom was so strong that the king was as much bound by it as were his subjects. Usually at the beginning of his reign he promised to observe the laws and customs of his people before he was accepted as "full king," so that he entered upon his office on a distinct understanding that he was not to go beyond what his predecessors had sanctioned. Many monarchs lost their thrones because they underestimated the force of custom. Restrictions from an earlier age might be false and cramping, but to overthrow them immediately was to destroy the basis of the sanctity of government. The monarch in primitive society who attempted too hasty and drastic reforms frequently ended by being himself deposed.

Throughout this period we find that the second check on the power of the king was the rise of a nobility which succeeded in obtaining hereditary offices in the royal household, and ultimately a hold on the crown itself. Thus the house of Pepin, as mayors of the palace, made their position hereditary and secured eventually the crown of the phantom Merovingians, but met, themselves, a similar fate at the hands of the Capetians.

The third check on the royal power was the rise of the estates. However, their influence was not strongly felt until after the period we are now considering. Only in Spain were they important at this time. But the fate of the Christian kingdoms in Spain was too much the sport of war for them to retain their primitive note of democracy, and the premature attempt at representative government could not survive.

Although the king's power was checked and

was to be even more limited, he had many prerogatives that increased the prestige of his royalty. He had some sort of consecration; he was a sanctified person; he was as much "the vicar of God" in his own sphere as was the pope in his. Moreover, besides his sacred character as the personification of his people, he was, on the same principle, their supreme judge. He was not the fountain of justice, for there were remnants everywhere of the tribal courts which had been older than the royal courts. He was, however, the supreme administrator of his people. Except on his own personal territories he exercised this administrative power through officials who were local, like the *comites*, or centralized, like the officers of the household. These office holders all tended to become hereditary and irremovable, and the kings found that their best protection against this situation was to choose their personal administrative court from the clergy.

Administration implies finance and the royal mint with its officials was a natural development. Originally, it is probably safe to say, the exchequer dealt in the main with justice and was a court of fines, so that money came to it principally as the perquisite of justice. But the increasing determination of the king to be the real controller of his people's destiny made larger financial resources imperative for him if he was to interfere effectively and take over what had hitherto been done by war lords, or inaugurate what had hitherto not been done at all. Hence the gradual evolution of the exchequer into what was primarily a centralized treasury. In these earlier days of mediaeval national life the increase of royal power meant the multiplication of royal officials, and the multiplication of officials, stationary or *on-eyre* (the Carolingian *missi dominici*), meant both greater need of money and greater importance attached to local meetings that could raise money. Thus the more extravagant the king, the more he fostered what might become representative government.

VI. This development was no silent evolution, nor was it altogether blundered into by accident. It was part of a general and orderly movement, pushed on alike by needs and by theories. We cannot consider these ages apart from their thinkers and writers who influenced enormously the particular shape that mediaeval life assumed. Of the chief determining personalities, one opens and the other closes our period. There can be no question that St. Augustine (430) and St. Thomas Aquinas (1225–74) between them molded the thought of the earlier and later Middle Ages. Of these St. Thomas was the more consistent and systematized and St. Augustine the more original and versatile. St. Augustine was of the African shore and lived in the two political centers of the West, Milan and Rome. The influences to which he was subject are clear everywhere in his writings; he is half Eastern or African, and half Roman and of the West.

His political doctrine can be seen in almost all his works, but chiefly in his *City of God*, a rambling disquisition on the church and the empire, on the earthly and the heavenly Jerusalem, on politics, history and religion. He is working out in it not one thesis but a score, so that he follows no one argument nor any particular metaphor. The book has different meanings according to the point the author is trying to prove. Generally we can be sure that he holds the great stoic doctrine of a division between nature and convention, equating it with the Christian doctrine of the fall, believing nature to exist in innocence, and convention to be the remedy discovered by man after the introduction of the mischiefs of sin.

The three great institutions of social life, namely government, private property and slavery, are all defended by St. Augustine as being the inevitable results of the disorder effected by sin. Had men not sinned, these institutions would not have been necessary. Man having sinned, the need for these three became imperative. They are not created by any legislation, for they are presupposed in all codes. Therefore, he argues, they must have been inherent in primitive society and have evolved through experience. While they might never have been discovered solely through abstract thinking, their emergence was inevitable, since without them social life is impossible. If any society discarded them, it would be forced to return to them, since they are the inevitable and divine remedy to pacify and set in order the greedy desires of sinful man. What we would now call communism, or even the academic theory of socialism, would be judged by St. Augustine and all his followers as a possibility only for saints. To be workable, they require "unfallen" nature. Between man and such a memory, said a later mediaeval writer, stands an angel with a flaming sword.

The main contention of St. Augustine is that

over all is the rule of God. This "eternal reason" which creates and gives purpose to every part of creation as well as to creation itself has also been imaged in the being of man and is reflected in his intelligence and will. But the fall disturbed the harmonies of man's nature and troubled the reflection of this eternal reason. Hence sin disordered not merely the emotions and passions in their relationship to the will but the mind also in its relation to the divine law. Hence came the imperfection of man's knowledge, for the reflection of truth was distorted by sin. Revelation helped man to recognize the truths which our now disturbed and ill-balanced reason could not have discovered for itself. Here lay the importance of the "teaching church" for the civil power. It was the business of the church to decide what was morally right and just; and consequently in order to prevent the natural and now fallen reason from false judgments it had a definite jurisdiction, not over the civil power but over its laws and directive administration. It made no laws and had no temporal rule; but it could and should judge laws in order to see if they were just, and it could reprove the temporal ruler who failed in his sworn duty to his subjects or to the church.

It was because St. Augustine placed the purpose of man's creation in the enjoyment of God, and also laid down the principle that both church and state were here to help the achievement of that purpose, that his doctrine of political and social theory led to conflict between the two powers. It is necessary to recognize that the troubles which followed were produced not by any depreciation of the civil power but rather by the assignment to it of a place where its sphere was not only moral but religious. Thus Ambrosiaster (*circa* 390) said of the monarch that he was to be reverenced on earth as vicar of God (*adoratur in terra quasi Vicarius Dei*). Aquinas spoke, too, of kings as "ministers of divine providence." Once it was settled that the primary object of civil government was to help men toward the accomplishment of their purpose (namely the enjoyment of God), the state was furnished with a pretext for interfering with the church. Investiture and the other topics of controversy showed that opportunities for interference would not be wanting. St. Ambrose had endeavored to forestall this by reminding the Emperor Valentinian that "in matters of faith it is the bishops who sit in judgment over emperors and not emperors who sit in judgment over bishops." But this was merely a reminder of the older teaching. Church and state had, since the days of Constantine, been held to be separate. So it had been stated in the teachings of the popes and the earliest political writings of the fathers. The idea was implicit in Christianity. A pope like St. Gregory the Great might be a little more tender to the civil power than the strict letter of the law obliged, but only because he believed that the end of the world was imminent. He would do nothing in the chaos caused by the collapse of imperial rule in the West to weaken still further the prestige of Byzantium.

The next centuries of prolific political writing naturally center around the renaissance of culture under Charlemagne. The Carolingian ideals were high; the civil power in this new era was eager to work with and through the church for the betterment of mankind. Both East and West still looked upon themselves as a single unity; the claims of Charlemagne were recognized by the Emperor Nicephorus who saluted him (811) as the Augustus of the West, the successor of that other Caesar whom Diocletian had deliberately created. There is little difference of political theory on this point to be noted in men like Sedulius Scotus (884), Abbot Smaragdus (830), Jonas of Orléans (843), Rabanus Mauras (856), Archbishop Hincmar (882), Hugo de S. Maria (1119), John of Salisbury (1180), and the rest of the writers who came between Gregory I (604) and Innocent III (1216). With some minor peculiarities they maintain for the most part the same attitude to the relationship of church and state, namely the separation of spheres, the spiritual right of the church to judge the laws of the state, the absence of any right on the part of the church to legislate in temporal affairs. Moreover this position is maintained on the principle expounded by St. Augustine, inherited by him from the earlier fathers, and by them derived from the stoics—namely the dual nature of man, his former innocence and his present sinfulness. In his former state man was free and equal and without possessions; since the fall he has needed to be set in a social hierarchy, to be in submission to someone else and to have property of his own. Thus Archbishop Agobard of Lyons (840), for instance, forbids the baptism of the slaves of Jews without the leave of their master, because "by nature all men are equal." So, too, Gregory VII (1087) denounces the civil authority as

the devil, meaning little else by this than that it is a remedy, even a divine remedy, introduced to deal with sinful and therefore rebellious man.

We have henceforward a growing host of writers who discuss the principles of morality in political and social life, since Christendom has grown conscious of itself and has settled down to a state of peace. The great experiment was being made of a polity of Christian people, the principles of whose rule were to be the Ten Commandments and the laws of the church. Our period witnessed its beginnings, crude, simple and tentative; within a hundred years Aquinas had organized these beginnings into a logical system and given them relationship and a defense. But our period does not pass beyond the era of vigorous originality, of an intense desire to solve in accordance with Christian principles the problems of the new Europe; an era of high hopes and great ideals on the part of pope, bishop, emperor, lawyer, priest and poet, dealing with violent excitable folk who listened but would not obey.

BEDE JARRETT

V

The Growth of Autonomy

I. INTRODUCTORY. To the student of social theory the Middle Ages present a twofold spectacle. On the one hand he sees the attempt made by the church to concentrate and unify the social activities of Christendom in an all-embracing system of thought and action: at the heart of this lies its sacramental doctrine, guiding and directing the believer through his temporal life to eternal felicity; its agents are the hierarchy, its intellectual weapons the theological schools and universities, and its outward appeal is the wonderful and harmonious architectural constructions, the mural decoration, the sculpture, the glass, the smaller, intimate arts that humanize man's existence. On the other hand he is strongly conscious of the immense variety of local life and of the number of self-sufficient institutions; of the rich growth of corporations or quasi-corporations, and the universal prevalence of "liberties" or jurisdictional rights over persons and territory; these seem to exclude the operation of a central power, and rule out the modern idea of a uniform authority extended over a homogeneous national area, which forms the basis of the state. But the impression in its earlier stages, that is, at any rate, during the twelfth and thirteenth centuries, is not one of contradiction. The theory that postulates the unity of European civilization does not demand its sharp unification. The metaphor of the body, so plentifully used by church writers and reaching its fullest articulation in John of Salisbury, represents most closely the mediaeval idea of this organized life, in which sovereignty does not offer itself as a problem in the way it does to the modern mind, since the idea of law as the *fiat* of determinate human will has not yet come to upset the balanced automatism of local institutions.

Social thought began by a full recognition of the organic character of Christendom: then, as unity overreached itself and spelled unified subjection, as the papacy utilized spiritual methods and resources for temporal ends, the reaction against unity set in, and the national centers asserted themselves. If there is any date assignable to the beginnings of nationalism in Europe, it is the latter part of the thirteenth century, and directly to be connected with the Pope's overstatement of his own position in regard to France. The papacy was not pursuing a phantom, however much it may have overreached itself in the pursuit. In that age spiritual power, to be effective, had to possess a temporal basis, and it was the acquisition of this that led to the conflict of the papacy with the Hohenstaufen emperors and later to its immense fiscal system which alienated much of the loyalty of Europe and substituted business for sanctity. To the territorializing and commercializing of the papal ideal, which the movements of piety within the church could not arrest, political Europe reacted or, it would be more accurate to say, Europe reacted politically; and the new nationalistic tendency was augmented by the spread of Roman, as opposed to Teutonic, ideas of law. The mediaeval notion of the rule of law bowed before the notion of law as the positive command of the prince, and the way was open for despotism and ultimately for the Reformation. That course might have been saved had men in the early fifteenth century found it possible to agree upon an international form of church government, and there were the brightest hopes that the Conciliar Movement might show them the way. But the nationalizing process proved to have gone too far, the financial methods of the papacy to have taken root too deeply, for success to be achieved. Internationally, just as nationally, constitutionalism could not stand the test, on the one hand, of self-interest and, on the other, of exclusive spiritual centralization, and the brilliant evening of the Middle Ages closed in starless night. But the movement was not without results for Europe, after the extreme *étatisme* of the Renaissance had provoked its reaction.

II. THE PRINCIPLE OF AUTONOMY. Let us first examine the forces sustaining that autonomy which, as we said, coexisted and could be reconciled with the universalism of the church. It had its roots in feudalism, with its

essential notions of contract and custom; it was perpetuated in the various forms of association, guilds, partnerships and communes, the rich, spontaneous growth of the high Middle Age; and in certain cases it came to fuller consciousness when, often after conflict, the royal power, in virtue of its growing legislative and administrative capacity, was able to guarantee those associations peaceful intercourse within a more or less organized state. We said "certain cases" because in this respect a great divergence is to be noted among the European countries. England, on the whole, was able to preserve a marked balance between the spheres of central authority and of the local communities and organizations; in France the royal power tended to emphasize its centralizing supremacy (for the story of French national unity is the story of the growth of the royal demesne); in Italy it was the local urban units which in the long run coped not unsuccessfully with papal and imperial centralization alike; in Germany there was notable variation, as the central authority became divided between the electorates; and in the Spanish kingdom class supremacy and the rule of *fuero* seem to have deadened the normal interplay of local and central forces.

Feudalism was a stage in man's political education before he recovered what had been lost in the chaos of the Dark Ages proper, the sixth and seventh centuries: the habit of obedience to public authority. He had lost it, needless to say, because the state itself had been destroyed, and its place taken first by tribal hegemonies and later by lords powerful enough to give protection to their neighborhoods in return for the tribute of obedience. In spite of the revival of political power in the West in the ninth century, and notwithstanding the Carolingian capitularies (soon to become a dead letter), the place of public law continued to be taken by private law and, except in the countries bordering upon the Mediterranean where written codes were still in vogue, customary law prevailed. Political obligation was thus replaced either by tribal allegiance or by the system of contractual agreements between lord and vassals. Soon tenure of land, rather than the circumstances of birth and descent, came to determine the obligations and the status of the individual. Customary codes guaranteed and stabilized his position, just as in earlier times they had guaranteed his place in the tariff of monetary values marked out by the custom of the *wergeld* or blood-price. Thus we must banish any notion of conscious and direct legislation before the systematic growth of the royal power took place in Europe. Sir Paul Vinogradoff stated the case exactly: "In rudimentary unions, in so-called barbaric tribes, even in feudal societies, rules of conduct are usually established not by direct and general commands, but by the gradual consolidation of opinions and habits. The historical development of law starts with custom." Or again, in another context: "Law had to be sought and discovered in the vast background of social intercourse."

This is the soil—the soil of private and customary law—from which the characteristic institutions of the Middle Ages sprang. They did not come into existence at the behest of any government which formally licensed them, but were due to the principle of economic necessity or of free association for religious or cultural purposes. Often they had to fight for existence, to maintain which they found it needful to create for themselves a clearly defined corporate life, with governing authorities and a customary constitution. Once organized they were recognized as natural and necessary parts of the social order, fulfilling, as they did, functions which today are normally undertaken by the public authority. This notion was extended to classes just as much as to religious or economic associations. Defense was undertaken by the military tenants, prayer for the whole community by the clergy, work by the rent-paying socagers and the unfree natives, commerce by the burgesses. The autonomous political federations of Germany—the military groups under feudal law (*Lehnrechte*), the sergeanties under their special customs (*Dienstrechte*), the rural districts under peasant customs (*Bauernrechte*) and the towns under borough customs (*Stadtrechte*)—reflected this idea of a specialist and at the same time organic society, each part of which, by preserving its own custom and defending its liberties, served the common weal. It is the same in England. The chroniclers speak of a *communitas barnagii* which they regarded as the political class *par excellence*, the only body capable of getting a charter out of King John; the records tell us of the *communitas ville*, the unit that decided the agricultural arrangements. Feudalism might be imposed on a district from above, as in East Anglia at the time of the Norman conquest, the manor might become the unit to which rents and services were paid, but the custom of the manor, which the lord might not infringe,

poked its head through the network of lordship and vindicated the principle of economic organization among the villagers who in their generations had helped to determine it.

III. THE FORMS OF ASSOCIATION. It was town life which gave birth to the richest variety of experiments in self-government or of voluntary associations for religious or industrial purposes. Economically the town cut across the old feudal manorial arrangement by which the scattered village communities sent their goods to the lord's place of consumption. Founded in many cases originally for strategic purposes, it became the center of both marketing and production, although not in the fullest sense until it had vindicated for itself a direct relation with the royal power or got free, when possible, of intermediate overlords whose officials, like those of the king, it succeeded in excluding. The process by which this was effected was a long and complicated one and cannot be described here; whatever its genesis, the commune stood as the sworn association of townsfolk, formed primarily for the purpose of trade, and governed in the north by its mayor and jurats or *probi homines*, in the south of France and in Italy by its consuls and the various assemblies of the citizens. The corporate status achieved by the town differed in a marked degree from the system of private bargains and obligations prevailing without. Vassalage and serfdom were discarded—*die Stadtluft macht frei*. As has been well said, "its walls, personal freedom of denizens, market and civic immunity made the town a detached unit with an incipient political life of its own." As such it might ultimately find representation in a national assembly of estates.

Within it grew up unions for trading and industrial purposes. The earliest associations of citizens were commercial associations, merchant guilds which were in some cases identifiable with the governing authorities of the town, but in the majority of instances were more like chambers of commerce, entry into which was limited to citizens who were holders of burgage tenements within the walls. The merchants of the guild traded collectively, availed themselves of the privileges granted to them collectively, especially that of pleading within their own walls and of free passage along waterways and roads. But the period with which we are dealing had also seen the rise of groups of artisans organized into groups of fellow craftsmen, themselves the makers, employers and vendors of their own wares. These associations might have come into being partly through physical contiguity in the same suburb or quarter, partly through common religious observances and festivals. They were controlled by the municipalities, which insisted on a standard of quality, on a "just" price to prevent undercutting or undue enhancement, and on sale within certain authorized hours. The guildsmen themselves appointed their "triers" or overseers to supervise the quality of the work, and held the monopoly both of the industry and of the sales within the town. Collective trading, monopoly, fixed standards from which it was an offense to depart, were the three main characteristics of these organizations.

The city, then, as a place of exchange, a distributor or a vendor of the wares made by its own industrial corporations, was the essential trading agent of the great period of the Middle Ages. But not necessarily in isolation. The towns might ally together in a system, such as the famous Hanseatic League, with its own customs, its "counters" or depots (e.g. the steelyard, or the counter at Wisby) outside its own boundaries, and its own courts and guildhalls. Commercial arrangements between one set of towns and another, e.g. between the Low Countries and the Italian littoral, or between the Gascon communes and the English and Flemish seaports, showed a remarkable variety of corporate initiative, which even a prolonged war did not bring to a standstill. Mercantilism had not yet fully made its appearance, and the trading groups, provided that they could get license to pass in and out of foreign countries and safe-conduct within, took their own way unhampered by national considerations. It would not be accurate to state that the thirteenth and fourteenth centuries knew the full meaning of free trade: foreign merchants had often to pay customs on goods, as the English *nova custuma* show; on the other hand the universal prevalence and applicability of merchant law point to something like an international system of trading, and the great fairs of Champagne were in the fullest sense free cosmopolitan centers of exchange.

The fact that urban society was in essence commercial society had a considerable effect upon the movement of social ideas. It meant that the practise of the towns constituted the main practical criticism of the predominant clerical theories of property and money-making. It has been well remarked that it was money

which altered the attitude of the mediaeval mind to property. To minds of the eleventh century wealth lay primarily in the service and suit entailed by land. Now, as money became the new basis of state organization and elaborate royal exchequers were organized throughout Europe and more peaceful habits prevailed, the idea of *service* grew fainter, and land began to be thought of in terms of exact money equivalents, not in terms of conditional services. Thus land was regarded as a thing in itself, as a source of wealth, something that was coming to be owned directly and absolutely. Here urban conditions showed the way. The researches of M. Des Marez in the history of the Flemish communes in the thirteenth century have revealed the movement on the part of an urban patriciate, itself the result of the process of engrossing tenements, buying up houses under conditions permitting of easy sale and thereby accumulating resources of capital for future use. At the same time the early tendency toward capitalism in the easier and more elastic urban environment was breaking through the usury prohibitions of the canonists and challenging the Aristotelian doctrine that a limit to money-making is imposed by the purpose for which money was made. Father Bede Jarrett has spoken of the moral difficulty that confronted mediaeval writers "of making profit-taking in trade fit into the scheme of the gospel." The doctrines of mediaeval theorists have been accepted far too literally as corresponding to established fact. Apart from the practise of the Italian city-states, where there was extreme latitude, the papal curia at the beginning of the fourteenth century was itself no mean profiteer, and never above taking money from its bankers at no mean rates of interest.

But mediaeval communities were by no means exclusively commercial: they were religious and governmental, too. The development of the indulgence system by the church led to the formation of various fraternities, often called after the saint to whose shrine indulgence-bringing pilgrimages were made. The participants were admitted to profit by the merits their saint had acquired, and later the fraternity system developed along the lines of provident, burial and intercessional societies. In the institution of monasticism, the most coherent and powerful of the forms of association in the Middle Ages, the religious houses were in a very real sense communities, although the degree of self-government varied according to the type of religious order. It has been argued with some plausibility that they exemplified the nearest approach to communism seen in the Middle Ages; for the original purpose of the Benedictine rule was to round independent families of religious, whose individual members lived in poverty which, together with chastity and strict obedience to the superior and the rule, was considered necessary for the imitation of Christ. It is impossible to enumerate here even a fraction of the self-governing charitable institutions of the church. But if we pass to secular society outside the towns we shall not be able to withhold the notion of community either from the franchises of great lords or from the counties of mediaeval England. The "liberty" (public jurisdiction in private hands) was a unit of government that ran itself, with its own officials responsible to their lord, who in turn was responsible for its conduct to the royal power, although the extent to which that responsibility was realized varied very greatly in the different countries of Europe. Here the nexus of union was service to the center of jurisdiction, the suit to the lord's court. Suit to the common center was likewise the bond of that most real and effective of governmental communities, the English shire, quickly called into self-realization by the work put upon it in the way of taxation and justice by the English monarch, and finding methods of representation through the very machinery that royal inquests of all kinds had made normal and necessary.

The legal status of these most variegated communities differed surprisingly. It is extremely difficult to know how far we may predicate corporateness, for example, of a fraternity, to what extent the community of the shire, embodied in the county court, had the legal personality possessed by an abbot and convent. But one generalization may be attempted. The mediaeval king might confiscate the temporalities of a convent, he might take a town or a liberty "into his own hand"; but he would not permanently alter their status or, unless they belonged to an enemy power or had entirely outlived their original religious purpose, suppress them. They were part of the social order, their positions were guaranteed by written or unwritten custom which it was his duty to preserve. The coronation oath which he took was the oath to defend this

highly articulated order, to forbid rapine and the encroachment of one section upon another, or of individuals upon any one of them. This was involved in the idea of the rule of law, the most powerful and lasting contribution of the Middle Ages to modern political thought.

To the mediaeval theorist of the thirteenth century the conception of the monarch as the source of law and superior to all law was, as we observed, alien. When Bracton said that the king was under God and the law, he was saying something that all western Europe could understand; for to holders of this view law was the bond uniting the various parts of the body politic, preserving communities and individuals alike in their different estates. The king's court was the body which was the guardian of this cohesive system of rights, the source of appeal if any were infringed, and the collective arbitrator when doubtful issues arose. On this point the weighty judgment of Dr. Carlyle should be heard in full: "It is only when we take account of this fundamental principle of mediaeval constitutional law that we can properly understand the real significance of that famous clause of Magna Charta in which it is laid down that no free man should be imprisoned or disseized or destroyed or even attacked without the legal judgment of his peers or the law of the land. We are not here concerned with the detailed interpretation of all the phrases of the famous passage. . . . It is enough for us to observe that it is not an isolated attempt to establish some new principle of the law and the constitution, but that it was in its most essential principle nothing but a restatement of the fundamental principle of the feudal and constitutional system of the Middle Ages; that whatever authority was possessed by the lord or prince, it was limited and controlled by the law, and that this law had as its guardian a properly constituted court, and that this applied to the king or emperor as much as to any lesser lord."

The idea of the limitation of political power, as understood by the British and American peoples, derives in the first instance from the doctrine and application of the rule of law in mediaeval English government, and has its rise in the feudal guarantee of rights and the determination, put more than once into practise, to insist upon it. That guarantee was given a contractual form, for contract was the essence of feudalism. In the insistence upon the contract, first the baronage and then the organized communities of the land in Parliament made their great contribution to the destruction of absolutism. But neither the royal power nor the communities were wholly or permanently successful, and this equilibrium, which is found also in subsequent constitutional history, serves to explain why in England today monarchy coexists with democracy.

IV. THE UNIVERSAL SYSTEM. We have seen how the feudal organization of society with its notions of contract and custom insured the status of the community life of Europe and held at bay the idea, ultimately to triumph, that the will of the prince has the force of law. From the diversity of group life, so guaranteed, we must turn to the unified system of administration and theory that prevailed in spiritual and temporal matters during the thirteenth and the following two centuries.

It must be said at once that the unity of Christendom was a fact only in a very limited sense. What actually existed under Alexander III and the greatest of his successors, Innocent III, Gregory IX and Innocent IV, was a central court of church law for the whole of Europe, a highly centralized spiritual administration that never ceased to develop, and a more or less complete enforcement of canonical obedience to superiors and so ultimately to the papacy. In temporal matters there was the Holy Roman Empire, in theory universal, in practise confined to the Germanic kingdoms and Italy, never embracing France, England, Spain or the Balkans. If we look more closely we shall see that only at a comparatively few periods was imperial supremacy unchallenged, even in Germany and Italy. The pope and the emperor were in theory the two ruling officials of united Christendom: in practise they had been and were continually fighting each other, and at intervals the internal structure of their own monarchies was shaken with the gravest dangers. Yet there was unity of Christendom through a powerful threefold nexus: the sacraments of the church, canon law, the Latin tongue. Furthermore before the end of the thirteenth century the papacy had been able to mobilize the western nations in the crusade, the symbol of European unity against the infidel in the East. Thus unity, administrative, literary and militant, indeed existed; and churchmen maintained the ideal of a Christendom multiple in function, one in spirit, continually floating before men's eyes. Nor should we forget the art

which in the *tympana* of the doors, in the sculpture and painting of sacred buildings, gave illustration to that ideal, exemplifying the passage of man through the present life, under the church's guidance, to his eternal felicity or, apart from the church, to his eternal damnation.

We cannot but be struck by the contrast between the early Christian communities and the Catholic church of the twelfth, thirteenth and fourteenth centuries. As Troeltsch has pointed out, the peasants and fishermen who gathered round Christ and the Apostles were not official rulers nor learned doctors, but derived their leadership from religious conviction and prophetic spirit; on the other hand the church of the central Middle Ages had developed a powerful and complex hierarchy, "armed with scientific doctrine and superior technique." The power of the hierarchy, manifested in many characteristic ordinances, and the obedience it claimed were derived from its position as shepherd of the Christian flock. Care of the sheep carried with it the authority over the believer. But in process of time and with the development of doctrine this position had come to rest not merely upon the evangelical command but upon the sacramental duties of the priesthood. To all alike the hope of salvation was vouchsafed by the miraculous grace of God, and to that miraculous grace Christian thinkers traced the reversal of the general condemnation of mankind through the act of atonement—the incarnation, suffering and death of Christ. The efficacy of the reversal for each individual depends, however, upon the personal reconciliation and regeneration; and, as Troeltsch pointed out, the miracle of grace is prolonged in the shape of the mystic life of the church, which unites the living and the dead, and helps all struggling for salvation against sin in this life. Dante expresses this idea of the mystic unity and miraculous mediation of the church in the beautiful version of the Lord's Prayer put into the mouths of the souls in purgatory waiting for salvation (it has the ring of Virgil's "tendebantque manus ripae ulterioris amore"):

> Vegna ver noi la pace del tuo regno
> Chè noi ad essa non potem da noi
> S'ella non vien, con tutto nostro ingegno.
> Come del suo voler gli angeli tuoi
> Fan sacrificio a te, cantando Osanna,
> Cosi facciano gli uomini de' suoi.

The doctrine of the church as, again in Troeltsch's words, the "sacramental institution for salvation," is the corner stone of Catholicism and its concrete development. Grace, the sole means to salvation, is conferred by the seven sacraments, covering the whole range of man's spiritual requirements. The church's object, her *raison d'être* itself, is to convey these sacraments to men.

The mystic life demands an organization. Von Hügel in his address on the essentials of Catholicism has remarked that Catholicism is essentially organic. The social body it aims at building up is constituted by the several groups of men, down to the individual souls; to those groups and individuals "it gives their characteristic functions and delicate irreplaceable reactions." The organism must have a directing soul which moves the various members. In the mystic body of the church the direction comes from the head, Christ; but the visible acts of the organism depend on constituted authority, and this authority is the papacy. It would be impossible here to give any account of the gradual development of papal power in the church: we need merely call to witness the monarchical tendency of political theory in the later Middle Ages, due to what Vinogradoff has termed "the historical necessity of concentration amid the centrifugal movement of a society broken up into a quantity of local units and composed of a multitude of heterogeneous elements." That concentration arose first from the challenge to Rome's authority offered by the Donatists and by the Arian revival in Visigothic times; it continued in the struggle to claim church property from lay hands, which underlies the various Donations, true or fictitious, and the Forged Decretals; it was sharpened by the opposition of the Eastern Empire; it was developed in the struggle for tithe, and then in the great movement for the defeudalization of the church that culminated in Gregory VII; it was augmented by Innocent III's schemes for clericalizing society, for engendering in all believers the ecclesiastical point of view, and after the life and death struggle with the Hohenstaufen it reached a commercial climax at Avignon.

The legal weapon that held the centrifugal tendencies at bay was the canon law. Maitland described this system in unforgettable words: "It was a wonderful system. The whole of western Europe was subject to the jurisdiction of one tribunal of last resort, the Roman curia. Appeals to it were encouraged by all manner of

means, appeals at almost every stage of almost every proceeding. But the pope was far more than the president of a court of appeal. Very frequently the courts Christian which did justice in England were courts which were acting under his supervision and carrying out his written instructions."

By the thirteenth century the canons had provided the system of organization to the church. The laity was reduced to a condition of obedience: the life and position of the hierarchy of clerks were regulated in every detail, and the papacy had begun to intervene in the political relations of one ruler with another through claiming judgment in cases of sin. Innocent III expressly kept clear of questions of feudal law; but on moral questions the ecclesiastical tribunal might step in and judge the recalcitrant prince. Thus in both spiritual and moral affairs, in all matters relating to the sacramental life of the church, the church's unified and centralized legal activity claimed and did in fact exercise supreme competence with the concurrence of society. And just as the church in her world wide claims and administration was the political legatee of the single world wide empire of Rome, so in her language she maintained the unity of this legacy, and developed in it the wonderful flexibility of a still living tongue, both in her hymns and her poetry which called on men to look with expectation to the one republic on high:

Bone pastor, panis vere
Jesu, nostri miserere.
Tu nos pasce, nos tuere,
Tu nos bona fac videre
In terra viventium.
Tu qui cuncta scis et vales,
Qui nos pascis hic mortales,
Tuos ibi commensales
Coheredes et sodales
Fac sanctorum civium.

The writer of these simple lines of immediate appeal was the author of the most profound philosophical treatise of the Middle Ages.

In a rough age unity of the faith could not be procured by spiritual weapons alone, nor could breaches of that unity be punished solely by the normal penalties of interdict or excommunication. Churchmen had to make up their minds upon the problem of force, whether, when and how it was to be resisted or used. It was part of the church's duty to restrain the love of mere violence and the bestiality which disgraced the life of the military classes; and restrain it she partly did by instilling into their minds the principles of chivalry, or by diverting the emotionally awakened West to the defense of the holy places in the crusades, or by leading the forces of the orthodox against those tainted with heresy. The ceremony of conferring knighthood, the military orders which held the points won in Palestine after the crusades were over, and the Holy Office of the Inquisition were the legacies of the solutions adopted in these three cases. Chivalry was the most characteristic and significant, because it was the most normal, of her methods. The various mediaeval statements of a knight's duty which have come down to us are strongly ecclesiastical. The knight must hear Mass daily; he must die for the faith, if need be, must protect widows and orphans, not make war without good reason, not espouse unjust causes; he must bear himself humbly in all things, and it is his duty to preserve the goods of his tenants and do nothing contrary to the interests of his suzerain. Fidelity to the suzerain was emphasized as a guarantee of social stability in an age when the peace of society depended on the keeping of feudal engagements. The unity of Christendom in the faith and the preservation of the peace were the aims of the church in society. War she could not prevent, but she could harness and moderate it. It cannot be said that she entirely failed in these tasks—at any rate until the fourteenth century. And so deeply did the idea of unity strike that even when it no longer could or did exist, it formed the mainspring of the noblest ideal of a united Christendom ever propounded by political thought—the *De monarchia* of Dante. This tractate is all the more striking because it was written by one who had no sympathy with clerical government, by a "white" Guelf who had suffered the loss of all through the machinations of Boniface VIII in league with Florentine commercial interests. It is a great plea for universal empire, the only condition of peace, since a unity of discordant wills can be secured only by the governing will of a single person. Dante argues that the proper function of the human race, for which God by His art has created it, is to bring into play the whole capacity of the possible intellect for contemplation and for action, and that this can only be achieved when the one guiding power, the emperor, by his rule of justice spreads peace and creates the opportunities for this intellectualized activity. His argument that this empire is the Holy Roman Empire, the prolongation of

the divinely willed Roman Empire, is not so important for our purpose as his demonstration, carried out by pointing to the end of the human race, of the necessity for world wide unity, and his conception of the emperor as a permanent source of international justice and an impartial tribunal of international arbitration.

V. THE SCHOLASTIC PHILOSOPHY AND ITS VIEW OF SOCIETY. The central period of the Middle Ages is the period of the *Summa*: that is, of the attempt to synthesize all knowledge and speculation in a single body of Christian philosophy. The *sapientia christiana*, which this was called, is the intellectual form of the legal and administrative control which the church attempted to exercise over the spiritual life of Christendom. It included the twin spheres of faith and reason, dissociated by St. Thomas Aquinas who, following his teacher Albertus Magnus of Cologne, broke the spell of the Augustinian theories. The emphasis which he laid upon free will undermined the Augustinian idea of predestination, the real principle of division between the two cities in the *De civitate Dei*, while his theory of knowledge aided in developing and enriching the notion of human personality to an extent impossible while the intuitionist doctrine of knowledge held the field. The philosophy of St. Thomas, besides bringing to its mediaeval culmination the notion of the *person* as an independent center of thought and action, made to social theory contributions along two very important lines: on the model of Aristotle it took as its governing principle the notion of *purpose* in the world-process; and it gave prominence to the idea of *law* as sustaining both the physical cosmos and human society in its various groupings and units—the philosophical counterpart of the idea of custom noted above.

St. Thomas took over Aristotle's conception of nature and regarded it as the agent of God. With Aristotle he asks, in his *De regimine principum*, what is the purpose of the state and, more widely still, of society as a whole; with Aristotle he concludes that it is the virtuous life—but that is not enough: "since the virtuous man is also determined to a further end, the purpose of society is not merely that man should live virtuously, but that by virtue he should come to the enjoyment of God." Now if people could achieve this end by natural capacities alone, it would be the duty of kings to direct them to it; but the fruition of God, a mystical ideal, cannot be achieved under temporal direction: it belongs to divine government. Thus "the administration of this Kingdom has been committed not to the Kings of this world, but to priests, in order that the spiritual should be distinct from the temporal; and so to the supreme Pontiff, the representative of Christ." The method of St. Thomas is clear. The character of the supreme directing authority of society depends upon the purpose for which society exists; and because that end was a divine end, logically the government of this world should be a theocracy. It was open, as we have pointed out elsewhere, to any thinker after St. Thomas to use the Thomist method of relating social activities to their ends, but to hold that the purpose of society was not an otherworldly one; to deny, in fact, the transcendental view of the objective of human life, and to go no further than to suppose that the end was temporal happiness or smooth administrative efficiency.

The idea of law in St. Thomas is the complement of his theocratic doctrine. Blessedness, the divine end of man, is achieved through life lived justly in a society in which law governs and directs. For St. Thomas law is not first and foremost the determinate command of some human superior, but "a rule or measure of actions," dictated by reason, aiming at the highest good, not at the profit of individuals. It reflects the *ratio*, the reason (or, better, "reasonableness") in which both ruler and ruled participate, a reason which, just like the individual purposes in man, serves and is set in motion by the "highest reason existing in God." Human law must be in accord with these natural or reasonable principles: it need not be dictated by nature, for obviously *jus civile*, positive or conventional law, is not, but it must not be opposed by nature. "Every human law has as its condition of being a law that it shall be derived from a law of nature. . . . It is of the essence of a human law that it should be derived from the law of nature." Thus just as the purpose of each individual life serves a supreme purpose, so individual laws serve and "respond" to a supreme law; and the doctrine of purpose which we noted above is applied to the juridical sphere in such a way as to provide a criterion for the positive enactments of the prince. That the prince should observe the law constituted no lack of sovereignty for him, if we accept this definition of law. Thus political philosophy came to the support of constitutionalism.

VI. THE REACTION AGAINST THE THEORIES OF THE CHURCH. Since the death of Innocent decretalists (the commentators on the Decretals of Gregory IX) had never ceased to extend and exaggerate his statement of the papal claims. It was they and the papacy by its temporal demands and the fiscal measures undertaken to satisfy them that led the secular power, Philip IV of France in particular, to challenge the doctrine that the papacy possessed both spiritual and temporal swords and the declaration of Boniface VIII to the effect that the subjection of every human nature to the supreme pontiff is necessary to salvation. The lay argument, in the mouth of John of Paris (1302) for instance, is put in a feudal form. The royal power is in no sense derived from the papal, but from God. The king of France holds from none but God alone. The author of the *Disputatio inter clericum et militem* (about 1296) claimed for the king of France legislative power similar to that of the emperor. "The author," remarks Dr. Carlyle, "is clearly thinking of the legislative power of the French king in terms of the position of the emperor in Roman jurisprudence, and while he formally allows for the possibility of the king legislating with the advice of his *proceres* (nobles) he does not think of this as essential." The Roman influence is significant, for in other writers it led to a more far-reaching thesis: the denial of the theory of law adumbrated above (not a denial that law should be reasonable, but a denial that any man or body of men have the right to proclaim the prince's law to be unreasonable) and an attempt to limit it to purely temporal origins and circumstances. The civilians of Bologna, following their Roman models, derived it not from custom or nature but from the definite human will of the ruler, on whom the people had conferred its legislative power. The remarkable theorist, Aegidius Colonna, would go further to argue that it is better to be governed by the prince than by the law.

The most powerful theoretical attack on the papal claims came from a Paduan physician and a French Aristotelian, Marsilius of Padua and Jean of Jandun. The occasion was the struggle of the papacy against the Emperor Lewis of Bavaria, the ally of the Angevin Robert of Naples and the firm opponent of the Ghibelline leaders in Italy; and it is significant that the authors, shortly after writing their book, betook themselves to the court of Lewis at Nuremberg, and that Marsilius followed the emperor to Rome, where he attempted to put some of its doctrines into practise. Marsilius had seen much of ecclesiastical interference in northern Italy, and without doubt the condition of his native Lombardy chiefly moved him to write the book. In order to demolish the theory of the papal *plenitudo potestatis* he had to prove two revolutionary theses: he had to show that no special divine revelation created the papal supremacy and ecclesiastical jurisdiction, and that the very nature of the state excluded their operation. He had therefore to discuss the nature of the state and to analyze ecclesiastical government. The purpose of the state he defines in the words of Aristotle: it is a perfect, self-sufficing community aiming at the good life—but in this world only. It contains various orders and groups, among them the priesthood, the *pars sacerdotalis*; but the business of the priest is to administer the sacraments and to prepare men for the future life, not to take part in the politics of the present. That social peace may be secured it is absolutely essential that the secular power which governs should be supreme: and this power is the assembly of adult citizens, the *legislator*, which in matters of administration is represented by a *pars principans*, the executive body, elected by the *legislator*, whose authority must be final and absolute, unique and undivided. Marsilius will not allow the priesthood to have any coercive jurisdiction. His analysis of ecclesiastical government confines the functions of the priest to the sacrament of penance and the celebration of the Eucharist. Excommunication, if inflicted, can only be so by the local assembly (which, being Christian, he terms the *legislator humanus fidelis*). The clergy must possess no property but, like the Roman priesthood, be provided for by the state whose servants they are, and elected by the Christian citizen assembly. The papacy is not a creation of divine revelation: it is an administrative episcopate, and all bishops are indifferently successors of the apostles in general.

This frankly Erastian treatise, almost immediately condemned by the papacy (and what wonder?), is remarkable for its absence of internationalism, its lack of arguments for a world wide empire such as Dante had foreshadowed. Its hard realism breathes the spirit of a commercial city which had had enough of the interference of a universal power. But Marsilius does provide some international machinery for cases where there are differences of interpre-

tation in the church over scripture or dogma. Then a general council must be summoned, the representatives being clerks and laymen elected by the *legislatores humani fideles*, the Christian citizen assemblies. The idea of a general council was by no means new: such a body under Alexander III (in 1179) and Innocent III (in 1215) in its decrees had registered papal policy with the support of the church; yet the council now thought of was not to be held at the behest or for the assistance of the supreme pontiff but for the decision of difficult matters in the church, where the papacy could not avail. In this sense and with this intention there had been an anticipation in the treatise on Conciliar government by William Durandus in the thirteenth century. But the demand for such heroic remedies was not loudly heard until constitutional doctrine arose to meet a situation in the church unparalleled for the length of its duration and the evil of its consequences: the Great Schism of 1378–1409.

The period of the Avignonese captivity in the papacy had been marked by fiscal reforms and experiments on a large scale. By leaving Rome (which, because of the quarrels of the great families, would have been necessary in any case) the popes lost large sources of revenue; but apart from this there were petty wars in Italy to finance, the patrimony to protect, a residence at Avignon to be constructed; and to meet the needs of a greatly increased budget they had to strengthen the financial machinery at the expense of the local churches. This was done principally by increased taxation of all kinds, and by a system of collation to benefices which reserved more and more classes of livings and cures to the papacy and annoyed ordinary collators, especially the national monarchs. The curia was reorganized and centralization in the church reached its climax. This concentration had the effect of arresting the measured flow of canonical obedience through the grades of the hierarchy; it disturbed the ideal symmetry of the church by undermining the authority of prelates. The lack of discipline in the pre-Tridentine church is the direct result of the numbing of diocesan life and activity or, to change the metaphor, of Rome's short-circuiting of her subjects. The great protest against this suppression of local life came in the constitutional outbreak which we know as the Conciliar Movement. By character this was early mediaeval through and through in its attempt to foster local church life through representation, to get back once more to the graded type of society, to call into active being the diocesan communities undermined by papal collation to benefices and the multitude of papal dispensations and organizations. This, however, did not stand first on the Conciliar program. Reform came after unity, the unity that was destroyed by the competition of Italian and French candidates for the papacy; and when in the Council of Constance unity had formally been achieved, that body was too much divided along the line of national animosities and peculiarities, and too much occupied with the suppression of heresy and with irrelevant administrative matters, to deal seriously with reform. But the rock on which the *causa reformationis*, which was in all good men's hearts, really foundered was the old problem of finance—how to recompense the papacy, which needed every penny it could get now that it had returned to take up its Roman patrimony and inheritance, for the loss of taxes and collations which the reformers demanded that it should undergo, but which had constituted the main source of its revenue during the Avignonese time.

VII. CONCILIAR THEORY. The theory underlying the mass of Conciliar treatises finds its greatest exponents in Jean Charlier de Gerson, chancellor of the University of Paris, and, at the time of the Council of Basel, in Nicholas of Cues, the German philosopher, reformer and later bishop of Brixen. Both believed that the constitutional doctrine of representation in secular politics could be applied to the government of the church: both held that the representative body in the church was the general council. Gerson took his stand on the doctrine of *epikeia*, or the equitable, in place of the rigid, interpretation of law. The schism presented an emergency unprovided for in the law of the church. At all costs the views of extreme canonists had to be overridden and the only remedy tried which was then feasible (1409). In his reaction against the rigid legalism that would permit of a general council being summoned only if the pope gave his assent, Gerson was at one with the spirit of his time, which was increasingly in revolt against the rigidity of ecclesiastical institutions. Cusanus went further than Gerson to argue, rather like Marsilius, that the papacy is an administrative office alone, with no power to veto (as Eugenius

IV did) a representative synod of Christendom His argument in the famous *De concordantia catholica* rests upon a fourfold foundation: that the character of the papacy is purely administrative; that all power, spiritual as much as temporal, is dependent on the consent of the whole body over which it is exercised; that such consent is conveyed through representatives; and that the representatives of the whole body, in this instance the church, are the council. This doctrine of consent conveyed through representation had, for the papacy, an ugly democratic connotation; and if the system of voting by nations in the Council of Constance had brought national animosities to the fore, the large numbers of lower clergy and intellectuals (doctors) introduced through representation among the select higher few presented at Basel a most unwelcome feature to the curial mind. The movement as a whole failed, though it registered at Constance the famous decree that the council was superior to the pope and should meet to settle the needs of the church at stated intervals. But even if the papacy emerged from its ordeal strengthened, narrowed and still more centralized, the constitutional doctrines of consent and representation were generalized throughout Europe, and were ready to be used in later times when the excesses of national monarchs produced reaction.

It is interesting and instructive to find Cusanus still cherishing a belief in a united Christendom. It is characteristic of the mediaeval mind that refuses to be disturbed by the discrepancy between idea and fact. For the facts in the middle of the fifteenth century were very different. In Italy communal government had faded into the regime of the signory, in which a single family often had a controlling voice; democracy had passed to oligarchy, and oligarchy was now melting into tyranny. In France Louis XI was behaving as a typical Renaissance despot, centralizing, subduing the fiefs, intriguing against his more mediaeval neighbor Burgundy; Germany was a conglomeration of almost independent electoral and ecclesiastical principalities, their rights sanctioned by the Golden Bull of Charles IV; and in England the house of Tudor, soon to succeed, was ere long to establish the principles of the new monarchy. Everywhere the promise of constitutionalism was failing before despotic control, and the unity of Europe and international government through representatives were no more than a dream. But that vision, which men have recurrently tried to turn into reality, is one of the most permanent legacies of the Middle Ages and, with the true dreams, may prove to have come through the gate of horn.

E. F. JACOB

VI

Renaissance and Reformation

I. In respect of the social sciences, as of all other spheres of knowledge, the keynote of the Middle Ages throughout Christendom had been submission to authority. This submission to authority was the intellectual counterpart to that obedience to authority which had been the dominant principle in every department of mediaeval activity. And the authority which both determined conduct and prescribed creeds was that of the Catholic church. It was the church that fixed the canons of ethics, declared the nature and limit of the Christian man's duty to his neighbor, established and maintained the standards of right and wrong. The church, too, claimed the realm of economics as its own, and not only announced pontifically the conditions under which commerce should be conducted and industry carried on, but also formulated definitively the principles that should decide such questions as whether or not a wage was just, a price equitable or a payment for the use of money in accordance with the Levitical law. Law, moreover, was a prime concern of the ecclesiastical authority. The customs of the nations, the enactments of their rulers and even the venerable civil law of Rome were all inferior in obligation to the canon law based on the divine revelation and developed by the sacred tribunals of the church. As for politics, just as the papal curia in its great days claimed to exercise sovereign power over all Christian kings and princes, so did the doctors of the church formulate the prevailing theory of the state, basing it on the Bible and supplementing the Bible with whatever seemed to them relevant and congruous in the systems of Aristotle, the stoics and the Roman jurists.

The prime characteristic of the period of the Renaissance, on the other hand, was revolt against authority. The emancipated and lawless mind of man began to question the dicta of its ecclesiastical tutors, first, of course, in their own proper sphere of religion, and then, as a consequence, in the sphere of the social sciences over which they had exercised suzerainty. It began to examine the foundations of ethics; to discuss on rationalistic lines the principles of economics; to analyze critically the nature of law, and weigh the competing claims of the *jus divinum*, *jus naturale*, *jus gentium* and *jus civile*; to develop a political theory which, divorced from religion and free from entanglement with morality, had direct relation to the art of government as practised by the tyrants of the world of practical affairs.

To examine in detail the causes that led to this intellectual liberation does not fall within the scope of this section. They must, however, be indicated briefly; for, unless they are borne in mind, the nature of both the Renaissance and the Reformation will be misunderstood. If we wish to express these causes in impersonal terms we may say that primarily they were the influences emanating from Asia, near and far. If we wish to express them in terms of specific movements we may say that they were the consequences of the crusades and of the Mongol invasions. If we prefer to stress the power of personality in history we may say, without undue exaggeration, that the two main authors of the Renaissance and the Reformation in western Europe were Mohammed and Genghis Khan.

The way for the diffusion of the liberating light of Asia had without doubt been prepared. The barbarians who constituted the peoples of western Christendom had always been rebellious children of the church; although until the time of the crusades their rebellion had been moral and not intellectual. They, in their natural naughtiness and ingrained independence, had resisted the restraining hand of the priesthood, and had all too frequently refused to live up to the lofty ethical standard erected by the saints. Excommunication, interdicts, bulls of deposition—all the weapons of the spiritual armory of the papacy—had been necessary to reduce the sinful obstinacy of the early mediaeval superman. It was, indeed, to no small extent just because the church could not enforce decency of behavior upon the organized brigandage of Europe that she had the happy inspiration to divert and sanctify their predatory and sanguinary passions by directing them to

the recovery of the Holy Land from the infidel.

The crusades, which form the real dividing line of the Middle Ages, had many and far-reaching results. The only one among them, however, that we have to note is this: that they brought the military multitudes of the West into contact with an oriental civilization immeasurably older and finer than their own, and made them conversant with a new world of institutions and ideas. Not a few of the crusaders renounced their former faith, adopted that of Islam and remained permanently as denizens of the East. Many of those who returned to their ancestral homes and retained their allegiance to Christianity came back with an intellectual outlook ineffably enlarged and with an unquenchable tendency to question established creeds. The influence of Asia was manifest in most of the late mediaeval heresies. And the influence of Mohammedan Asia reached Europe not only along the routes of the armies, the ways of the pilgrims and the roads of the merchants who made the Holy Land or Egypt their objective. In two other regions the Crescent and the Cross were in contact for several centuries, a contact, moreover, that was by no means generally hostile. In Sicily, on the one hand, Saracen and Norman—not to mention Greek and Jew—lived side by side in a peaceful polity which fostered the generation of a universal skepticism and the rise of an intensely rationalistic science. In Spain, on the other hand, the Moorish universities became the headquarters of a culture that was based on that of ancient Greece, as transmitted and transmuted through Egyptian, Syrian, Jewish and Arabic channels. Inquisitive Christians, such as Gerbert (later Pope Sylvester II), did not hesitate to risk the salvation of their immortal souls in their desire to learn the mysteries, unknown in the schools of the church, of the higher mathematics and physics, of chemistry and metallurgy and, above all, of the Aristotelian logic and metaphysic. Thus the lore of the Orient quickened the western mind, making it pregnant with new ideas.

The influence of Genghis Khan and of the Mongol invasions of Europe was different in kind. The outstanding fact to be borne in mind is that the empire established by Genghis and maintained by his two successors in the thirteenth century extended from the seaboard of the Pacific in the east to the shores of the Black Sea in the west. Its roads and rivers, admirably patrolled and provided with excellent hostelries and appropriate vehicles, brought together in mutually profitable union the long sundered civilizations of China and Rome. Now while Rome had gone one way, transforming itself from an empire into a church and developing a culture based upon a creed, China had gone a totally different way, devoting all its talents, in peaceful seclusion, to the perfecting of a culture based upon material comfort. Thus when Rome and China renewed contact in the thirteenth century each was able to contribute much to the other. The great Kublai Khan (A.D. 1260–94) imported Christian missionaries to Peking in order that his people might learn something respecting that spiritual world with which the West had become so conversant. In return his people were able to familiarize the backward denizens of Europe with such powerful agents of progress as the printing press, the mariners' compass and gunpowder.

These three things in particular—printing press, gunpowder and compass—were the material causes of the Renaissance. They brought the mediaeval system to an end. First, the printing press cheaply and easily spread knowledge broadcast among the laity, and broke down that monopoly of learning which the estate of the clergy had enjoyed for a thousand years. Secondly, gunpowder completed the work that had been begun by the bow and the pike; that is to say, it placed weapons of power and precision in the hands of the masses of the third estate, and so destroyed the monopoly of military efficiency which the estate of the European chivalry had enjoyed from the days of the battle of Tours, if not from that of the battle of Adrianople. The armor of the feudal knight became merely an interesting relic of antiquity; while the castle of the noble (a sheer death trap in the days of artillery) was converted into a museum in which to exhibit it. Finally the mariners' compass—especially when supplemented by the quadrant and the chronometer, which were perfected about the same date—made possible for the first time continuous and systematic voyages on the great ocean. Thus it became feasible in the fifteenth century to embark on distant expeditions, and to test those startling ideas of the classical geographers (whose works were early put into print) to the effect that the earth was round and not flat, and that consequently seamen sailing westward across the Atlantic would not reach the perilous margin of the world but

would within reasonable time attain the friendly harbors of India and Cathay.

II. The Renaissance was a composite movement. The outcome of the quickening intercourse of Europe and Asia at the close of the Middle Ages, it displayed many of the characteristics of new and exuberant life. It was, in the first place, the "rebirth of the human spirit"—the resurrection of the mind of man from an intellectual tomb—after a millennium of death and putrefaction. Not that the mediaeval world had failed to make invaluable contributions to the structure of modern civilization. It had made many such contributions, as the preceding section has shown; but they were not intellectual contributions. They were religious, ethical, social and political contributions; not additions to knowledge. For the mind of mediaeval man was entombed, and his spirit wandered ghostlike amid sepulchral superstitions. Such knowledge as he supposed he had acquired was knowledge of a visionary universe that had no existence outside the realm of his own imagination—a realm peopled by fairies and goblins, angels and devils. Science was impossible in a world whose phenomena were regarded as the consequences of incessant and capricious interference on the part of supernatural beings.

That brings us to the second outstanding feature of the Renaissance, viz. the dawn of modern science. The fourteenth and fifteenth centuries were marked by a rapid waning of the sense of the miraculous, and by a corresponding swift increase in the consciousness of the existence of unvarying law. Men began instinctively to seek for rational explanations of events —such as eclipses and earthquakes—which their ancestors had without hesitation ascribed to divine or diabolic interventions. And it was especially in the impressive realm of astronomy that science made its first great conquests and established the evidence of the reign of law. Among astronomical discoveries of the Renaissance era none was equal in sociological importance to that of Copernicus (1473–1543), viz. that the sun is the center of our planetary system and that the earth moves round it once a year. It was a discovery—or rediscovery of a truth known to Aristarchus in the third century B.C.—that was sociologically important for two reasons. First, it shook to its very foundations the mediaeval theological system which was based, beyond possibility of reconstruction, upon the Ptolemaic principle of a geocentric universe. Secondly, it compelled the thoughtful to contemplate the earth and all human affairs in a new light and in an infinitely reduced perspective. The world shrank to a point in limitless space; the bustle of man's business became inaudible in the immeasurable silences; humanity at length displayed itself in its proper insignificance.

The growth of science and the spread of rationalism constituted in effect a return to the Greek view of life. It was a view in which joy was the most prominent feature, and self-realization the dominant ideal. It contrasted sharply with the mediaeval view, in which the sense of sin filled the scene and asceticism set the standard of virtue. This return to the Greek view was immensely furthered and fostered by that "humanistic" revival which was the third conspicuous feature of the Renaissance. The gradual infiltration of Byzantine copies of the ancient Hellenic classics into Europe by way of south Italy; the renewed study of the Greek language in the academies of Naples, Rome, Florence, Milan and Venice; the printing of the works of Plato and Aristotle, Homer and Hesiod, Aeschylus and Euripides—these were the things that helped to open men's minds, to give rise to crucial questionings, to prepare the way for the reception of science. It was this neopagan outlook upon man, upon nature, and upon God, too, that gave rise to that marvelous manifestation of brilliant art and splendid literature which makes the Renaissance the most fascinating of all the periods of history since the Periclean age of Athens.

The original centers and sources of the Renaissance culture—humanistic, artistic, philosophical, scientific—were the Italian city-states. These cities, and in particular the five mentioned above, had had a continuous existence from the days of republican and imperial Rome, and they had remained pagan to the core. The church had turned temples into cathedrals, and had even transmuted deities into saints, but it had never been able to eradicate the fundamental secularity of the Italian soul. Italy, too, was strewn with relics of classical antiquity. Its language, moreover, was so closely akin to Latin that the study of the Roman writers was an easy matter. The Latin revival begun by Petrarch in the first half of the fourteenth century prepared the way for the entry of Greek under Chrysoloras and his followers at the end of the century. Not only, however, did

continuity with classical times make the Italian city-states the natural leaders in the Renaissance movement; their political independence, their economic wealth, their social organization, all helped to confirm their primacy. The ruin of the mediaeval empire in the thirteenth century, followed by the captivity of the papacy at Avignon in the fourteenth, left them with unequaled opportunities of self-government and civic development in the fifteenth. The growth of their industries in the hands of the municipal guilds; the spread of their commerce under the protection of the state; the increase of their navies and the vast improvements in the art and craft of seamanship which they effected; above all, the evolution of banking and the weaving of the network of international finance —all these things gave their rulers and their leading citizens the power, as well as the will, to patronize artists and sculptors, to build churches and palaces, to found academies, to establish printing presses, to maintain scholars and men of letters.

From Italy the Renaissance spread across the Alps to continental Europe, reaching Germany first. In Germany the signs of the reawakening life and the inquiring mind were rather different from those displayed in Italy. The Christian religion had a stronger hold on the Germans than on the Italians; the solemnity rather than the hilarity of things impressed them. Hence their Renaissant scholars were men like Reuchlin and Melanchthon who poured the light of the new learning upon the sacred Scriptures; their representative artists were men like Albrecht Dürer who subdued all his draftsmanship to the inculcation of moral lessons. Nay, the most typical German figure of the time is that of Luther himself, who converted the Renaissance for Germany into the Reformation.

France was hardly affected by the ideas and influences of the new era until after Charles VIII's fateful expedition to Naples in 1494. Janus Lascaris, in fact, during his eight years' sojourn in Paris, may be regarded as its pioneer. Its supreme representative, however, was François Rabelais (1495–1553), and his immortal creations, *Gargantua* and *Pantagruel*, are sufficient to show that in France the Renaissance meant not, as in Italy, the cult of pagan beauty nor, as in Germany, the quest for primitive Christianity, but rather the zest of a life of ribaldry, freed from the bonds of mediaeval reverence and restraint.

England had shown signs of an early Renaissance of her own. The poems of Chaucer, for all their mediaeval setting, had been an indication of the dawn of the modern mind. In the opening years of the fifteenth century, too, the zeal of Humphrey of Gloucester in gathering manuscripts, patronizing scholars, embarking on hazardous speculations, had been a clear precursor of the Renaissant spirit. The Wars of the Roses, however, had thrown the country back into mediaeval anarchy and darkness; and when the Tudor rulers gave the country peace and order once again, the course of events revealed the fact that during the interval of obscuration the Renaissance in England had been changed from a movement akin to the Italian to a movement akin to the German. Not men like Humphrey of Gloucester or Tiptoft, Earl of Worcester, but sober reformers and grave scholars, such as Linacre, Colet and More, became its representative figures.

In the Spanish peninsula religion of the mediaeval type remained dominant, and it precluded the entry of either Renaissance or Reformation. Eight centuries (700–1500) of almost uninterrupted crusade had made the maintenance and diffusion of the faith the prime concern of the loftier Spanish minds. This enthusiasm for the Cross, however, although it expelled humanism and depressed art, led to some very remarkable achievements which rank among the greatest and most characteristic of the age. It led to the voyages of discovery. The Portuguese pioneer Prince Henry the Navigator, as during forty years (1420–60) he built his ships, collected his charts, organized his expeditions and sent his seamen forth, was inspired and supported by the hope that he might reach the Christian kingdom of Prester John, might turn the flank of the Turkish Empire and might recover the Holy Land. He did not succeed in his purpose; but he did open up the way which later enabled Diaz to reach the Cape of Good Hope (1486) and Vasco da Gama to open the ocean route to India and the Far East (1498). Similarly Columbus, when on August 3, 1492, he set forth from Palos on his first great westward voyage, did so *in nomine D. N. Jesu Christi*, and went in order that he might open up the Indies and Cathay not only to the commerce of Europe but also to the missionaries of Catholic Christendom; and when the New World was discovered and the strange realms of the Aztecs and the Incas were reduced, the extirpation of heathendom and the imposition of the yoke of the church became the

prime preoccupation of the Spanish conquerors.

The discovery of the New World, like the Copernican discovery of the universe, had a profound and even more direct influence upon the social sciences. On the one hand it enlarged the spheres of both politics and commerce, giving rise to wholly unprecedented problems of property and power. On the other hand it prompted anxious questions by revealing to the speculation of the Old World religions wholly alien from both Crescent and Cross; systems of government profoundly different from any contemplated by either Aristotle or Augustine; codes of ethics in some respects superior to those of Christendom and yet totally unconnected with any of the codes current in Europe; social organizations obviously of immemorial antiquity and of intricate elaboration, nevertheless strikingly different from any modes of organization ever known on either the eastern shores of the Atlantic or the western shores of the Pacific; economic institutions curious in their naïveté but fascinating in their patent purpose to secure rational justice. It is deplorable that the investigation of these ancient aboriginal civilizations of the newly discovered America fell into the hands of a people so ignorant, so incurious, so bigoted, as the Spanish companions of Cortez and Pizarro. The fragments of information they have transmitted to us make us long for more. They told enough, however, to their contemporaries to quicken their imaginations and to set them dreaming of Utopias, Oceanas, New Atlantises, wherein politics preferable to those of a decadent Christendom prevailed. Above all, they gave new vitality and enlarged content to the old stoic conception of a state of nature superior to that of civilization; of a law of nature higher than the enactments of men; of a natural religion, simple and universal, underlying the creeds of all the churches and cults; and of a natural man, free and unsophisticated, who in primitive innocence lived the ideal life in the earthly paradise. The "noble savage" was the denizen of lands unknown before the days of Columbus; and the *Etre Suprême* of the deists of the age of reason rose into existence among the palm clad coral islands first seen by Magellan.

III. The impact of new ideas, the spread of new inventions, the revelations of the new astronomy, the discoveries of the new geography, the opening up of the new commerce—all these strange perturbing novelties displayed themselves in a Christendom that was already in process of rapid and revolutionary change. The feature which, above all others in the sphere of political institutions, marks the period of transition from mediaeval to modern times, is the disintegration of the *res publica Christiana* and the substitution of the system of national states; that is to say, the dissolution of an ideal unity based on religion—a single Christian community governed under God by two joint rulers, viz. the Holy Roman pope and the Holy Roman emperor—and the establishment in its place of a number of fragmentary states each under its national monarch who tended to claim unlimited authority over all persons and in all causes, whether temporal or spiritual. This tremendous change was immensely accelerated by the many movements, just surveyed, which made up the Renaissance. On the one side the free thought of the Renaissance challenged the validity of the whole system of mediaeval orthodoxy, sapping the very foundations of the papal authority. On the other side the exploitation of the New World, the appropriation of the new trade routes and the conquest of the new commerce, were tasks beyond the competence of any power less imposing and less well organized for war than whole nations, led by belligerent monarchs and supported by all the resources of the militant state.

In other words, the struggle for colonies and for commerce which the geographical discoveries of Columbus, Vasco da Gama and Magellan inaugurated conduced to the establishment of absolute monarchies, supported by the dogma of the divine right of kings, and so put a stop to several most interesting and important movements in the direction of democracy and representative government which the thirteenth and fourteenth centuries had manifested. In England the Parliament under Edward III, and still more under the three kings of the house of Lancaster, had steadily advanced toward control over the executive. In France the feudal nobles, the communes, the *parlements*, the provinces had all made strong claims for autonomy. In Germany and the Netherlands the revived study and general reception of the Roman law had generated the idea of self-governing corporations administering their own affairs by an inherent right not in any way derived from the state; and this fruitful idea of group sovereignty had been eagerly welcomed by all sorts of corporate bodies, civil and

ecclesiastical, municipal and industrial, philanthropic and educational, that had coveted independence of alien control. The political speculations of mediaeval thinkers like John of Salisbury, St. Thomas Aquinas and Aegidius Romanus had strongly tended toward the limitation of royal power and the establishment of constitutional government regulated by the church.

The late mediaeval classification of law into *jus divinum*, *jus naturale*, *jus gentium* and *jus civile* had assisted the cause of the opponents of absolutism by placing the mere enactments of the secular ruler in the lowest category of obligatory commands. Even the humanistic revival in its early stages had tended in the same democratic direction. For the *Politics* of Aristotle had made familiar the idea of a state in which the citizens had held complete authority; while the story of the Roman Republic, as told by Livy, was full of the records of fights for freedom and the expulsion of tyrants.

But, as Herbert Spencer has so conclusively demonstrated, the development of free institutions is dependent on the maintenance of peace and on the organization of society for industrial ends. The intense militancy of this transitional age, which saw the disruption of mediaeval Christendom and the struggle for overseas dominion, was such as to throw back for a couple of centuries the movement toward popular government, and in the meantime to make the autocracy of warlike monarchs inevitable. The men of the West, in their passion for power and their lust for wealth, ceased in the main to feel any concern for either sanctity in religion or freedom in politics. The principle of nationality became rampant. The old bonds which had held together the clergy of Christendom in a common church, the monks and friars in cosmopolitan orders, the knighthood of Europe in a fraternity of chivalry. the scholars of all universities in curricula always the same and a language everywhere Latin—all these mediaeval bonds were broken, and the people of the several countries of the continent (French, Spanish, Portuguese and so on) regrouped themselves as nations for purposes of commerce, colonization and war. The old "estates of the realm" forgot their former quarrels as they combined for aggression or defense. Vernacular languages supplanted the Latin which had for long been the universal vehicle of culture, and the French which had made itself the tongue of chivalry. Even the church, which stood, above all things, for the fatherhood of God and the brotherhood of man, tended to split itself up into national sections that, even where they did not become definitely heretical, became decidedly schismatic. Catholicism in Spain and Gallicanism in France were at times hardly less resistant to Roman authority than Lutheranism in Germany and Anglicanism in Britain.

Nationality is fundamentally a psychological phenomenon. England was the country in which it first realized itself. Edward I's determination to unite the island of Great Britain by subjugating Wales and Scotland made an irresistible appeal to the patriotic passions of all classes of his subjects, welding them together for aggressive war. Still more did the struggle with the French that broke out in Edward III's day—the Hundred Years' War—caused, as it was, not so much by dynastic claims as by the clash of rival maritime and commercial interests, join all the orders of the people together to maintain English prestige and vindicate national honor. Such discordant factors as remained in England at the close of the Hundred Years' War—e.g. feudal nobles and ultramontane clergy—were so weakened by the subsequent Wars of the Roses that it was easy for the Tudor monarchs to eliminate them and to lead the whole "commonwealth of this realm of England" on patriotic adventure. The establishment of the Tudors at the end of the fifteenth century, indeed, may well be taken as the event that marks the unification of the English nation. The formation of the French nation, although different in process, was achieved also about the same date. Under Louis XI the centralization of the administration was completed; the feudal nobility reduced to impotence; the royal autocracy assured. Under his son Charles VIII Brittany, the last of the great independent fiefs, was (through the marriage of its duchess to the king) subjected to the authority of the crown. In that same closing decade of the fifteenth century, too, Spain brought to a termination its eight century crusade, when the united forces of Castile and Aragon (long sundered by fratricidal conflicts) joined to reduce Granada, the last stronghold of the Moors in the peninsula.

The almost simultaneous attainment of nationhood by England, France and Spain—to say nothing of Scotland, Scandinavia and the Netherlands—involved a portentous change in the politics of Europe. The achievement of solidarity at home marked the beginning of adventure abroad. Consciousness of power led

to aggressive enterprise. Not only were the high seas and the newly discovered regions of the Americas and the Indies made the scenes of furious conflict between English, Spaniard, French and Dutch, but the regions of old Europe which had not succeeded in attaining unity and order were converted into battle-grounds for contending depredators. In particular, two great countries whose inhabitants, although growingly conscious of nationhood, were unable to secure any sort of effective unification, became the "cockpits of Europe," the fields where alien invaders waged their wars, gathered their plunder and worked their will. These two were Germany and Italy. Concerning the causes that delayed the unification of Germany and of Italy until the nineteenth century this is not the place to speak at length. It is enough to note that the intimate association of Germany with the Holy Roman Empire and of Italy with the papacy held them fast bound to the mediaeval system.

Italy was the first to suffer from her failure to weld her diverse small states into a national monarchy of the new type. At the moment when France, Spain and England were completing their consolidation under strong kings, that is, at the end of the fifteenth century, Italy was divided among five greater powers, viz. Naples and the papal states in the south, Venice and Milan in the north, with Florence holding the balance in between. Commonly Venice and the papacy were allied against Milan and Naples, but commutations and permutations among the microscopic five were so frequent and so bewildering that the study of Italian history during the period of the Renaissance is like the threading of an intricate maze. Moreover never was diplomacy so utterly devoid of scruple as it was at this time in the Italian peninsula; never was war waged with so diabolical an admixture of treachery and cruelty; never were poison and the dagger so freely employed to supplement the lies of the politicians and to redress the failures of the mercenary soldier.

No doubt the Italian intellect was quickened and sharpened by the urgent need for incessant alertness in the midst of this unmitigated struggle for existence. The period of wildest and most confused conflict was precisely the period of the climax of the Renaissance—the period wherein flourished Leonardo da Vinci, Michelangelo, Raphael and their compeers of equally immortal memory. But to the commonalty of the peninsula it was little satisfaction to know that treasures of art were being accumulated and masterpieces of literature written, when at the same time their fields and vineyards were being trampled down by lawless companies and their homes broken up by unpunishable tyrants. And if the condition of things was almost intolerable when the disturbers of the peace were still limited to persons and powers proper to the peninsula, how much more than intolerable did it become when into the seething cauldron of Italian politics French, Spaniards, Swiss and Germans began to dip their agitating spoons. The expedition of the French king, Charles VIII, to make good his claim to the throne of Naples in 1494, marks the commencement of the serious intervention of foreign powers in Italian affairs. To expel the French from Naples Ferdinand of Aragon, the inheritor of another shadowy right to the Neapolitan crown, sent his invincible Spanish infantry. Then, in the north, Valois and Hapsburg became involved in furious conflict for the duchy of Milan, and alien mercenaries, Swiss on the one hand and German on the other, were brought over the Alpine passes to aid in determining the doubtful issue. So was Italy ravaged from end to end by *condottieri* devoid of honor, and by auxiliaries lustful and merciless. To a patriotic Italian at the beginning of the sixteenth century the political prospect was one of almost unrelieved gloom.

IV. It was at this critical moment in Italian history that Niccolò Machiavelli (1469–1527) began to play his memorable part upon the Florentine stage—a part how strikingly different from that played by Dante (1269–1321) on the same stage just two centuries earlier! Nothing, indeed, can more effectively bring home to the student the completeness of the transformation that marked the transition from mediaeval to modern times than a comparison of the *De Monarchia* of Dante with *The Prince* of Machiavelli. All Dante's great ideas of divine governance, universal empire, perpetual peace, eternal justice and the general reign of law have vanished away, and in place of them has come a *Realpolitik* wholly free from all idealistic elements—a political system concerned solely with current facts, entirely regardless of both the precepts of religion and the dictates of morality, completely engrossed with the art of government to the entire exclusion of all speculation respecting the theory of the state.

The year 1469, which saw the birth of Niccolò Machiavelli, is the year which—because of the fact that it saw the marriage of Ferdinand of Aragon to Isabella of Castile—Major Martin Hume regards as the beginning of modern history. If that view is correct, the year can have given birth to no more representative figure. For Machiavelli was free from any affinity with the Middle Ages. All his mental and moral relations were with that old pagan Rome which lay quiescent but immortal beneath the passing pageant of the papacy. His education, discursive but not deep, was based upon the Latin classics, and he not only learned the language of Cicero and Livy but also caught the spirit of enthusiasm with which they regarded the might and majesty of the great republic wherein they lived and moved and had their being. At the age of twenty-five he witnessed the incursion into Italy of the French under Charles VIII. He was present in Florence when the alien host passed through the city, effecting a revolution in its transit. He saw with satisfaction the overthrow of the Medicean tyranny, and the reestablishment of the republican form of government. It was then (1494) that, as a keen republican, he was called to the service of the city-state and initiated into a public career that lasted for eighteen years.

A deep and all-pervading patriotism is the redeeming feature in Machiavelli's otherwise sinister and repellant personality. The desire to see Florence dominant in Tuscany; the wish to establish Tuscany as the center of a united and consolidated Italy; the passionate zeal to find means by which his country could realize her nationhood, could expel the insolent and predatory foreigners and could make herself feared and respected among the states of Europe—such were the noble ideals which (together with the less exalted ambition for personal advancement) inspired the astute and resourceful Florentine during both the eighteen years of his career as a practical politician and the fifteen subsequent years of his career as a literary man. If they were ideals less sublime and splendid than those of Dante, they were at any rate practicable ideals, which Dante's were not. And if they were practicable ideals, they were at least larger and more statesmanly than were those of the petty tyrants and selfish conspirators whom Machiavelli denounced and decried.

During the strenuous and anxious years of his continuance in office Machiavelli's prime preoccupation was the military regeneration of his people. The Italians in general, and the Florentines in particular, had during the later Middle Ages become soft and degenerate. Made wealthy by usury and sensitive by art, grown self-conscious by speculation, and utilitarian through decay of faith, they, like the Romans of the later empire, had lost the manlier virtues and had sunk into effeminacy and corruption. Not realizing how deep seated was the canker, and with that excessive trust in institutions which usually characterizes the young reformer, Machiavelli hoped to remedy the evil by discipline and education. After long persuasion he secured from the Florentine signory authority to organize and equip a militia. Setting to work with eager zeal, in the course of laborious years he levied, arrayed and trained a force that looked impressive as it paraded in the piazza. But when in 1512 the acid test of war was applied to it, it vanished into thin air, leaving Florence a prey to the returning tyrants, and Machiavelli himself a prisoner in the hands of his implacable foes.

When, after having suffered imprisonment and torture, he was expelled from his beloved city and condemned to perpetual banishment, he realized that in a world so evil, and amid a generation so decadent, craft would be required to supplement force if ever his ideals were to be attained. Hence he set to work in his place of exile at San Casciano to frame the Italian politician's *vade mecum*—the practical guide which should enable the hoped for maker of Italy to overcome his enemies, expel the foreigners, subjugate the papacy, unify the peninsula and convert the particularists of scores of petty principalities into a simple, self-conscious and self-sufficient Italian nation. There are two versions of this masterly, yet terrible, handbook. They were begun simultaneously in 1513; one, however, was completed the same year; the other, continually toiled at, was still unfinished when Machiavelli died in 1527. The two—entitled respectively *The Prince* and *The Discourses on Livy*—differ from one another considerably in point of form. But in spirit and essence they are the same. And the spirit and essence of both of them is this: that the existence and well-being of the state are matters of so great moment that they must be regarded as ends in themselves to the attainment of which all means whatsoever are justified. In *The Discourses* (bk. iii, ch. xli) he says: "Where the

deliberation is wholly touching the safety of the fatherland there ought to be no consideration of just or unjust, pitiful or cruel, honorable or dishonorable, but rather, all other respect being laid aside, that course ought to be taken which may preserve the life and maintain the liberty thereof." From *The Prince* (ch. xxviii) comes the echo: "Let a prince, therefore, take the surest course he can to maintain his life and state: the means shall always be thought honorable"—and the means to which Machiavelli alludes are the merciless ferocity of the lion and the unscrupulous craftiness of the fox. If we ask why Machiavelli troubled to put his ideas down twice—once at leisurely length in an endless string of comments upon the history of the Roman Republic, and once in a brief but pungent letter of advice to an individual ruler, the answer is that the purposes of the two works were wholly different. *The Discourses* were intended for the generality, and they were as a matter of fact read to a numerous company from time to time in the gardens of Florence; they were intended to prepare the public mind for the setting up of the Italian kingdom, modeled on the Roman Republic, and to inoculate the squeamish against any shock which their consciences might receive from the means employed in its establishment. *The Prince*, on the other hand, was a private and confidential document giving precise instructions of a most secret and intimate nature to the individual superman through whose agency the deliverance and unification of Italy were to be effected. Who was this superman—this hero amid a multitude of poltroons—on whom Machiavelli fixed his hopes? In his early days the great *condottiero* Castruccio Castracani had been the center of his expectation; later, when he was secretary, the brilliant but wholly non-moral Cesare Borgia had appeared likely to be the predestined man; Cesare's death in 1507 had left no one but Giuliano de Medici to whom the patriotic nationalist could look. Can Machiavelli ever seriously have believed that Giuliano had either the spirit or the ability to carry through the tremendous and terrible program assigned to him—the formation of a native army, the expulsion of the foreigner, the debasement of the papacy, the unification of the peninsula, the establishment of a national state? Probably not. Most likely all that Machiavelli immediately hoped for was his own restoration to office and influence in Florence. Not even this, however, resulted. Giuliano de Medici died in 1516, and Machiavelli transferred his solicitations to his brother and successor Lorenzo. But to him likewise he appealed in vain. Lorenzo neither recalled him to Florence nor took any steps to realize his political ideal.

Machiavelli's *Prince* had no apparent influence whatsoever during Machiavelli's own lifetime. Five years after his death, however, in 1532, Pope Clement VII, nephew of the two Medici to whom the book had been presented, let it loose upon the world. It is eloquent of the corruption of Renaissance Italy that the Machiavellian politic should not have shocked in any way the papal conscience, and that the publication under papal auspices of a work in which reasons of state take precedence of all the dictates of morality and religion should have caused no surprise in the peninsula. Once published, it spread rapidly. Translated into all the languages of Europe, it became the textbook of tyrants and conspirators. It is difficult to estimate how far it was to be held responsible for such dark deeds as the massacre of St. Bartholomew's Day, 1572. Not less difficult is it to say to what extent the conduct of such typical Machiavellians as Frederick the Great, Napoleon I and III, Bismarck and Cavour was determined by a study of its precepts; possibly the accordance of their conduct with its precepts was a mere coincidence. For the dissociation of politics from ethics has not been a phenomenon peculiar to any one age or any single locality. What makes Machiavelli unique is his open and unashamed avowal of principles which men usually (like Cavour) conceal or (like Frederick) ostentatiously repudiate. His works, with their frank and naïve wickedness, mark as with a flash of sudden revelation the end of the amiable theorizing of the estimable mediaeval ecclesiastics concerning the relations of the two powers, the two lights, the two swords, the two small fishes and the rest of the miscellaneous collection of visionary dualities; and the reunion of the theory and practise of politics in a world of new and militant states.

V. Machiavelli's *Discourses* and *Prince* are not the only works of his enforced and unwelcome leisure that merit notice as evidences of the change passing over the social sciences during the period of the Renaissance. His *Art of War*, remarkable as the first scientific treatise on military tactics, indicates clearly the abandonment of the mediaeval belief that the destinies of nations are in divine hands and are

determined according to the decrees of everlasting justice, and the assumption of the view that they are in the keeping of the nations themselves and are determined by the standards of mere craft and force. In this book, with a curious mixture of wisdom in generalities and folly in particulars, Machiavelli exalts pagan virtue as against Christian humility; a national militia as against hired mercenaries; infantry as against cavalry; and pikes and swords as against those deceptive novelties, firearms! Still more significant sociologically is his *History of Florence*. Utterly unlike both the earlier chronicles, such as that of Villani, and the collections of learned lumber to which such antiquarians as Aretino gave the name of histories, it is concerned wholly with the politics of Machiavelli's own day. Written in Italian and not in Latin, expressed in vivid and unconventional phraseology, it deals mainly with the events of that very recent period 1434–92; and where it treats of the earlier period it does so merely in order to discover the causes of current movements or to illustrate them by analogies and parallels. It piles up examples, for instance, to show how treacherous and untrustworthy mercenary soldiers always have been, and how all decisive victories have been won by native levies. Similarly, greatly daring, it indicates again and again how appalling a disaster has been the assumption of temporal power by the papacy, and how the first step toward the unification of Italy must be the termination of this ecclesiastical usurpation.

The treatment of history as a handmaid to politics, so strikingly illustrated by Machiavelli's *History of Florence*, was characteristic of many other historical writings of the period of the Renaissance and Reformation. History, and particularly ancient history, was seen, on the one hand, to provide a storehouse of precedents and examples infinitely valuable as guides to the conduct of practical affairs. History, and particularly modern history, was recognized, on the other hand, as the indispensable informer respecting the antecedents of the problems of the current day. Hence writers such as Blondus and Guicciardini, on the one side, or Camden and Grotius, on the other, compiled their histories or their annals not in order to provide amusement for the passing hour, nor yet in order to point moral lessons, but in order to supply statesmen with materials for the formation of judgments, and to furnish patriots with weapons for the defense of their country.

The historical works of the Renaissance and Reformation period, since they were of the nature of politicians' handbooks, although they were characterized (in sharp contrast with mediaeval chronicles) by coherence and unity of design, were of course highly partisan in nature and controversial in tone. They aimed at stating a preassumed case or at defending a prejudged cause. They were uncritical in their use of materials, unscientific in their treatment of evidence and wholly unscrupulous in their arguments and conclusions. The patriotic histories, such as those of Machiavelli and Guicciardini, pointed the way; but the theological histories became the great examples of the new mode.

That history should have been one of the main weapons with which the battles of the Reformation were fought is by no means remarkable. For the keynote of the Reformation was "Back to Primitive Christianity," and consequently the issue turned on the historical questions, first, what was primitive Christianity, and, secondly, by what process, whether of development or of corruption, did mediaeval Christianity come to diverge so widely from the primitive model. Hence rival bodies of theologians, such as the Magdeburg Centuriators, on the Protestant side, and the Benedictines of St. Maur, on the Catholic side, gave themselves to the enormous labor of rummaging the lumber rooms of antiquity in order to provide their partisans with offensive missiles or with material for defensive barricades.

But the Reformation was more than a matter of academic controversy between divergent schools of ecclesiastical historians or antagonistic companies of theologians. It was a movement that gathered to itself and incorporated many revolutionary tendencies in the worlds of society and politics for which the time was ripe. Besides being a return to the simplicity of the Gospel and a reaffirmation of the doctrine of justification by faith, it was also a revolt of the laity against clerical tutelage; a rebellion of the individual against authority; a rising of emancipated human reason against tradition and convention; a protest of the national conscience of man against the corruption of the Roman penitential system; an attack of the secular power upon the accumulated wealth of the religious. Further, as it spread from Germany throughout Europe and as the comparatively mild dissidence of Lutheranism was supplemented by the thoroughgoing anti-Catholicism of the Cal-

vinistic organization, the Reformation became involved in one country after another with social and political movements with which it had no natural or necessary affinity. Generally it appealed more to the Teutonic than to the Latin mind; so that it might seem to have been the belated revolt of the barbarian against his Roman master. In many lands it became associated with the cause of national independence, and the association was so complicated that it is difficult to say whether politically the Reformation is to be regarded as the product of the national state, or the national state the product of the Reformation. At any rate nationalism and reform were frequently inextricably interwoven. For example, much of the support which John Knox received in Scotland came from powerful patriots who were determined to cut the fetters that were dragging down their country into subjection to France; similarly Calvinism made headway in Holland as part of the national resistance to the tyranny of Catholic Spain; so, too, did Sweden adopt Lutheranism precisely at the moment when she was shaking herself free of Danish control. Internal politics, moreover, did much to determine the attitude of governments and of large classes of their subjects toward the Reformation movement. In England, for instance, the king took the lead in the revolt against Rome; and he used the religious power of the reformers as a means wherewith to beat down the remnants of the mediaeval nobility, to subjugate and despoil the over-wealthy clergy, and to establish the royal autocracy. In France, on the other hand, the Valois monarchy, whose conflicts with the Hapsburgs in Italy made papal friendship a necessity, set its face against both Luther and Calvin. Hence, by way of reaction, all opponents of kingly power and centralized administration —and in particular the feudal nobility and the semi-sovereign communes—tended to join the company of the Huguenots. And the Huguenots, in the fury of their resistance to the royal authority, did not hesitate to ally themselves to the enemies of France and to mortgage French territories to their country's foes. Hence in France nationalism identified itself with the Counter Reformation, and the cause of Calvinism became not (as in Scotland or Holland) the cause of patriotism but the cause of disloyalty, rebellion and treachery. So, too, in respect of Spain: the mere fact that the Dutch rebels were Calvinists and the English pirates Protestants was enough to make the grandees of Castile and Aragon fanatical in their zeal to maintain the ascendancy of Rome. Catholicism and empire became synonymous terms.

VI. Since the Reformation had such different political and social affinities in different parts of Europe, and since, moreover, it was marked by a general revolt against authority and by the proclamation of a novel independence of judgment, it is not surprising that in the sphere of sociology it should have given rise to many and diverse varieties of speculation and theory. At one end of the scale the old problem of the relations of church and state assumed new forms and met with strange solutions, discussion finally centering round the question of the limits of religious toleration. One thing, at any rate, was made clear in the course of the controversy, and that was that the ideal *res publica Christiana* of the Middle Ages had been irremediably shattered and that the two societies, secular and sacred, stood forth as separate and naturally antagonistic entities. At the other end of the scale the long quiescent question of the relations of the individual to society began to be raised in many acute forms. Not only did heretics and antinomians claim entire freedom of faith and complete emancipation from external restraints; but radicals and communists in infinite variety of fantasy challenged the whole social and economic order, and formulated grandiose schemes for the reorganization of heaven and earth.

Martin Luther, the pioneer reformer, more of a moralist than a theologian and more of a German than either, was the first who had to face the problems created by the disruption of Christendom. The position of antagonism to both papacy and empire which, with prodigious courage, he assumed in 1521, was one of a peril so extreme that only a few years earlier no one occupying it could have hoped to escape fiery destruction. His only chance of safety and survival resided in the possibility of the support of the German nation as against the dominance of the Roman curia, and the support of the princes of the empire as against the alien Charles V who, although a foreigner, half Fleming and half Spaniard, had just been elevated to the imperial throne. His politics therefore were, on the one hand, intensely nationalistic and, on the other hand, intensely monarchic. He made his appeal in the German language to the Christian nobility of the German nation; its insistent note was emancipation from

the Latin yoke. He exalted the power of the prince, deriving it from God, and asserted, in language borrowed from St. Paul, the duty of all subjects to obey. He glorified the state as the supreme authority in all causes whether secular or sacred, thus preparing the Teutonic mind for the reception, three centuries later, of the *étatiste* doctrines of Hegel and Treitschke. Nevertheless he had to make some concession to relativity in his absolutism. He could not forget that the monarch whose divine prerogative he exalted might be a persecuting Catholic, like Charles v in Spain. He therefore had to impose limits both on the authority of the ruler and on the submission of the subject. He found much difficulty in framing an exception to the general rule of passive obedience which should not itself become a general rule of active disobedience. Finally, with much hesitation and vagueness, he admitted that if a monarch violates the divine law he forfeits the claim to command the submission of his subjects. This reluctant but inevitable admission was enough for the antinomian rebels of the day, to each one of whom the divine law was a matter of direct personal revelation. In revolts that set all the restraints of religion and morality at defiance they reduced large tracts of Germany to chaos. Hence, in order to save his nation from ruin and his religious organization from hopeless discredit, Luther had to insist that the authority of a pious Protestant prince was unlimited, and to call upon all the pious Protestant princes of his communion to suppress the peasants' risings.

Philip Melanchthon, Luther's great disciple and colleague, pondered politics from a loftier and less opportunist point of view than his leader. He was a man of profounder scholarship than Luther, and of more philosophic mind; moreover he was less perturbed by the urgent need to solve the practical problems of the hour. Not without justice has he been called the Protestant Aquinas. Drawing upon an extensive knowledge of the scholastic philosophy, the canon and civil laws, the politics of Aristotle and the ethics of the New Testament, he made a serious attempt to frame a coherent system of social doctrine applicable to the new ecclesiastical condition of things. The basis of his system is the sovereignty of law, primarily, of course, the divine law, the directly revealed will of God; but, secondarily, the law of nature, the unrevealed law of God, written upon the conscience of every man born into the world. By reference to this supreme and authoritative double code of law Melanchthon defends the institution of government and maintains the right of princes to rule. He contends that the principal purpose of secular administration is the establishment of peace and the provision of conditions in which true religion may flourish. He insists that so long as the state is duly performing its divinely appointed functions, all its subjects are bound to obey its commands. He refrains from discussing what ought to happen if the state should exceed or fall short of its duty, and if it should violate the precepts of the divine legislator. But by implication he says the same as Luther, viz. that in the last resort Christians must obey God rather than man, and consequently that the right and duty of resistance exist. No reformer could possibly avoid sanctioning rebellion in some degree or other. In the endeavor to do so most of them suffered agonies.

Ulrich Zwingli was a much less conspicuous reformer than either Luther or Melanchthon. His stormy career, which centred in Zurich, was cut short by death in battle (1531) when he was but forty-seven years old. In so far as the eight volumes of his works contain any meanderings from the straight paths of theology into the mazes of politics, they show that in an interesting and significant way he reverted to the mediaeval ideal of the *res publica Christiana*, that is to say, to the ideal of a single society—church on its spiritual side, state on its temporal side—in which the whole community is joined together. But it was a reversion with a difference. It was no longer a Holy Roman Empire comprising an undivided Christendom in its scope but merely the city and canton of Zurich wherein Zwingli himself exercised the combined ecclesiastical and secular authority. Within the limits of this small reformed Christian community he claimed absolute and universal authority, and he insisted on the duty of passive obedience from his subjects.

For a short time Zwinglianism planted itself in the city of Geneva. The Zwinglian principle of religious autonomy and political independence commended itself to the citizens of that aspiring commune in their struggle to retain their freedom as against the dukes of Savoy and other formidable foes. Soon, however, Zwinglianism was supplanted by another type of reformed religion still more potent as an organ of militant independence. In 1536 John Calvin, fleeing from persecution in France, made his way to the fair city on Lake Leman; in 1541,

after striking vicissitudes of fortune, he established an ascendancy there that endured until his death in 1564. The political principles of Calvinism, as set forth with admirable precision in the closing sections of *The Institutes*, are theocratic and republican. Their foundation is the universal sovereignty of the divine will. The superiority of the spiritual authority over the temporal authority is asserted with as much emphasis as ever it had been asserted by Pope Boniface VIII in his famous bull, *Unam sanctam*. Nevertheless the secular government is necessary as the agent of the ecclesiastical, and within its own proper sphere it is equally of divine institution. Its function is to enforce the decision of the elders of the church, to maintain the cause of the reformed religion, to secure external and internal tranquillity. Its form, like that of the presbytery, should be republican: it should consist of the aristocracy of saints. The duty of the rank and file of the elect is passive obedience. But even Calvin, although with obvious unwillingness, is compelled at the very end of his discourse to admit the fatal exception. What if the secular authority, forgetting its duty to its spiritual superior, prove naughty and recalcitrant? In two cases Calvin allows that it may be, and indeed must be, resisted. First, if it be "tyrannical" it may be opposed in due constitutional form by the ephors; secondly, if it be "wicked" it must be met by the general resistance of the whole community. Since the question as to what constitutes "wickedness" is left to the judgment of the individual believer, it is clear that a breach is made in the dyke of authority sufficiently large to admit all the flood of rebellion. For the faithful Calvinist, whenever he found himself in either a Catholic or a Protestant state, tended to identify "wickedness" with refusal on the part of the government to accept the full presbyterian system. Hence Calvinism, for all Calvin's precautions, became the creed of rebels.

VII. For some quarter of a century (1520–45) the Reformation in its various manifestations —Lutheran, Zwinglian, Calvinistic, Anglican— carried all before it. The Catholic church, because of its failure to correct the abuses which had corrupted it in the later Middle Ages, had lost its hold on the conscience of Christendom. Toward the close of Luther's life (1546) it seemed probable that not only in Teutonic countries, but even in France, Spain and Italy itself, Catholicism would be swept away altogether. In these desperate circumstances, however, the menaced church recovered itself, carried through the long needed reforms and under a series of new popes, very different from the depraved worldlings who had held the papal chair during the Renaissance, stemmed the tide of disaster. New religious orders, in particular that of the Jesuits (1534), organized themselves to combat the new heresies; the Index was instituted to regulate the reading of the faithful; the Inquisition was directed to the extirpation of the unfaithful; the doctrines of the church were formulated with a new precision, as against the new sectaries, by the Council of Trent (1563).

The Catholic recovery began; and before the close of the sixteenth century one-half of Christendom was securely regained. Not without strenuous resistance, however, did the reformers surrender their conquests, and for nearly ninety years (1559–1648) Europe was torn by religious wars marked by a sanguinary ferocity unknown in earlier conflicts. The persecutions of Alva in the Netherlands (1567–73); the massacre of St. Bartholomew's Day in France (1572); above all, the long protracted atrocities of the Thirty Years' War in Germany (1618–48) necessitated not only the establishment of a state sovereignty strong enough to curb the fury of the religious fanatics but also the reconsideration of political theory, the formulation of a principle of toleration and the institution of international law. We can do no more than glance at some of the lines taken by the thought of this disturbed but energetic age.

The first doctrine to be developed was that of the right of resistance to tyrants—a tyrant being any ruler who did not support the resister's form of religion. It was a doctrine urgently needed both by Protestant subjects of such monarchs as Philip II of Spain, Mary of England or Charles IX of France, and by Catholic subjects of such monarchs as Henry VIII of England, Henry III of France or William of Orange. It was developed by a number of thinkers on both the Protestant and the Catholic sides. Of the Calvinistic statements of the case by far the most effective is that of the *Vindiciae contra tyrannos* (1579), formerly attributed to Hubert Languet but now generally assigned to Philippe Duplessis-Mornay. It boldly advances, on the basis of Old Testament history, Roman law and feudal principle, the contractual theory of the source of political obligation; contends that sovereignty originates in and continues to

reside in the people; and argues that kings, who are mere executive agents, can properly be removed if, whether by tyranny or by wickedness, they break their engagements.

On the Catholic side the principal formulators of the theory of the right of rebellion were the Jesuits. To the horror of a good many Catholics of the old school they frankly abandoned the politics of St. Thomas Aquinas and treated the state as a purely human (if not diabolic) institution, having no claim whatsoever either to challenge or to share the divine authority of the church. The greatest and most lucid of the Jesuit publicists, Juan de Mariana, in developing this idea in his *De rege et regis institutione* (1599) formulated a political philosophy strikingly similar to that which half a century later Thomas Hobbes elaborated in his *Leviathan*—using it, however, for the exaltation of the ecclesiastical and not of the secular power. He pictures a state of nature, subsequent to the fall of man, thoroughly evil, in which everyone's hand is against that of his neighbor; he describes the emergence of society from this condition of primitive chaos by means of a contract; he supposes a ruler to be chosen by the newly constituted people, and he depicts him as placed in an authority which is strictly limited by the terms of his appointment. If he breaks his engagement, whether through tyranny (that is, violation of the constitution) or through wickedness (that is, departure from the true faith) he can properly be removed, either openly by formal deposition or, if this fails, by assassination.

It was the sanction of assassination by the grave fathers of the church, both Catholic and Calvinistic, that constituted one of the worst horrors of this dreadful period of the wars of religion. Rulers in every country where the conflict between the new faith and the old was waged were subjected to the paralyzing peril of sudden death at the hands of pious fanatics who were assured by their spiritual chiefs that they were doing God service in removing tyrants. William of Orange in Holland had survived five attempts upon his life before he succumbed to the pistol of Balthasar Gerard in 1584; Elizabeth of England informed a French ambassador that, thanks to Burleigh's vigilance, no fewer than fifteen plots to compass her death had been frustrated; Henry IV of France escaped nineteen would-be assassins before he fell beneath the knife of the twentieth, the devout Ravaillac, in 1610.

The dominance of the doctrine of rebellion and tyrannicide in the political theory of the late sixteenth century, coupled with the universality of civil wars and the persistence of assassination plots, caused both practical statesmen and patriotic thinkers to ponder means whereby fanaticism could be restrained and order restored. The men of affairs had to seek modes of religious compromise and methods for restoring strong monarchical governments. The theorists had to try to discover some workable principle of toleration and some valid arguments for monarchical authority. We are not now concerned with the history of the process whereby—e.g. in France by the Edict of Nantes (1598) and the strong rule of Richelieu, (1624–42)—religious strife was quelled throughout Europe and order reestablished. Our attention must be concentrated on the speculative writings whereby the return to sanity and security was fostered.

Foremost among the champions of good government and the advocates of religious toleration was Jean Bodin (1530–96), one of the ablest Frenchmen of his day, a faithful servant in turn of the renegade Catholic Henry III and the renegade Huguenot Henry IV. In an age of religious fanaticism he was eminent for indifference and ambiguity. What his own opinions were it is impossible even now to determine. Mercier assures us that he was a Catholic; De Thou claims him as a Huguenot, and it is certain that as such he was marked down for extermination in August, 1572, escaping the fate of Coligny only by the lucky chance that a window was open and that he himself was agile and daring. Patin says that he was a Jew and so lends support to a tradition, recorded by Monsieur Chapellain, that on his mother's side he was descended from a family of Spanish Israelites driven from the peninsula by the persecution of 1496. Bayle characterized his religion as "amphibious," while Gillot, who had known him, denied (in a letter to Scaliger, 1607) that he had any religion at all, concluding with the words: "Il mourut comme un chien, *sine ullo sensu pietatis*, n'étant ni juif, ni chrétien, ni turc." These are high encomiums for the period to which they relate: a few more of such amphibians would have been all the better for the peace of the world. Even as things were, his influence was great and beneficial. For he was the guide and counselor of the party of the *politiques* who in France secured some sort of toleration by the issue of

the Edict of Nantes (1598), and some sort of order by the establishment of the Bourbon monarchy. His two most notable works from our point of view are, first, his *Heptaplomeres* (circulated in manuscript and never yet fully printed) and, secondly, his *Republic* (published in French in 1576 and in a revised Latin version in 1586). The *Heptaplomeres*—whose curious title no one has been able to explain—is in form a discussion, free and passionless, between seven men representative respectively of the tenets of Catholicism, Lutheranism, Zwinglianism, Judaism, Mohammedanism, atheism and neo-Platonic mysticism. The outcome of the protracted but amiable debate—of which the honors are shared between the Jew and the neo-Platonist—is that absolute truth is unattainable and that the only practicable policy is therefore that each should hold his own view and tolerate that of his neighbor. The book ends with the noble words attributed by Cassiodorus to Theodoric the Ostrogoth: "Religionem imperare non possumus, quia nemo cogitur ut credat invitu."

This same principle of lofty tolerance is quoted again by Bodin in his *Republic* (bk. iv, ch. vii), but the object of that great work is far larger and more comprehensive than the mere advocacy of a liberal religious policy. The *Republic* is an immense treatise, comprising in its twelve hundred and twenty-one octavo pages well over a quarter of a million words. It is the most complete and systematic treatment of the whole field of political and social speculation written since the days of Aristotle. Of its six books the first treats of the family and the state. The family is the basis of the state, and groups of associated families form the material out of which it is constituted. And yet it is not constituted by consent out of the voluntary cooperation of these groups but by force because of their conflicts with each other. Force is the essence of that sovereignty which is the distinctive mark of the state: "Majestas est summa in cives ac subditos legibusque soluta potestas." Book II is less controversial; it distinguishes, in a way which later political theorists (e.g. Hobbes) would have done well to remember, between state and government, describes the three possible forms of state (monarchic, aristocratic, democratic) and indicates the innumerable varieties of forms of government. Book III is dull and technical: it discusses at dreary length the different types of legislative assemblies, executive magistratures and judicial courts; treats of the various *sodalitia* (colleges, communes, corporations) within the state, and contends that all are subordinate to the sovereign political authority; expounds the rights and duties of citizenship. Book IV follows closely the lead of Aristotle in considering the causes of revolution and in seeking to discover the secret of the fall of states. It goes beyond Aristotle, however, in arguing that by means of astrology the fate of kingdoms and empires can be foreseen. If Book IV follows Aristotle, Book V in a most interesting way anticipates Montesquieu. It is a pioneer study of the influence of geographical conditions in general, and climate in particular, upon political and social institutions. It distinguishes three primary climatic regions—the frigid north, the torrid south and the temperate middle region—and it discusses with a wealth of learned illustration the features peculiar to each and the institutions appropriate thereto. Nothing could have been a clearer indication of the doctrine of political and even religious relativity. No form of state or government, no sort of ecclesiastical organization, has any absolute validity. All is dependent on time and circumstance. After this remarkable utterance Book VI comes as an anticlimax. Apart from a rather novel treatment of public finance, it is merely an omnium-gatherum comprising miscellaneous odds and ends too important to be left out altogether but not sufficiently relevant to the main themes of the book to have been included hitherto.

VIII. Bodin's *Republic* was a seminal work full of original and striking ideas. Its main tendency was the exaltation of the state over the church, the assertion of the almost unrestricted sovereignty of the secular ruler and the advocacy of the principle of religious toleration in the interests of peace. Bodin's doctrines, of course, did not please everyone. Both zealous Calvinists and devout Catholics objected to his secularity and to his debasement of the spiritual power. His conception of religious toleration appeared to most of the persecutors and would-be persecutors of the day as a weak and wicked surrender to the devil. Even those who agreed with his doctrine of state sovereignty, his advocacy of the subjection of corporations to the central power, his commendation of monarchy and his condemnation of regicide, were often dissatisfied with the way in which he treated the state as having no other sanction than force, and the king as

possessing no higher sacredness than utility. They felt that a religious basis was needed for the state if it were to maintain itself against the sectaries, and that only if kings were hedged in by divinity could they hope to escape the diabolical weapons of the assassins.

Prominent among these theological defenders of monarchy was William Barclay (1546–1608), a Scottish Catholic who, having gone to France as a youth to study law, remained there as a professor and public servant. In his most notable work, *De regno et regali potestate* (1600), he argued (against Bodin) that royal authority was not derived from conquest or based on force, and (against the Calvinists and Jesuits) that it was not a mere matter of contract. On the contrary, he maintained that kings were the representatives of God and that they derived their authority from heaven. On this ground he taught the duties of passive obedience and active support on the part of subjects, and condemned the prevailing practice of regicide as being as obnoxious to the King of Heaven as it was inconvenient to the kings of earth.

The doctrine of divine right thus enunciated was not a novelty among men. It had many antecedents in the sacred books of the East. It was clearly foreshadowed both in the practise of the Old Testament and in the precepts of the New. It had been developed by the supporters of the mediaeval emperors in their controversies with the supporters of the mediaeval popes. The emperor, they contended, derived his dignity direct from the Deity and not mediately through the papacy. It had been adopted and adapted by such national kings as Philip IV of France and Edward III of England when circumstances brought them into conflict with the ecclesiastical power. It derived a new importance after the Reformation when bulls of excommunication and deposition began to be directed from the papal curia against heretical and schismatic rulers. Still further was its value enhanced when Jesuits like Mariana and Calvinists like George Buchanan, commenced to formulate the contract theory of the relation between monarchs and their subjects, with the appendant dogmas of the contingent rights of rebellion and tyrannicide.

At the end of the sixteenth century two kings of the front rank were ruling in spite of the strenuous antagonism of the papacy—Henry IV in France and James I in England and Scotland. They and their defenders asserted, as against the papal claims to absolve their subjects from the bonds of allegiance, not only the divine right of kings but further their divine hereditary right. They emphasized the patriarchal principle of primogeniture as the sole mode by means of which the sacred authority to govern was transmitted. Henry IV was content to let William Barclay speak and write on his behalf; but James I, proud of his pedantic learning, himself took pen in hand and, in order to exalt his royal prerogative, produced a series of works, of which the *True Law of Free Monarchies* (1598) is the most considerable. He found the dogma of the divine hereditary right of monarchy a potent instrument of defense against very varied foes. It protected him against popes who claimed power to depose him; against parliaments which professed to restrict him; against presbyteries which pretended to regard him as their agent and "God's silly vassal"; against Puritans who proposed to assassinate him. Later statements of the divine right doctrine were made in England by Sir Robert Filmer and in France by the courtly Bossuet.

IX. The problems dealt with by Bodin and by Barclay, by Mariana and by James I, were problems of internal government. The principles of their solution were sought in scripture, in history, in Greek philosophy and in Roman law. Besides these domestic problems, however, the new age brought up for consideration problems of a wholly novel character in the realm of international and interracial relations. The discovery of America; the establishment of colonial empires by Spaniards, Portuguese, Dutch and English; the founding of factories in India; the development of intercontinental commerce; the subjugation of non-Christian peoples—all these phenomena of the new world of sovereign national states gave rise to urgent questions in the sphere of ethics, economics, politics and law.

It was useless to appeal to the old authorities for the settlement of these new problems. For, on the one hand, their utterances were irrelevant and, on the other hand, they were not recognized as authoritative. On issues that divided Protestants from Catholics it was vain to cite the decisions of popes and councils; on issues that concerned both Christians and non-Christians it was no good to appeal either to the Scriptures or the early fathers. What was needed was some recognized norm of conduct that would be recognized as binding on man,

merely as man, all the world over and in every age. This norm was supplied by the great Dutch thinker Hugo Grotius (1583–1645) in the law of nature with its supplementary law of nations.

The conception of the *lex naturalis*, or *jus naturale*, was as old as the stoic philosophy. It was recognized by St. Paul (*Romans* II. 14); it was developed by the mediaeval schoolmen; it was incorporated by St. Thomas Aquinas in his famous fourfold classification of laws. In Christian theology the "law of nature" was regarded as the unrevealed law of God, implanted in the consciences of men—part of the light that lighteth every man that cometh into the world. The great Jesuit jurists of the sixteenth and seventeenth centuries—Mariana, Suarez, Bellarmin and the rest—adopted and developed the Thomist view. Now this conception of the law of nature as the unrevealed law of God—the mere appendix to the law revealed in the Scriptures and expanded in the canons of the church—was worse than useless to the international jurists. They needed a code that would be recognized as binding by Jews, Turks, infidels and even by South Sea savages. Grotius, therefore, although a sincerely pious man (of the Arminian persuasion), snatched the law of nature from the possession of the theologians and rationalized it, making it universal. It was, he said, the product of human reason: "Jus naturale est dictatum rectae rationis." This was a revolutionary utterance, and it excited the fiercest antagonism of the despoiled divines. But it was so vitally important as laying the foundation of modern international law that the jurists maintained their possession against all the theological attempts at recovery.

In the Roman jurisprudence the *jus naturale* had been intimately associated with the *jus gentium*, i.e. the law of nature with the law of nations. Some of the great Roman lawyers, in fact, had gone so far as to identify the two, contending that the *jus naturale* is merely the abstract and philosophical presentation of the concrete and practical *jura gentium*. Grotius found this close association extremely serviceable to his purpose. Having appropriated the *jus naturale* as a principle of international morality, he adopted the *jus gentium* as a code of international custom. It provided him with countless invaluable rules concerning such difficult questions as the modes of acquiring property and the means of discharging obligations. It has been much debated whether or not he was aware that he was taking a system of private law and converting it into a system of public law. Certainly he effected the great transmutation without drawing attention to it. But he was no fool, and it is best to assume that he knew what he was about.

His sense of the need of an authoritative body of international law independent of theology had been quickened by three great conflicts with which in his official capacity he had had to do. First, in the East Indies, the Dutch and the Portuguese had become involved in a furious struggle for markets and trading stations, in which no common standard of right had been recognized (1604). Secondly, in the North Sea and the English Channel, English and Dutch seamen had developed a fierce rivalry, the one contending that these waters were their exclusive property, the other maintaining the freedom of the ocean (1609). Finally the Thirty Years' War (1618–48), with its unprecedented tale of horrors and atrocities, brought home to Grotius the urgency of the demand for some laws of war and peace which both Protestants and Catholics, both Christians and infidels, would accept as restraints upon unmitigated barbarity.

In these circumstances he wrote his great book *De jure belli ac pacis* (1625). Compiled in exile in France, it is dedicated to Louis XIII. It contains prolegomena treating in general terms of the state and of law—a treatise of the highest interest and importance to students of political ideas. Then it proceeds (bk. i) to argue the question whether or not war is ever just, coming most emphatically to a positive conclusion. Next (bk. ii) it proceeds to enumerate and examine the just causes of war. Finally (bk. iii) Grotius lays down, on the basis of the *jus naturale* and the *jus gentium*, detailed rules for obviating the outbreak of war and for mitigating its abominations when once it has become kindled.

Few books have had a more powerful or a more beneficent influence upon the conduct of human affairs. All through the seventeenth, eighteenth and nineteenth centuries it operated to limit the scope of hostilities, to ban atrocities and to extend the humanities in war.

X. The ferment in men's minds caused by the Renaissance and the Reformation, by the new astronomy and the new geography, by the revival of humanism and the return to primitive Christianity, by the spread of science and the

growth of a vernacular literature—by all the countless influences that molded this great transitional age—caused an immense effervescence of new social and economic ideas. Moreover social and economic conditions changed with inconceivable rapidity, and soon the orderly and regulated mediaeval world broke up into a chaos of conflicting individualities. Industry left the old towns with their strictly organized guilds, their sternly enforced customs, their antiquated and inefficient modes of production, and located itself in new regions where economic freedom could prevail. Similarly, and particularly after the devastations of the Black Death, the venerable agricultural estates of the great secular and ecclesiastical lords sank into bankruptcy. Under the obsolete modes of mediaeval cultivation the fields ceased to yield crops, the exhausted pastures refused to rear flocks and herds, the vineyards failed, and the remnants of the rural population languished into destitution and misery. Then came the Reformation with its widespread confiscation of church property, followed by closing of hospitals, enclosure of common lands, expulsion of peasantry, and in general a thorough if unobtrusive social revolution. On the top of all this was superimposed the discovery of the Midas wealth of the New World—the fabulous hoards of the gold of the Incas and the Aztecs, the inexhaustible silver mines of Potosi. These barren metals, which themselves could feed no one and clothe no one, were nevertheless by the misguided economists (or bullionists) of the day regarded as the sole sort of wealth that mattered, if not veritably and exclusively wealth itself. Hence gold and silver, instead of being used freely in the arts, and instead of being allowed to circulate easily as lubricants of commerce, were hoarded and stored, protected and monopolized to the utter disorganization of the world of business. The net result of the influx of the precious metals, however, and of the regulations imposed upon their circulation, was a steady and rapid rise of prices which, because it completely outstripped the hesitant and reluctant rise of wages that should have accompanied it, caused the further depression of the already suffering working classes.

The immediate consequences of the unparalleled miseries of the time, which no one could intelligently explain, were widespread and terrible revolts of the unhappy peasantry and artisans. Those of Germany were the most notable and characteristic. As far back as 1438 a secretly circulated manifesto, the *Reformatio Sigismundi*, voiced the dissatisfaction of the rustics, demanding abolition of serfdom, restitution of forests and pasture lands, and the like. Fifty years later organization of the peasantry for action began in the formation of a *Bundschuh*, or union of the oppressed. In 1514 the poor of both town and country, especially in Württemberg, formed a militant association named quaintly *Der arme Konrad*. Not, however, until 1524, when the Lutheran upheaval was in full course, did the wretched proletariat intervene in the mêlée with their "twelve articles" and their declaration of war upon the lords. The revolt was, of course, suppressed with considerable severity, Luther aiding the secular authority by his denunciation of the sin of rebellion.

In every great period of social and economic advance, however much in the long run it may tend to the increase of the general happiness, at the moment the impoverished and unprogressive multitude suffer. And in this period of the Renaissance and the Reformation, when the communal conscience was not sensitive and when the machinery for the relief of destitution was undreamed of, the distresses of the commonalty were severe. The governments of the day, themselves by no means stable and secure, menaced by the attacks of numerous foes, the prey to ignorance and terror, could do nothing but suppress the risings of the miserable mobs which, indeed, were always marked by appalling excesses of savagery. Individual observers, however, who from the vantage ground of safety were able to contemplate the novel and distressing phenomena of the peasants' revolts, were able to investigate causes and to suggest remedies. They usually, at this date, preferred to put their inquiries and proposals before the world in the form of "utopias." They did so partly because they were thus less liable to prosecution as revolutionaries at the hand of the sensitive secular authority, and partly because the vehicle of fiction enabled them to incorporate all those novelties of idea and institution which the discoveries of the islands and continents of the New World had revealed to the imagination of the Old.

Among the visions of ideal states framed during this period, five have significance for students of the development of the social sciences. Of these one, More's *Utopia* (1576), belongs properly to the earlier or Renaissance portion of the period; the remaining four are

manifestations of the Reformation era, viz., Andreae's *Christianopolis* (1619), Bacon's *New Atlantis* (1627), Campanella's *City of the Sun* (1637) and Harrington's *Oceana* (1656). Sir Thomas More's great romance, which gave its name to the whole series of imaginary commonwealths, is by far the finest and most illuminating of all. It relates especially to early Tudor England, but it depicts conditions that were common throughout western Christendom. It delineates in vivid colors (as they would appear to a visitor from a distant and very different land) the evils of the age and locality. It examines their causes, and enumerates them under the main headings of bad government, dishonest business, unjust and unwise finance, enclosure, sheep farming and, above all, the institution of private property. It does not directly prescribe remedies but, instead of doing so, describes the constitution of the remote island of Utopia where a better order of things prevails. That blissful island, it appears, is happy in community of property, an autocratic administration, state controlled family life, rigidly regulated and enforced public education, and religious toleration. The eminently conservative and Catholic Sir Thomas More by means of his brilliant flight of imagination let a large number of revolutionary ideas loose upon the world. It should be noted, however, that More's *Utopia*, like Plato's *Republic*, assumes the institution of slavery as its basis.

Andreae's *Christianopolis* is merely a Lutheran version of More's *Utopia* without the slavery and without the religious toleration. It is strictly sectarian in its organization; regular attendance at church is its primary regulation. Next to religion education is prominent. The material goods of life, which are possessed in common, seem to be plentiful; but whence they come does not appear.

Education, secondary in Andreae's *Christianopolis*, is primary in Bacon's *New Atlantis*. The interest in this rather dull and pedantic work centers in the picture which it presents of "Salomon's House," a great civic college where all the arts and sciences are investigated. Campanella's *City of the Sun* displays the idea of the mediaeval monastic organization—celibacy excepted—applied to the constitution of a model city-state. It is rigorously governed, on principles of poverty and frugality, by autocratic religious rulers. Labor is compulsory; its products are pooled; both property and wives are held in common; population is regulated by the authorities on strictly eugenic lines.

Harrington's *Oceana*, a long and labored fantasy, is important in the history of the social sciences as foreshadowing the economic interpretation of history. Harrington was a keen advocate of the doctrines of the sovereignty of the people and the natural equality of men. He perceived—and he was one of the first of moderns to do so—that true democratic equality is unattainable, or at any rate unmaintainable, in the presence of great inequalities of wealth. Hence in his *Oceana* the prevalence of equality is secured by periodical redistributions of land, coupled with an administrative system according to which (as in Periclean Athens) all citizens hold office in turn.

Harrington wrote during the period of the Protectorate of Oliver Cromwell in England. It was a period of tremendous vitality, full of conflict and controversy, amazingly rich in seminal ideas in all departments of social and political science. Even a cursory study of the pamphlet literature of the time makes it abundantly clear that there is scarcely any important conception which has molded the thought of the subsequent three centuries that is not in some shape or form anticipated by some speculator of this robust age.

F. J. C. HEARNSHAW

VII

The Rise of Liberalism

I. If liberalism be defined as the attitude which tests the validity of behavior and of institutions in terms of the rational consent of men, it is permissible to regard it as the younger and unwanted child of the Reformation. Social philosophy is, indeed, always the offspring of history; and the stages of its development are unintelligible save in terms of the events out of which it took its rise. Every thinker who essays the task of interpreting the needs of men is, at bottom, writing his own autobiography. For what he recounts is an analysis of his own experience, his effort to make systematic the lessons he has learned from the facts about him. Of no period is this generalization more obviously true than of the seventeenth century. If the Reformation gave birth to the absolute state, the poison of its autocracy provided its successor with an effective antidote. For the absolute state was born of war and persecution; and meditation upon the price to be paid for its establishment drove men to the consideration of alternative philosophies.

The seventeenth century is, in an emphatic sense, an age of critical transition; and it was therefore natural that its manifold uncertainties should make it the birthplace of the liberal temper. If older dogmas still lingered on, they were examined anew and challenged. If older philosophies still asserted their prestige, their rivals displayed a new and ultimately victorious certitude. It is the age in which scientific method and experiment first secured their dominating hold over the minds of men. It is the age, also, in which men began slowly, doubtless, and with pain to test religious claims in terms of social cost; and therefrom to replace the theological foundations of political authority by principles more capable of a rationalist interpretation. It is, not least, the age in which the edifice of feudalism is recognizably in profound decay, and economic organization becomes the effective expression of a national policy conceived in the terms of what state power is held to demand.

These changes are evident in the seventeenth century; but it is important to remember the prelude to their emergence. The overthrow of the mediaeval papacy provoked everywhere a widespread spirit of challenge and inquiry. New dogmas no sooner arose than the demand was made for their justification; new authority was no sooner proclaimed than its pretensions were ruthlessly examined. Novelty in the sixteenth century was so widespread and so various that the rational temper which is the root of liberalism was its logical and necessary outcome. Lutheranism had hardly created conditions for the rediscovery of the divine right of kings when the emergence of Calvinist sects, especially in France, Scotland and Holland, made necessary the doctrine of a social contract. Huguenot writers had hardly insisted upon the right of revolt in the nobility before the Catholic opponents of Henry IV had transferred that right to the people at large. The ink was scarcely dry upon the claims of Spain and Portugal to empire when England and France entered into the competition for the spoils of geographical discovery. The revival of classical learning had poured a new content into philosophic and religious speculation. The rise of mathematics in its modern form pushed supernatural hypothesis from the center to the circumference of thought. The birth of Biblical criticism combined with economic need to make the cost of persecution—the advantage, therefore, of a rational tolerance—seem increasingly obvious over a widespread area. And if the absolute prince was prepared to play the despot in the name of his private creed, men were forthwith prepared to inquire whether political power was not a trust, to be forfeited where it was betrayed. Without the passionate intellectual ferment of the sixteenth century, the liberalism of the seventeenth would hardly have been possible; certainly it would have been neither so widespread nor so creative. As it was, it developed naturally in a soil well prepared for its reception.

With the seventeenth century we emerge into a Europe which had replaced the mediaeval ideal of a single and unified Christian commonwealth by a system of independent and sovereign states, no one of which conceived itself as

owing duties to its neighbor. The consequences of this change can easily be underestimated. It meant not only the rejection of the temporal supremacy of Rome and with it the rejection of the moral outlook in politics of which Rome was the appointed guardian. It involved also a growth in the secular temper, a replacement of values conceived in terms of eternal spirit by values conceived in terms of earthly power. This made possible the development of an idea of progress, the rejection of the social consequences involved in the doctrine of original sin. For power was dependent upon the discovery of new truth; and new truth, in its turn, was the result of applying reason to the analysis of phenomena. Once that step had been taken, the evolution was natural, first, to the insistence that there are no limits to the empire of mind, and, second, to the inference that the growth of mind was also the growth of good. Once such an attitude was possible, it was clear that the claims of tradition and antiquity were assailable in their innermost citadel. We can, indeed, already see the beginnings of the challenge in the sixteenth century. The reputation of Galen was obviously undermined by the researches of Vesalius; Aristotle lost his mediaeval preeminence after the attacks of Cardan, Ramus and Bruno; Copernicus' attack on the cosmology of Ptolemy made necessary a new and unimagined theory of the universe. The epoch of the Reformation was well aware that it stood upon the threshold of gigantic discovery. Gargantua tells Pantagruel that the field of study is wider in his day than anything known to Plato or Cicero or Papignan; and Peter Ramus with his claim that "a single century has seen a greater advance than . . . . in the whole course of fourteen previous centuries" bespeaks a temper in no sense mediaeval. Obviously enough the seventeenth century reaped the harvest its predecessor had sown.

What, in fact, was that sowing? There are three conditions of the inheritance upon which it is necessary briefly to dwell. Geographical discovery, continuous throughout the sixteenth century, gave a new spaciousness to the minds of men. It accustomed them to the ideas of novelty and diversity; it broke the cake of custom to which they had been used as nutriment. The social consequences of the discoveries were tremendous. They involved corporate enterprise instead of individual enterprise; and this, in its turn, made the machinery of the state a vital factor in the encouragement and protection of trade. They meant, in the second place, a realization, infinitely more acute than in the past, that human habits were immeasurably more various than had been imagined; and this, in its turn, was not only a dissolvent of tradition, but also, as is evident from the utopias, a new basis for social idealism. From *Utopia* to *Télémaque* every romance bears witness to a new attitude to paganism; and the introduction of the noble savage into literature is nothing so much as a method of criticizing traditional social arrangements. It is not too much to say that no factor was more potent than geographical discovery in persuading men that institutions are by no means unchangeable and that the human will is itself a factor in the making of change. The discoveries, moreover, meant settlements and colonies, and in these it was rarely possible to maintain the more rigorous formalities of status habitual in the old world. As a consequence travelers' tales from the West are tales of men who rise above their station, and of religious differences that are forgotten or abolished in the union necessary for self-preservation. Nor must we omit the significance of the voyages as a factor in the triumph of rationalism. For their revelation of variety in social arrangements, economic not less than political, gave rise to the need for comparison between different principles; and here, once more, the power of tradition had slowly to give way before the need to convince the reason of men. The necessity of kingship, the power of a priesthood, the permanent division of society into rich and poor, appear less final than before to men who have been told that societies both exist and prosper in which no such principles are for a moment tolerated.

The new geographical world implies, then, at least slowly, a new social world. The same result follows from the impact of scientific discovery and philosophic system. The essential effect of the Copernican revolution was the withdrawal of cosmology from the field of revelation. It had become necessary to interpret the universe not in terms capable of being reconciled with traditional theology but in a manner consonant with observation and experiment. In the long run it is not improbable that the growth of science was more fatal to ecclesiastical pretensions than any other single influence. For it established an order of nature which not only contradicted received theological opinion but also demanded unlimited inquiry

as the condition of its own development. Once again, therefore, it made for the acceptance of novelty, and this, in its turn, meant the triumph of rationalism. Implied in that victory was the perception of the common sense of toleration; for heterodoxy in natural philosophy could only be penalized in terms of an arrest of knowledge. By displacing the earth as the center of the universe, the Copernicans, albeit only half consciously, displaced the theology which had sponsored the adequacy of the Ptolemaic system. In its place they put the principle of reason and thereby they dethroned the pretensions of the supernatural to be the residuary legatee of human ignorance. For when so much could be rationally explained in terms of the new scientific certitude; when so much newly explained meant the overthrow of what tradition had persuaded men to regard as ultimate; the acceptance of the supernatural as the source of hypotheses gave way in part to skepticism and in part also to a belief that the patient analysis of phenomena by the new methods would alone reveal to the mind secrets which had thus far defied its scrutiny.

This, at least, is the attitude which, in an incomplete and fragmentary way, the sixteenth century passed to its successor. It is worth while to emphasize in a little detail the use made of the inheritance. Broadly speaking, the canon of the new era was the necessity of a direct appeal to nature. Reason was to act upon the evidence of the senses, not as in the previous period after all authority had been exhausted, but as the only way in which an authoritative explanation is available. Laboring upon the foundations which Copernicus, Kepler and Tycho Brahe had laid, the seventeenth century may be said to have built, by the method of observation and experiment, a new material universe. With its details, of course, we are not concerned. But we must note that the new calculus of measurement permitted the formulation of laws which explained the action of every body in the universe. And what to the age seemed striking about those laws was their revelation of a universe capable of reduction to a strict mathematical interpretation. The natural thereby became identified with the rational; and the discoveries which culminated in Newton's laws seemed to set a model for every field of human inquiry. Guesswork, chance, tradition, were simply annihilated. A world came into view in which hypothesis became certitude by experimental verification. And when to the triumphs of the method in the field of mechanics were added those of Torricelli and Pascal, of Boyle and Huyghens, it is not difficult to understand the intoxication of the century with its own achievement.

The philosophic significance of the new science, indeed, was perceived even before its experimental triumphs had been secured. With Giordano Bruno it had already led to a half-intuitive perception that in a universe so constituted Christian truth became an episode and a fragment, that a mystic pantheism free from historic dogma of every kind was the only religious consolation left to man. In Bacon it led to the sense that by the scrutiny of the secrets of nature man might obtain power over her for his own ends. Central to his thought are a complete contempt for what has gone before and a confidence that the method of experimental inquiry is the highroad to truth. Science for him has become definitely humanized. It is independent of all theological trappings and subservient to definitely practical ends. It is a secular instrument, asserting its own right to investigate because of the power it will attain through knowledge so revealed. That Bacon only imperfectly understood the significance of the new discoveries is doubtless true; but his sense of their bearing upon human destiny is, in its largest outline, both new and far-reaching. It will, he has no doubt, give man new dominion over nature; and in that authority, discoverable only by the careful scrutiny of natural processes, the source of his happiness will be found.

What Bacon clearly implied was the idea of progress; and with that implication there necessarily goes a tacit condemnation of the whole theologic structure. He did not, indeed, as his insistence that his epoch is the old age of humanity makes clear, fully understand the import of what he was struggling to say. He was in the new age, but not completely of it. The philosophy which first frees itself completely from the ancient moorings is Cartesianism; and without a grasp of the impact it made, the rise of a liberal doctrine is unintelligible. The significance of Descartes lies in the majesty of the claims he made for the new methodology even more than in the discoveries for which he was sponsor. By his insistence on the supremacy of reason he challenged the whole power of faith and tradition. By his affirmation that the laws of nature were unchanging he banished the idea of a presiding

Providence from the order they governed. Once the revolution these notions implied had come to maturity, the triumph of a secular world over a theological conception of the universe was inevitable. And maturity came as soon as the discoveries of the century seemed to affirm the truth of Cartesian hypotheses. There were then present all the solvents required for the final rejection of mediaevalism. To abolish Providence was to throw man back upon himself. To throw him back thus was to insist that reason must know no bounds to the empire it investigates. Once that is argued, the way lies open for the emergence of the liberal spirit; and with its emergence in the scientific field it was inevitable that it should make its way into matters of social constitution.

This does not, of course, mean that the new science triumphed quickly, or that the spirit it involved made its way easily into other realms. Puritanism in England was hardly conscious of its influence or, where it was conscious, was hostile; while the Jansenist movement in France, though its leaders avowed themselves Cartesians, was in effect inimical to the progress of the scientific attitude. The cause of its victory lies in a wide variety of fields. Partly the reason is to be found in the discredit religion brought upon itself. The excesses of Puritanism produced a reaction, and in that new atmosphere what triumphed was not the religious spirit, but deism, on the one hand, and toleration, on the other. In France the religious revival of the early seventeenth century did not endure; and the struggles between Jansenist and Jesuit, between Catholic and Huguenot, enormously increased the area of religious indifference. This, in its turn, opened the road to the confluence of certain critical tendencies of which the cumulative power was enormous. There was the inheritance from Rabelais and Montaigne of the belief that man finds himself in an obedience to his impulses which, by its genial epicureanism, is at once a protest against the ascetic discipline of the church, and a gospel of pleasure for pleasure's sake which makes reasonable choice, and not traditional pronouncement, the path to the good life. In the hands of men like Saint-Evremond the attractiveness of this doctrine became obvious; and it fitted in easily with the picture of the "honnête homme" so admirably incarnate in the aphorisms of La Rochefoucauld. There is the development, further, of religious rationalism. Deistic hypotheses made enormous progress during the century. Lord Herbert of Cherbury, Hobbes and Selden in England, the *Libertins* in France, Spinoza in Holland are all of them evidence of how far the old orthodoxy had been undermined. John Spencer and Spinoza laid the foundations of the scientific treatment of Hebrew institutions. Richard Simon started the scientific study of the Old and New Testaments. When Bayle came to write his great dictionary he was attempting to build a structure of disbelief the foundations of which had already been planned.

In a sense nothing shows this more clearly than the change in the temper of religious defense. Apologetics in the hands of Chillingworth and Tillotson, even of Pascal and Bossuet, has an atmosphere of reasonableness about it far different from that of the previous century. The half-conscious influence of the Cartesian spirit is omnipresent; and the extent of its triumph is perhaps measurable by the rapid growth of deistic literature in England once the Licensing Act was repealed in 1694. It is to be seen, also, in the constant admission by the theologians of the time of the degree to which skepticism had penetrated among the multitude. The age, said Tillotson, is "miserably overrun with skepticism and infidelity"; and Bossuet's letter to Huet of 1678 is an avowal of an unbelief which he does not doubt is wider than at any previous time. Nor is it without significance that the most famous defense of the Christian faith in the seventeenth century—that of Pascal—should have been hardly less a grammar of skepticism than a justification of credence.

Science, philosophy and theology, therefore, all reveal in the seventeenth century the increasing permeation of the rationalist temper. They show a generation driven back to first principles, with the eternal result that the inheritance is transformed in the process of examination. What the seventeenth century commenced its successor completed. What had been moderate and half-hidden in the one became determined and decisive in the other. The eighteenth century in France and England is nothing so much as a determined onslaught upon revealed religion. The attack of Hume is its supreme intellectual expression; but Voltaire, Diderot, Holbach, to name only the outstanding critics, set the ecclesiastical phalanx permanently upon the defensive. The real achievement of the philosophic movement of the eighteenth century was to complete the case

for a purely secular conception of social life. Building upon the acceptance of the Newtonian universe, they made the literal interpretation of the Christian revelation impossible to intelligent men. And therefrom they drew the inference that if its theology was dubious its power was without justification. They denied altogether the sanctions it proposed to exercise in political and social life. They destroyed that alliance between church and state which had made the beliefs of men the test of their capacity for citizenship. By rendering at best dubious the adequacy of the beliefs themselves, they made of religion a private matter independent of the overt expression of conduct, and created a secular ethic with which alone, as it received outward form, it seemed legitimate for the state to concern itself. Naturally enough this victory of the utilitarian temper did not make its way with ease. The triumph of the Toleration Act must be set alongside the defeat implied in the revocation of the Edict of Nantes. But it is notable that the eighteenth century in England saw no effective revival of religious persecution; and if Calas and de la Barre were executed in France, the most striking element in their fate is the applause which greeted Voltaire's vindication of their names. By the time of the French Revolution men were able to think and to say things that before 1700 would undoubtedly have involved a ruthless persecution. They were able to do so because the ecclesiastical interpretation of life had ceased to occupy the center of the stage. Its view of the universe having been rejected, the principles of the new philosophy were applied to realms which had once been deemed its own empire. And until the revival of mediaevalism with the romantic movement, the claim of theology to a dominating place was not so much challenged as neglected by those who set the temper of men's thoughts.

II. Not, of course, that the scientific development and its consequences are independent of political and economic events. Anyone who seeks to explain the rise of liberalism must at least indicate its connection with new institutions in the world of practical life. In one sense, at least, the fundamental event of the seventeenth century is the emergence of the middle class into political significance. The Dutch Rebellion and the English Revolution are the two outstanding expressions of its power; but it is also important to remember that civil war in France, in destroying the nobility as a political factor and making possible the centralized despotism of Louis XIV, left the monarch and the middle class face to face as soon as dissatisfaction should develop. The rise of the middle class is important because its economic needs required a type of liberty of which constitutionalism was by all odds the best expression. The middle class needed exactly the central principles of liberal doctrine if it was to prosper. It required religious toleration because the establishment of this principle was inextricably intertwined with the rights of property. It required limitation upon monarchical prerogative lest it be ruined by arbitrary taxation. It required a controlled aristocracy because the establishment of internal peace was the essential condition of commercial prosperity. It required the abrogation of the mediaeval theories of restrictive regulation in the interest of morality because in such terms individual enterprise could not reach its maximum fruition. The new economic order, in a word, required a secular state; and a secular state, in its turn, required a liberalizing doctrine if politics was to be more than a branch of theology. What the scientific revolution had begun the utilitarian revolution completed. Right gave way before the claims of expediency. A state was built which corresponded to the wants of the new men to whom power had flowed.

It is worth while to dwell for a moment upon the ideological significance of the three great political events of the seventeenth century. The successful establishment of the Dutch Republic was the first organized invasion of the monarchical principle in the modern world. It was a success which came in the name of religious toleration and the right of a nation to determine its own destiny. It offered immediate proof that its basic principle was the parent of religious toleration; and its permanence was a victory not only for constitutionalism against autocratic government but also for the independent and sovereign state as the form in which the exclusiveness of nationalism seeks naturally to clothe itself. The English Revolution, in which the final synthesis of 1689 is only the culmination of a movement lasting some fifty years, brings with it not only religious toleration and constitutional government (both of them, as in Holland, the parent of commercial prosperity), but also the creation of a parliamentary system the implications of which

change the whole substance of political philosophy. There is even a sense in which the despotism of Louis XIV may be said to have enforced upon men's minds the belief that the constitutionalism of England and Holland was of superior validity as a governmental system. For after 1685 it was no longer accepted as other than a system in decay. The ruin it had produced was not only obvious, but in striking contrast to the prosperity of its rivals. Saint-Simon, Fénelon, Vauban, Boisguillebert, all point the lesson that in some fashion the arbitrary exercise of power is incompatible with the attainment of social good. Their successors among the *encyclopédistes* of the eighteenth century are occupied in nothing so much as the conversion of public opinion to that view. They were successful in their effort; but the *malaise* of the monarchy was too deep to make peaceful reformation possible. The failure of French liberalism in the seventeenth century to secure institutional expression is the essential cause of the breakdown in 1789.

Nor must we forget the influence upon social institutions of the breakdown of the mediaeval economic organization. A new economic imperialism destroyed the old supremacy of the eastern market; and with its coming the scepter of trade passed from Venice and the south German cities to the states of the Atlantic seaboard. Capitalist enterprise, especially in textiles and in mining, made impossible both by its extent and power the retention of ancient regulation. Commercial companies discovered in the use of the state prerogative methods of legal organization which were revolutionary in their significance. A financial technique was evolved which synchronized with both the collapse of rural social categories and a catastrophic change in the price system. By the middle of the seventeenth century the economic world was characterized by all the main features which distinguished it until the application of steam power to industry. The wants of the new economic order were incompatible with the mediaeval notions of fixity and status. The new markets demanded enterprise; the new factories demanded free labor. Religious opinion, not less than political philosophy, adapted itself with remarkable swiftness to the wants of a new world. They accomodated themselves to a conception of life in which the possession of property was the mark of virtue. They preached a gospel of work in which poverty became the expression of nothing so much as the disfavor of God. That nature which, in the Middle Ages, had been the reflection of the Divine Will, became in the seventeenth century the response to human appetite—an appetite, moreover, freed by the new individualism from the restrictions of the earlier time. The development was rendered easy by the compromise effected by Calvin in his discussion of the problem of interest. Once the mediaeval ban on usury was lifted, religious precept was necessarily harnessed to the new institutions. The churches practically abandoned their obligation to formulate a social doctrine which should insist upon man's duty to his neighbor. When it could be plainly said that "it was not in simple divines to show what contract is lawful and what is not," it is obvious that the basis of economic arrangements had ceased to be theological and had become utilitarian. The Reformation and its aftermath had already shown how profound was the resentment of ecclesiastical discipline in the field of social policy; and whatever lip service was paid in the seventeenth century disappeared after the Puritan rebellion in England, and the reduction of the church in France to a pliant instrument of administrative purpose. Thenceforward the way was directly open to the idea of free contract as the basis of society; and with its emergence a purely secular standard of social values could prevail. Economic liberalism was the heir of the church's failure to understand the part it might play in the new world. An acquisitive society won the opportunity for unfettered development as soon as the church ceased to play the part of the critic entitled to test the moral adequacy of human effort and human institutions.

III. Political philosophy in the seventeenth century is, for the most part, English where it is important; the continent had no names to set alongside those of Hobbes and Locke. In Althusius, indeed, the impact of Dutch achievement and experience gave birth to theories of ample profundity; but there is little evidence to show that he deeply or widely affected the minds of men. The seventeenth century was mainly English because the prevalence of ruinous civil war upon the continent hardly left men space to do more than sigh for peace; and the relief at its coming was everywhere so great that, with rare exceptions, even an autocracy like that of Louis XIV was acceptable because it brought with it the cessation of conflict. But in England, until the last ten years of the century,

foreign war was an incident which hardly affected the substance of the national life; and the matter of internal conflict was such that the debate was bound to center about the fundamental problems of politics.

That is, indeed, obvious from the outset of the century. Already in Bacon, if we have a theory that is ultimately absolutist in temper, its whole basis is essentially utilitarian; and if he finds therein a place for the church, it is as no more than an effective instrument for the development of a state power conceived in purely secular terms. Even religious speculation may be said to have advanced the power of the secular state. For when the Church of England allied itself with the monarchy in the hope of destroying Puritanism it virtually abolished itself as an independent political authority; and the partnership of the Puritans with constitutional and radical theories hastened both the victory of Parliament and the advent of toleration. The lawyers, also, were a force in promoting the decline of ecclesiastical authority. For they not only attacked the desire of the church to be the inheritor of the religious courts, but they also provided the legal theories out of which the structure of the new state could be determined. Puritanism, also, acted necessarily as a dissolvent of mediaeval tradition. Since most of its devotees were to be found in the middle classes, it was inevitable that they should resent a state which, by persecution, interfered with their commercial effort and the prosperity of the country. They drew from their experience of its activities a bias against state action; and the liberal faith in a state whose interference is at a minimum is deeply rooted in nonconformist traditions. Puritan, also, may be said to be the dogma of equality in English political philosophy. Men like Lilburne and Rainsborough and Winstanley are the expression of the victorious spirit of a class which sees in the abrogation of special privilege the guarantees of its own well-being. The doctrine was premature as a philosophy because it failed to correspond to the distribution of economic power. The revolution that actually came was, as Harrington so magistrally perceived, essentially, in its final form, the constitutional expression of the new economic order which the previous hundred years had brought into being. A negative state, parliamentary government and toleration were all that the new class desired; and more radical theories, to which the disillusions of a revolutionary period naturally gave birth, had to wait for a more ample realization.

The most significant figure in the first part of the seventeenth century is Thomas Hobbes (1588–1679), in sheer intellectual power the most eminent name in English political philosophy. To understand at once his place in the mind of the century, and the import of his doctrine, we must realize, first of all, the significance of his intellectual contacts. He represents, with all his errors and inadequacies, the "natural philosophy" of the seventeenth century in the fullest sense of that term. Few men have specialized so profoundly in omniscience. Physicist, geometer, psychologist, metaphysician, Biblical critic, social theorist, there is hardly any department of human knowledge which was not swept into the generous ambit of his system. The friend of Galileo, the secretary of Bacon, the intimate of Mersenne and the Cartesian society of Paris, he was in close communion with the advanced scientific outlook of his time. He represents the first systematic attempt in English philosophy to erect a theory of the state upon foundations altogether independent of theological principle. Whatever the burden of his conclusions, the temper in which he worked was essentially what the new liberal outlook required. He is consistently rationalist, consistently utilitarian, consistently Erastian. He was fundamentally materialist and, in essence, utterly hostile to supernatural hypotheses in the realm of social thought. Both his ethic and his psychology show how completely possible it had already become for their principles to be worked out upon a basis entirely secular in character. If Hobbes' political philosophy is, de Maistre apart, the most powerful plea for autocracy that has ever been made, it is a plea built upon the assumption that every state is a completely self-sufficient organism which does not need to look outside itself for the sanctions of its conduct. That, perhaps above all, was the thesis of which the new order stood most in need.

Though Hobbes himself always insisted that his social philosophy was an integral part of his general metaphysic, it is no injustice to him to relate its emphasis directly to the events amid which he moved. He had seen the failure of the gunpowder plot; he was in Paris when Henry IV fell a victim to the dagger of Ravaillac; he witnessed the "hot gospelling" which accompanied the beginning and the end of the civil wars. The fact that his work was the product of

a timid temperament, writing when a strong and stable government was sought above all things, justifies our seeing in it the fruit of personal experience rather than literary influence. Machiavelli and Bodin, Barclay and Bacon, he doubtless knew and profited by; but the reader of his political writings will hardly fail to realize that, even more, he was the shrewd observer of Pym and Richelieu, of Strafford and of Cromwell. In no writer of the period, indeed, is the lesson rough hewn from vivid contact with men more obviously set down. The problem he set himself is how to make a common life for men whose actions are always born of fear and self-interest. He posits a state of nature, after the fashion of his age, but it is a grim enough condition, a state of anarchy in which every man's hand is against his neighbor, and in which the lust for power destroys all security. He does not spare the details of his picture. "Continual fear and danger of violent death . . . no propriety, no dominion . . . but only that to be every man's that he can get and for so long as he can keep it." In such a condition men may be taken as broadly equal in their faculties since, in the absence of a recognized power of control, no man has mind or bodily strength enough to be free from the art or sudden violence of his fellows. From so dismal a world the one object of life must be the organization of release.

And the means of release are to be had. For if man is avid of power he also fears death; he desires comfort, he searches for security. Reason therefore suggests to him some form of agreement whereby peace may be attained. Reason urges him to leave the state of nature and thus gives him a law which we may term a law of nature in the sense that it is a precept of reason; but it is not a law of nature in the accepted sense. The law of nature is the power of man to do in the state of nature whatever he thinks fit. Included in it, indeed, are precepts which reason commands for the sake of self-preservation; and these, in their totality, are something akin to the moral law. But they are pointless enough in the state of nature, since there is no common authority to enforce them. This law of nature may bind us in reason, even in the pre-social state, since the rule not to do to another what you would not have done to you is the clear road to self-preservation. But it is, there at least, a rule without a sanction. It gains authority only by being applied; and a civil state is needed for its application.

Hobbes therefore assumes the making of a covenant between men such that all surrender their natural rights to a sovereign, either by institution or by force. They then owe to this sovereign—be he a one or a many—an allegiance that is absolute and entire. This sovereign owes no duties to his subjects, while they are bound to one another to obey his commands. If, indeed, protection from insecurity does not result from the relationship, the subject is entitled to the resumption of his natural rights. But even then he has no remedy against the sovereign (since the latter owes no duty to him) and he resumes them at his own risk (since he has broken the contract with his fellows). He assumes, then, a sovereign power which, once established, is unlimited in extent; and the form of government can make no difference to its absolutism. Law is then simply a command of the sovereign, enforced by the sanction he institutes; and since there is no limit to the sovereign's power there is no such thing as an unjust command and, by inference, as an unjust law. As between different states Hobbes insists that there can be no condition save one of mutual distrust; "the law of nations," he writes, "and the law of nature is the same thing." But the weakness of the law of nature has been the absence of a common superior to enforce it; and the law of nations must, similarly, mean no more than the right of each state to do the best for itself that it can. A vital future lay before this rigorous positivism.

We have thus a state in which, for the preservation of peace, a sovereign has been instituted with unlimited authority to impose his commands. Hobbes is insistent not only that a monarchical system is the best form of state but also that all others are in truth a mere perversion of it; "other governments," he writes, "were compacted by the artifice of men out of the ashes of monarchy after it had been ruined by seditions." His case for monarchy is urged with singular vehemence; it may be that the fate of Charles I and the position of Cromwell made his sentences even more biting than was customary with him. A monarch's interest, he says, is necessarily one with the public interest. He can get all necessary counsel, and that in secrecy; he is less liable to the inconstancy and faction which attend the sovereignty of an assembly of men. The evils to be expected from favoritism seem to him less than in the case of an assembly "where all will play this game on the principle of *hodie mihi, cras tibi.*" Nor does he see more than temporary

inconvenience in the problem of the succession. He preaches the necessity for the strict control of churches by the state in passages of extraordinary power; and the need for the destruction of voluntary bodies is asserted by likening them to "worms within the entrails of a natural man."

Hobbes' thesis is, then, clear enough. The evil nature of man makes peace impossible without restraint, and the more concentrated the power exerted over him, the more successful that restraint is likely to be. The liberty left to the individual is twofold. He may do whatever the law does not prohibit; and he may even break the law since what binds him to obedience is simply the fear of punishment. But because the object of the state is security, Hobbes admits what for him is almost a legal right of disobedience in certain cases. Reason, he says, does not permit us to suppose that a man can be bound to kill or maim himself, or to be compelled to self-incrimination; nor is he bound to kill others or perform work of a dangerous kind; and whenever—a notable concession born, obviously, of the times—the sovereign is unable to give the protection for which the state is made, man resumes his natural rights. What, broadly, he has set out to do is construct a theory of social organization in which the radical doctrine of a contract is turned to the service of despotism. He has been so impressed by the conflicts of the previous century that he searches for a technique of order, whatever cost to individual freedom its institution may cause. So overwhelmed is he by the price of anarchy that he is not even prepared to pay tribute—as Filmer indignantly noted—to the fashionable doctrine of legitimacy. There is nothing about divine right in Hobbes, whether in the secular or ecclesiastical realm, except by way of contempt; there is nothing, either, about the rights of conscience except their danger. He had clearly no patience with Grotius' effort to regulate by accepted moral precept the practises of states; "convenants of government," he said, "without power of coercion are no security." He had no confidence in any power but the sword, no belief in any motives save the meanest in human nature. All that he asked for was a sovereign—whether Charles I or Cromwell was immaterial—who could force men to keep the peace. The state was thus, for him, concerned not with social good but with the condition upon which all human welfare depends; it was a restraint, evil, it might be, but necessary upon men's appetites. The form he gave to his argument cut away the ground from under the feet of his opponents. Granted his premise—and it is difficult to see how a Calvinist, for instance, could deny his premise—and his conclusion followed with irresistible logic. He represents at its maximum that intense desire for a strong authority, impregnable both within and without, which was natural in his time. And his sense of the state as the sovereign legislator which could brook no rival, whose will was law because no will was superior to itself, was destined to play a fundamental part in future political philosophy. From Hobbes to Rousseau and therefrom to Hegel, on the one hand, and, on the other, to Bentham and thence to Austin, was but a step; and when that step was taken the theory of the state was finally redeemed from all possible contact with alien principles.

IV. In a sense, however, Hobbes had come too late; a theory of autocracy did not suit a generation which wanted, indeed, order, but an order compatible with individual freedom. How profound was that want is evident from the rapidity with which England recovered from the sense of shock administered by the Cromwellian regime. The legitimate king was restored, but he, not less than his people, recognized that he had been restored upon terms. The debate between 1660 and 1689 is about nothing so much as the terms of the constitution; both parties had to recognize that a constitution was inevitable. When the brief reign of James II seemed to imply a monarchical experiment outside the limits for which men were prepared, the invitation to William of Orange followed at once. Its consequence was a king who reigned by parliamentary title upon conditions set out in the clauses of statute. The Revolution of 1688 led straight to the Bill of Rights and the Act of Settlement. The dependence of the crown upon Parliament was established; the Nonconformists were rewarded with a partial measure of toleration; the development of the Bank of England and the party system set the seal of finality upon the new system. In all this was implied dogma incompatible with the rigorous theorizing of Hobbes. It needed a more mediating philosophy if innovations so striking were to be put in the framework of doctrine.

The theorist of the revolution was Locke; and he did not conceal either from himself or

from his readers the purpose of his effort. It was the intent of the *Two Treatises on Government*, as he said, "to establish the throne of our great Restorer, our present King William, and make good his title in the consent of the people." What he sought was a theory of the state which would justify exactly the principles of the revolution settlement. He had to show that there were limits beyond which the sovereign power could not be permitted to go. He had to explain how a state might be built in which the share of the people in power, the maintenance, therefore, of their rights in form of law, was definitely established. He had to justify a solution of the religious problem which maintained such variety of outlook as was compatible with necessary political unity. He had to build a polity which left unfettered the individualism of the new economic order. He had, in a word, to build an alternative to the Hobbesian philosophy; and to do that, as he saw, it was necessary to go back to the foundations of the state. Locke, it may be, lacked altogether the clarity and the relentless logic of his great predecessor; and he had little of that genius for compressing into a phrase the experience of a lifetime which makes Burke the one classic in English politics who can still be read with delight. But he saw with unsurpassed common sense that the main problem of his time was such a theory of the state as would justify the maintenance of freedom in terms of individual good. What he had to do he accomplished with such mastery that for seventy years he remained the outstanding expression of political liberalism; and not until the advent of Rousseau did the philosophy of the state take a new direction.

Why, asks Locke, does political power, "a right of making laws and penalties of death, and consequently all lesser penalties," exist? It can only be for the public benefit, and his inquiry is thus a study of the grounds of political obedience. Locke thus traverses the territory Hobbes had covered in the *Leviathan*, though he rejects every premise of the earlier thinker. The state of nature is, for him, governed by the law of nature. The law of nature is not, as Hobbes had made it, the antithesis of real law, but rather its condition precedent. It is a body of rules which governs, at all times and at all places, the conduct of men. Its arbiter is reason and in the natural state reason shows us that all men are equal. From this equality are born men's natural rights which Locke, like the independents in the Puritan revolution, identifies with life, liberty and property. Clearly, as Hobbes had also granted, the instinct to self-preservation is the deepest of human instincts. By liberty Locke means the right of the individual to follow his own bent, granted only his observance of the law of nature. Property Locke derives from a primitive communism which becomes transmuted into individual ownership whenever man has "mixed" his labor with some object. This labor theory of value, it may be remarked, lived to become, in the hands of Hodgskin and Thompson, the parent of modern socialism.

The state of nature is thus, in contrast to the view of Hobbes, preeminently social. There may be violence or war, but this is only when men abandon that rule of reason inherent in their character. But the state of nature is not a civil state. There is no common superior to enforce the law of nature; each man, as best he may, works out his own interpretation of it. But because the intelligences of men are different, the law of nature is differently interpreted. Uncertainty and chaos result, and means of escape become necessary from a condition which human weakness would make intolerable. It is here that the social contract emerges; and just as Locke's natural state implies a natural man utterly antithetic to Hobbes' gloomy picture, so does his social contract represent the triumph of reason rather than of hard necessity. It is a contract of each with all, a surrender by the individual of his personal right to fulfil the commands of the law of nature in return for the guarantee that his rights as nature ordains them—life and liberty and property—will be preserved. The contract is thus not general, as with Hobbes, but limited and specific in character. It is not, as Hobbes made it, the resignation of absolute power to the hands of an irresponsible sovereign. It is simply a contract of the members of the community with themselves to form a whole which thus becomes that common political superior—the state—which is to enforce the law of nature and punish infractions of it. Nor is Locke's state a sovereign state: the word "sovereignty," significantly enough, does not occur throughout the treatises. It is a state in which the minority agrees to be bound by the will of the majority for certain defined ends; but its province ends when its action passes beyond those boundaries.

Locke will have no truck with absolute power; and he has no patience with the divine right of kings. He dislikes oligarchy, because it

inevitably emphasizes the interest of a group against the superior interest of the community as a whole. Democracy alone offers adequate safeguards of an enduring good rule; a democracy, that is, which is in the hands of delegates controlled by popular election. He did not like republicanism; experience, doubtless, of the Puritan epoch had taught him that its disadvantages were serious. He was content to have a kingship divested of legislative power so long as hereditary succession and the making of laws were deemed to be dependent upon popular consent. The making of law, the formulation, that is, of the rules by which life, liberty and property are to be secured, is legislation and this, from the terms of the original contract, was the supreme function of the state. The legislature was to be bound by its own prescriptions; and the executive—in his view, a body of minor importance—was simply there to carry out its will. For him, at the back of each governmental act there is an active citizen body occupied in judging it with single-minded reference to the law of nature and their own natural rights.

There is thus a standard of right and wrong superior to all powers within the state. "A government," he wrote, "is not free to do as it please . . . the law of nature stands as an eternal rule to all men, legislators as well as others." The social contract is thus secreted in the interstices of statutes, and its corollary is the right of revolution. For to deny that right was to justify the worst demands of James II. "The true remedy," he said, "of force without authority is to oppose force to it! Let authority but step outside the powers derived from the social contract and resistance becomes a natural right; the state of nature supervenes, and a new contract may be made for which there is more hope of observance." Here, also, Locke takes occasion to deny the central thesis of Hobbes that since power must be absolute, there can be no such thing as usurpation by the sovereign. But Locke retorts that absolute government is no government at all, since it proceeds by caprice instead of reason; and he argues that it is comparable only to a state of war since it implies the absence of judgment on the use of power. It is wanting in the essential and continuing element of consent, without which no law imposes obligation. All government, for him, is a moral trust, and the idea of limitation is implied therein. But an unenforceable limitation would be worthless, and revolution remains as the reserve power in society. The only hindrance Locke suggests is that of number; revolution should not, he urges, be the act of a minority. For the contract is the action of the major portion of the people, and its consent should likewise obtain to the dissolution of the covenant.

The problem of church and state demanded a separate discussion; and it is difficult not to feel that the great *Letter on Toleration* is the noblest of all his utterances. Not, indeed, that it stands alone; for it came as the climax to a long evolution of opinion and experiment in which the moral rightness and political adequacy of intolerance had been attacked on every hand. But Locke covered the whole ground, and it is notable that his outlook is built upon a denial that any element of theocratic government can claim political validity. The magistrate is concerned only with the preservation of social peace and does not deal with the problem of men's souls. He is entitled to suppress where opinions are entertained either subversive of the state or destructive of peace; though even here Locke thought that force was the worst of remedies. In England he was prepared, on these grounds, to deny toleration to Catholics, atheists and Mohammedans. The first, he thought, deny to others the rights they seek themselves, and they owe their essential allegiance to a foreign power. Mohammedan morals are incompatible with the civil systems of Europe; and there is absent from atheism—Bayle had just shown the contrary—the only satisfactory criterion of good conduct.

Though church and state are thus distinct they act for a reciprocal benefit; and it is thus important to see why Locke insists on the invalidity of persecution. For the cure of souls, he argues, the magistrate has no divine legation. He cannot, on other grounds, use force since it does not produce internal conviction. But even if it did, force would still be mistaken. The majority of the world is not Christian, yet it would, if force were legitimate, have the right to persecute in the belief that it was possessed of truth. Nor can he accept the implication that the magistrate has the keys of heaven. "No religion," he says finely, "which I believe not to be true can be either true or profitable for me." He thus makes of a church merely a voluntary society with no power save over its members. It may use its own ceremonies, but it cannot impose them on the unwilling;

and since persecution is alien to the spirit of Christ, exclusion from membership must be the limit of ecclesiastical power. Nor must we forget the advantages of toleration. It leaves the mind and actions of men unfettered; its eldest child is charity; without it there is no honesty of opinion. Later controversy did not make him modify these principles; and in the hands of his successors in England and France they became a vital argument for the completion of the secular state.

If there is little in the different elements of Locke's doctrine for which originality can be claimed, the synthesis itself was new, and the rapidity of its acceptance shows how welcome was its liberal temper to its generation. What opposition there was, was but the eddies of a stream fast burying itself in the sands. As early as 1693 Bayle could write that Locke has become the "Gospel of the Protestants." French Huguenots and the Dutch drew naturally upon so happy a defender; and Barbeyrac, in the translation of Pufendorf which he published in 1706, cites no writer as frequently as Locke. Addison, on six separate occasions, speaks of him in the *Spectator* as one whose possession is a national glory; and Swift softened his hatred of the malignant Whigs to find the epithet "judicious" for the man who was their master. He was, said Warburton, "the honor of his age and the instructor of the future." The eulogy is not too strong; for English political theory until the time of Hume is little other than a variation upon his central theme. Montesquieu paid him tribute when he made the separation of powers the keystone of his own more splendid arch. The teaching of Rousseau is only a broadening of the channel dug by Locke; no element integral to the *Second Treatise* is absent from the *Social Contract*. Rousseau, indeed, in many aspects saw deeper than his predecessor. He understood the organic element in the state, where Locke was still trammeled by the bonds of his narrow individualism. Yet it would not be difficult to argue that Rousseau's theory is at no other point a real advance. The general will, in practical instead of semi-mystic terms, really means the welfare of the community as a whole; and for both the active consent of the individual citizen remains the central problem. Most of the difference between them, perhaps, lies in their historic position: Locke was justifying a revolution that had happened, Rousseau was to justify a revolution that had still to come.

It is this revolutionary element in Locke that gave him his significance in both the American and the French Revolutions. He laid down the essential thesis of liberalism that no government can ever be justified unless it draws its strength from the free consent of the governed. He argued that an invasion of reasonable claims makes legitimate a resort to force for the overthrow of the invading authority. That also is the essential claim of the Declaration of Independence; and the verbal resemblances between that document and the *Second Treatise* show how deeply Jefferson had drunk from the Lockian fountain. There was, indeed, reason and to spare for the irritable insistence of Dean Tucker that "the Americans have made the maxims of Locke the ground of the present war," and his jibe that Locke was "the idol of the Levellers of England," Price and Priestley, is true both of America and of France. For Locke is written large in the American bills of rights; and these, in their turn, were to be the principles of 1789. What Locke had sought to do was the effort also of liberals in America and France. He tried to construct a system of government which made it lie at the service of individual citizens. He, like them, was jealous lest it invade territory for the control of which he deemed it unsuited. He, like them, made individual consent, a vigilant citizen body, a limited executive, a separation of powers, the true bases of the state. It is not too much to claim that their triumph was his also.

V. It was not to be expected that the success of Locke in England would be paralleled upon the continent in his own lifetime, for the necessary institutions were wanting there. After 1614 the Estates-General did not meet again until 1789; and the *parlement* of Paris was a purely selfish legal corporation without real vision of a communal purpose. In both France and Germany, moreover, the combination of defective popular institutions and war was sufficient to make the need of a strong and centralized power more effective than the need for liberalism. What men ask for is a monarch who can rule, the cessation of civil strife, freedom from the heavy burden of taxation, relief from administrative oppression. In the vast pamphlet literature of the Fronde there are not half a dozen writers who seek any radical remedy; and even of these Claude Joly is the only one who has a system of any kind to recommend. The same conclusion is broadly true of Ger-

many. With the exception of Pufendorf, none of her political thinkers rises above a commonplace level. They are occupied either with merely legal technicalities or with the facile proof that monarchy is the best form of government. Even Leibnitz, for all his emancipation from authoritarian dogmatism, offers us little beyond a skilful defense, in the manner of Grotius and with no advance upon his matter, of the validity of natural law.

But the evolution of French political thought in the seventeenth century is significant. It has an official and a critical side. On the one hand are Richelieu and Bossuet, the one the outstanding architect, the other the supreme apologist, of the renovated monarchy; on the other are those—Jurieu and Bayle among the Protestants, Vauban among the officials, Fénelon among the clergy, Saint-Simon among the nobles—who ventured upon expression of their dissatisfaction with the regime. There is little in their argument that can be called at all justifiably a liberal doctrine. But the mood they represented, when linked with the inspiration that Voltaire and the *encyclopédistes* drew from Locke and England, and fanned by the new skepticism which grew from the union of naturalism, as in Saint-Evremond, and the claims of science, as in Fontenelle, became, with the decay of the monarchy in the eighteenth century, the distinctly French liberalism of which Voltaire and Montesquieu are the most important representatives.

Richelieu was a political philosopher indirectly only; the *Testament* and the *Maximes* are rather the acute reflections of a statesman upon his art than the expression of a coherent system. He represents, essentially, the supreme organizer who has come to restore order, whatever the cost of its imposition. Authority is to know no bounds, and disobedience is to be identified with sin. The prince, for him, is the state; to multiply the number of pilots is to ruin the possibility of a safe voyage. He insists upon the necessity of a rigorous but carefully masked control of the church; its doctrine may be left unfettered only so long as it does not impinge upon temporal power. Neither political assemblies nor corporations should be permitted in the state, for these represent a possible counterpoise to royal authority. Nor does Richelieu approve of municipal privilege; communities, he argues, never understand their own interests since " dans une communauté le nombre des folz est plus grand que celui des sages." He does not even hold with the supremacy of the courts in the purely judicial realm, but urges the need for extraordinary commissions to supplement, by royal prerogative, the inadequacies of judicial justice. The whole keynote of his theme is *raison d'état;* in matters so complex as those of politics, he argues in effect, attention to definite principles of action is impossible. He is not even deeply interested in the prosperity of the people; a little misery, he thinks, will keep their minds from wandering into the political realm. He has no use for the aristocracy, except as the basis of the armed forces of the state. The whole is a sinister picture of a man avid for power and careless of, even uninterested in, the methods by which it is maintained.

The explanation, of course, is a simple one. No powerful and ambitious man could have passed through the experience of religious and civil war without insisting that the only path to safety lay in the presence of a Machiavellian prince at the helm of state. He wrote of what he had himself achieved; and the years of Louis XIV's minority are an apt commentary on why his views shaped themselves as they did. The wars of the Fronde stand out in singular contrast to the contemporaneous civil wars in England. They were purely factional fights of selfish minorities seeking to profit themselves from the feebleness of an incompetent regency. They produced no great leader and no great thinker. In the several thousand *Mazarinades* there are not half a dozen which express more than the misery or the passion of the moment. Only Claude Joly, as the wars came to a close in 1652, showed some power of insight into the principles of government. He at least sees that all power must rest upon a popular origin and that there can be therefore neither a divine right of kings nor an unlimited royal authority. Kings exist for the good of their peoples, and tyranny implies a right of resistance. Joly sees, too, the importance of individual liberty; and his detailed condemnation of Richelieu's judicial methods shows that he holds firmly, as befits the grandson of Loisel, by the supremacy of fundamental law. He demands a meeting of the Estates-General, and refuses to admit a right of taxation without its consent. Nor, in his judgment, has the king the power to make law without the consent of the constituted magistracy of the realm; and this must be given without the exercise of undue pressure. He urges, finally, that no war should be made except as a last resort and then only after the

king has taken counsel with the Estates of the kingdom.

Here, at least in outline, is such a liberal program as neither Pym nor Hampden in England would have rejected. But it came too late. There were neither the leaders to advocate, nor the institutions through which to work, its possibilities. When Louis XIV began his personal rule in 1660, the stage was already set for centralized despotism. Louis himself was intent upon the fullest possible exercise of his prerogative; and the unintelligent memoirs that he composed for the instruction of his son reveal a mind in which the hypothesis of divine right had assumed axiomatic form. Contemporary theory in France, at least, had no creative alternative to propound. The textbook writers, Priézac, Scudéry and the rest, all repeat the ornate commonplaces which, as in the reflections made for Sir Thomas Elyot, did duty in sixteenth century England for political wisdom. It was not until the advent of Bossuet that an attempt was made to give the Augustan autocracy a theoretical foundation.

Few writers on politics have received panegyrics so splendid as Bossuet; few also have done so little to deserve them. At bottom his political philosophy is little more than the conclusions of Hobbes loosely set in a theological context which he did not realize to be already obsolete. The magnificent eloquence, indeed, serves often to conceal the poverty of the thought; and the reality of the learning in which the conclusions are clothed often gives them the air of being a system of rigorous inferences from the accumulated wisdom of the ages. But what, in sober fact, has Bossuet to say? Like Hobbes he draws a grim picture of an evil state of nature from the anarchy of which men are only too glad to escape. Like Hobbes, also, he insists that absolute power alone could end so terrible a condition. With his English predecessor he concludes that the rights of the subject are no more than a concession from the sovereign power, and that monarchy, which best assures peace and order, is by far the best form of government.

Here, at least, is nothing of novelty. It is true enough that Bossuet, unlike Hobbes, sets his conclusions in the background of a philosophy of history which, built upon the theses of St. Augustine, makes Providence the master of historic events. It is true also that the principles of his *Politique tirée de l'Ecriture Sainte* are made to depend upon the support of Scriptural texts. But the foundations of his system are in fact mostly independent of all theological apparatus. The unity of a people is dependent on sovereignty being invested in an absolute prince whose power is of God: "the royal throne," he says, "is not the throne of a man but of God Himself." All government is entitled to respect, and revolt is the antithesis of the spirit of Christianity. No citizen has any right to attack the public power; and therefore even the prince who does evil must be obeyed. He denies altogether the contractual origin of political authority, and makes prescription the basis of a title however brutal its origin. Popular government, for him, is always the parent of tyranny; and the freedom of the individual means in the end popular government. Kings therefore are absolute, since without such power they cannot fulfil the purpose of authority. To be absolute, indeed, is not to be arbitrary; the king should obey those fundamental laws which are built on equity and right reason. Freedom of the person and property deserve respect; and the king must make the care of his people his first obligation. But he is himself the sole judge of how and when his obligation should be performed.

It is not difficult to see beneath the mask of Bossuet's seeming abstractions a system of generalizations from the events of his time. His state of nature is the wars of the Fronde; his people as the tyrant are the Puritans under Cromwell; his king who acts as father, under God, to his subjects is the professional eulogy of Louis XIV. As a philosophy it might well have succeeded had prosperity attended upon Louis' effort. But defeat abroad and misery and intolerance at home combined to evoke a protest against its assumptions which provided the foundation for the emergence of liberal ideas. The Huguenot pastor Jurieu proclaimed, if in exile, the right of the people to cashier an evil ruler, and insisted that its sovereignty is the only legitimate basis of political power. Bayle was only the most learned and able of a score of writers who made the case for religious toleration with a width and insight that not even Locke surpassed. Vauban and Boisguillebert exposed, in merciless detail, the ruin wrought by Louis' disastrous policy; and though the fiscal remedies they had to propose were timidly incomplete because they lacked a sound institutional scheme to give them effectiveness, at least they showed that men were prepared for innovation.

The diaries and projects of Saint-Simon reveal that even at the center of the aristocracy the grim despotism of Louis' later years was bitterly resented; and if his proposals are no more than reactionary traditionalism they are at least striking in the whole-hearted condemnation they imply. Boulainvilliers also, himself a lesser nobleman, reveals a mind utterly out of accord with the regime under which he lives. He attacks as vicious the administrative centralization which was the whole pivot of Louis' absolutism; and with a knowledge of past French history remarkable for its time, he condemns both divine right and *raison d' état* as incompatible with the well-being of the state. Like Saint-Simon he has no better remedy than the restoration of traditional institutions—a limited monarchy, a reformed administration, an active Estates-General. But Boulainvilliers had at least grasped the essential weakness of the regime he attacked; and his power of technical criticism is a new feature in the literature of his age.

Yet it is perhaps Fénelon who shows most fully how liberal was the new temper which had emerged. The tutor of the Duke of Burgundy and Archbishop of Cambrai, he had seen the working of the system from inside, and his rejection of its principles was built upon an intimate experience. He was in no sense of the word either an innovator in reform or an originator in ideas. The power he had and the influence he exerted came from the courageous clarity of the testimony he bore to the ruin worked by Louis XIV and from his determination to try all political conduct by the touchstone of ethical principle. He wrote not merely as a Frenchman but as a citizen of Christian Europe, concerned to insist upon its general interests even above the special rights of France, nor is it insignificant that his most earnest remarks should be set in the mouth of a pagan. If he had favored the revocation and applied its cruelties in his own diocese, he learned the error of persecution and insisted that France needed not merely the recall of the Huguenots but a system built upon toleration. Ultramontane though he was, he disliked the interference of the church in political affairs, since he saw that the alliance of church and state made inevitably for ecclesiastical slavery. He denied that love of one's country can absolve a patriot from duty to mankind; and he attacked aggressive war as in all cases indefensible. Not only did he urge the restoration of French conquests, but he saw the wrong done to Europe by the French occupation of Spain, and he wrote of Protestant and tolerant Holland as the hope of mankind. To him all power was by its nature poison; and he wrote of kings that their badness is practically inevitable. They must accordingly be the mere ministers of the law; and a constitution is essential to a well ordered state. For him political authority was the rightful possession of the nation, and there was a health-giving energy in its exercise for which no despotism, however efficient, could compensate. Despotism, indeed, always saps the strength of a people, and he predicted revolution as its necessary consequence. His remedies are not, perhaps, original. A limited monarchy flanked by a system of local and central assemblies, in which the aristocracy played the predominant part, had been recommended by others. But Fénelon saw the importance of legislation as a weapon for molding character. He realized, too, that participation in government is itself an exercise in the creation of individual personality. He demanded freedom of trade, an administration whose methods are built on a careful statistical assessment of the national resources, an adequate civil service and a purified judiciary. In his emphasis on the danger of luxury, the evil of an idle class, and the necessity of education as the base of national well-being, there is, clearly enough, something of the Platonic revolutionary. And his conception of history as set out in the *Letter to the Academy*, his insistence that institutions are more important than persons, that the habits of the nation are the pith of the record, show him as a genuine precursor. Save Bayle, no thinker of the seventeenth century was more comprehensively the instructor of the eighteenth; Saint-Pierre, Montesquieu, Rousseau all went to school to his teaching.

The boldness of Fénelon's attack upon the system of Louis XIV goes far beyond that of his contemporaries. Bayle, indeed, laid down the ultimate methodology for a deeper and more destructive analysis; but his own political proposals are, toleration apart, merely the expression of the scholar's conservatism. The Huguenot exiles, most notably Jurieu in Holland and Abbadie in England, maintained with vigor the dogma of popular sovereignty; but their opposition to the regime was rather a *cri de coeur* than a soundly reasoned philosophy, and their position as exiles detracted from the

influence of what they had to say. The first ideas of French liberalism moved upon historic and conservative lines. What was proposed was to revive the power of the aristocracy, to restore the Estates-General and the provincial assemblies, to cultivate the mediaeval polity, rather than to bring the people into the structure of government. It was not until Voltaire had made England an example to French thinkers, and bankruptcy had become the eternal partner alike of success and failure in foreign policy, that revolution was accepted as the highroad to stability.

VI. France apart, European speculation in the seventeenth century is remarkable rather for its lack of distinction than for ideas by which the current thought was profoundly moved. Spinoza in Holland and Pufendorf in Germany almost exhaust the list of those who exerted anything more than a superficial influence. The reason for this barrenness is not far to seek. The devastating influence of the Thirty Years' War made men inclined to peace at any price; and epochs in which consolidation is the outcome of fatigue are rarely capable of speculation upon ultimate principle.

About Pufendorf there is no need to say much. He was in no sense of the word an original thinker, and his importance lies rather in the temper and amplitude of his mind than in any capacity for piercing to the root of political foundations. His *De jure naturae et gentium*, first published in 1672, represents an attempt to unite the irreconcilable systems of Grotius and Hobbes. Like the former he pleads for the supremacy of reason in affairs of state; and the law of nature is for him a rational rule, inherent in the character of man and enabling him to distinguish right from wrong. Like Grotius, also, he makes the state of nature sufficiently rational and peaceful to render it difficult to know exactly why civil society was ever deemed necessary. But with Hobbes he argues that most men are the creatures of impulse and that only in the civil state is respect for reason possible to the majority. This state he traced back to a twofold contract. Subjects contract with subjects to create a political community in a particular form, and subjects then contract with those designated to rule upon their respective rights and duties. He does not agree with Hobbes that the ruler is absolute. His power may be supreme, but it is restricted always by the terms of the contract. The way in which this restriction is to operate, however, the sovereign is always to decide; and whatever validity the theories of Hobbes possess against the arguments of the great Dutch thinker must hold against Pufendorf also. He resembles Hobbes in his low view of men, his emphasis upon the worthlessness of the multitude, the emphatic repudiation of the Grotian hypothesis of a law of nations binding upon all men because it embodies the best experience of mankind. But the really outstanding feature of Pufendorf's work is its insistent secularity of temper. He will have nothing to do with explanations of political authority which find their source in theology; and he roundly denounces the defective obscurantism of contemporary ecclesiastics who seek political philosophy otherwhere than in the behavior of men. He is, in short, comprehensively rationalist in outlook; and the immense success which attended his book is evidence of the degree to which the rationalist principle accorded with the demands of the time.

Yet for all his success it is difficult to see in Pufendorf much more than a sublime mediocrity. Spinoza of course is one of the outstanding names in the whole history of political philosophy. But it is to be remembered that for almost a century after his death his influence on politics was small. Pufendorf and Bayle seem only to be outraged by his ideas. Locke does not mention him, while Vico dismisses him in one contemptuous sentence. It was not until the time of Lessing and Goethe that his supreme merits were understood in any effective degree.

The reason, indeed, is not far to seek. For him, as for his political master Hobbes, the whole basis of politics was rigorously utilitarian; but he differed, as he himself said, from his illustrious predecessor in that he applied his method with undeviating consistency. If there are present in him things like the state of nature and the idea of contract, none of them is essential to his method. His central thesis is the identity of right with power; and he uses the experience of history—his knowledge of events is remarkable for his age—to prove that the lesson of history is a justification of liberalism. For in the long run, Spinoza argues, the true and eternal sources of power are rational in character. The action of the state is always limited in fact by the knowledge that men are always measuring themselves against it; and it has power only as they fear it or love it. But, again in the long run, it cannot control those

things which men "cannot be induced by rewards or threats" to accept; therefore opinion and religion are outside its sphere. A state, he urges, cannot make men moral or religious, and its true strength is dependent upon their morals and religion. The true springs of action are in the internal nature of men, and the power of the state gives only outward conformity, which is never permanently decisive. Force, therefore, for Spinoza is powerless without reason. The ruler's right is thus limited by his wisdom and insight, by the measure of his justice and forbearance. For otherwise his subjects will depose him, or the civil state will be a condition of anarchy tempered by despotism. Wherever, he argues, there is sedition, there also is to be found governmental wrong. Nor does Spinoza think differently of international relations. Expediency suggests here, as in the internal economy of the state, the ultimate wisdom of the golden rule.

No more striking defense of liberal principle has ever been made in purely utilitarian terms; and it is upon the same terms, also, that Spinoza bases his defense of democratic systems. Here, indeed, the deep influence of Holland upon his theorems is obvious. The necessity of checks and balances, a wide diffusion of power to safeguard local liberties, the insistence that in a democracy alone is the government most representative of the community—this could hardly have been said in the seventeenth century save by an Englishman or a Dutchman. To Spinoza monarchy is clearly abhorrent; and though he analyzes the aristocratic principle with some sympathy, it is clear that the unfinished portion of the *Tractatus politicus* was to have been the culminating point of his speculation. Even as it is, the implications of the doctrine are unmistakable. The core of the argument is the insistence that the best government is that whose policy embodies the maximum self-interest. This is democracy because it allies with itself the will and the reason of the largest number of citizens. It makes their power its own; and it thus makes its right more permanent by the identification of their well-being with its own fortunes.

The eighteenth century, therefore, inherited from its predecessor a tradition of which the liberal principle was definitely a part. The idea of consent had been everywhere adopted as the obvious answer to the divine right of kings. The notion of utility had been everywhere put forward as the test to which the monarchical system must conform. Consent meant the consent of men; utility meant the test of results. Each was in its essence an appeal to reason against an appeal to a principle of authority clothed in some mystic sanction which reason was unable to penetrate. This liberalism, indeed, was as yet a method of examination, a challenge to the existing order, rather than a philosophy which had become a part of the normal mental climate of the generation. It needed the moral bankruptcy of church and state before liberalism could move from a thesis of reform to a thesis of revolution. The work of the next generation was to apply it to existing institutions with an incisiveness and a determination which exhausted the moral credit of the new order. When that was done, liberals were in a position to prove that they had come not less to fulfil than to destroy.

VII. Until the seventeenth century was well advanced, historical studies had for the most part assumed three forms. Sometimes, as with de Thou, they recorded the passage of events as these impressed a single observer; they are the generalization of a diary rather than the philosophic examination of a record. Sometimes, as with Rymer, they are carefully compiled documents which are less history than the materials of history, even if, as with Tillemont, they reveal a learning and a documentary insight in advance of anything previously known. Or again, as with Bossuet, historical writing may be the anteroom of a particular theology, an exercise in the proof of a definite religious thesis, instead of a scientific effort to explain the evolution of civilized life.

It cannot be said that the seventeenth century saw any revolutionary change in the attitude to historiography. The necessity for care in controversy produced by the multiplicity of religious sects conduced to a greater precision in the handling of evidence; the great Anglican school of men like Usher and Bingham did notable work in the reconstruction of early religious history, and Tillemont, Baluze and Mabillon began forging the essential weapons of scientific scholarship. Yet even though such works as those of Bacon on Henry VII, of Selden and Conring on legal antiquities, of Gruter on classical inscriptions make it clear that a new and secular temper was emerging, the area of its activity was as yet by no means wide. Bossuet was able to suppress Père Simon's effort to handle the Old Testament in

a critical spirit. Lanoue's analysis of martyrology earned him abuse and not understanding. Pouilly's investigation, in 1722, of the legends of early Rome merely led to his denunciation as an atheist. Until the very end of the *ancien régime* it was both difficult to procure materials and dangerous to announce untoward results. Fréret went to the Bastille for denying that the Franks were Gauls. Giannone died in prison for his history of Neapolitan institutions. The Common Council of London withdrew its grant from Carte for maintaining that the Pretender had cured the "king's evil." Muratori could not gain access to many princely archives lest his researches should disturb some princely title.

Yet the progress of a rationalist temper is unmistakable. The skepticism of Bayle made possible the rationalism of Voltaire. Bentley in England, Reimarus in Germany, Vico in Italy made it evident that the critical attitude was European in its extent. When Hume in the mid-eighteenth century wrote his history of England he was attempting a broad narrative of the national life such as literature had not previously known. With many faults it added notable qualities to English historiography. If it was often prejudiced it was never enthusiastic; and the *odium theologicum* was entirely absent from its pages. Hume saw, too, the significance of social and economic history; and if he used his insight too casually, at least he used it. No British writer had previously seen the need to weave the threads of historic events into a single whole. What he began, Robertson continued. Nothing now remains of the histories of Scotland, Charles v and America with which he delighted his generation; although the man who gave to Keats his finest metaphor may perhaps rest content to have been supplanted by later research. Yet Robertson, like Hume, has great merits. He made history literature, and it did not leave his hands the servant of a particular party. He brought together a great mass of facts into an orderly and coherent whole. He was neither profound nor widely read; but at least, like Hume, he made mere analytic compilation obsolete.

Both Hume and Robertson show that it was beginning to be difficult to retain history as the servant of authority; Voltaire and Gibbon make it evident that, in truth, the battle of rationalism was in its large outlines already won. With Voltaire a new epoch in historiography genuinely begins; the critical spirit takes possession of its kingdom. Providence is banished from the stage, passion is analyzed by the cold weapons of reason, civilization becomes the phenomenon to be examined. He realized the significance of documents. He understood that the worth of history is dependent upon the worth of testimony. If he hardly grasped the category of time, at least he understood the category of space. With him Christianity is no longer the central theme but simply an incident in universal history. His books are no longer either pamphlets or funeral orations but genuine attempts to explain the phenomena he encountered. He speaks like an analyst and not, like Bossuet, as a prophet. He banished the supernatural from history and thereby brought it down from the clouds to earth. If the *Essai sur les moeurs* is today inadequate, it is only because he pointed out the path by which its inadequacy might be made known. If we do not accept his view of Louis XIV as he conceived it, it is still in large outline his method of interpretation that prevails. Voltaire wrote history as a humanist, and he had the insight, accordingly, to see that nothing human was unworthy of his examination. The people as well as the court, the lawyer as well as the soldier, the man of letters not less than the priest—these enter for the first time into the necessary ambit of his scheme. A critical philosophy of history would doubtless have come without Voltaire; but no man made its coming more certain or its success more assured.

If the ambit of Gibbon was in a sense less wide, the character of his achievement was hardly less notable. The *Decline and Fall* is one of those books literally beyond praise; and it may be said with confidence that no work of its amplitude has ever been less touched by the corrosive hand of time. Here let us note that, proceeding though it did from a political reactionary, it is yet a manifesto of liberal rationalism. The famous epigram, "I have described the triumph of barbarism and religion," connotes not merely a history written in cold antagonism to religious belief but the first genuine attempt to describe Christianity as a sociological phenomenon; and if we should perhaps be kinder than Gibbon to the theologians and ecclesiastics upon whom he heaped contumely, no scholar will be found to dissent from his annihilating confutation of his religious critics. This rationalist philosophy of history, moreover, is accompanied by a sense of the continuity of history that was epoch making. No one had

seen before Gibbon that the Augustan empire fell only with the fall of Constantinople. Criticism has overthrown his attack on Byzantium; it has shown that, as in his chapters on Mohammedanism, he sometimes used untrustworthy sources. The answer to all such attacks is that he wrote before the nineteenth century, and that he made a large part of the achievement in method and outlook of the nineteenth century possible. He rescued a vital field of research from those who had made it the plaything of theological passion. He gave to that field both a new definition and a new perspective. With Voltaire he gave to the secular interpretation of history the letters of credit which assured to it its future empire.

VIII. For Catholic and Lutheran Europe the Reformation meant an autocratic and centralized state; and if the special experience of England and Holland required there different political institutions, nevertheless the economic ideology of Europe is, after the Reformation, different only in the varying degrees of its intensity. The decomposition of the mediaeval system, the rise of manufactures, the development of commerce, the new possibilities opened up by geographical discovery and the use of the mariners' compass, the growth of banking—all these meant, in their total and complex impact, the rise of national economic systems. It was inevitable that the state should seek to control this evolution. An increase of national wealth not only meant an increase of national power; it afforded a basis for taxation which fostered the political ends the state sought to serve. The history of economic policy before Adam Smith is thus very largely the history of a deliberate effort by the state to foster economic development. Burleigh's encouragement of maritime power in England, the relation, in Amsterdam, of the bank to the city council, the ordinance of Louis XIII permitting wholesale merchants to attain a patent of nobility—all these show clearly that the importance of the new industrial phenomena was clearly apparent to the mind of the government. The colonizing activities, the economic policies of Cromwell and Colbert, simply illustrate the same method in more intense form. The governments of the *ancien régime* became the patrons of capitalism as a means of promoting their own authority.

The conditions created by the Reformation inevitably sharpened this atmosphere. Catholic supremacy had meant the imposition of a social and moral discipline which made ethical assumptions constantly conflict with everyday behavior. The true Christian life, in that view, was the life of the monk; and accumulation of wealth was hardly regarded as a praiseworthy ideal. Asceticism of this kind was obviously unfavorable to individual initiative. It left the average man in the grip of a dual view of the universe which contrasted worldly advantage with the religious ideal. Luther destroyed the dualism by making the internal voice of conscience the criterion of external conduct; as Sebastian Franck said, the monastic ideal became with him a world ideal. That was already an aid, since the voice of conscience is conveniently various in the precepts it adumbrates. It was Calvin more than any other thinker who provided the new capitalism with the ethic of which it had need. His view of man as the guardian of what God has given to him and his insistence upon occupation as a "calling," fulfilment of which is service to God, enabled the view to be justifiably taken that accumulation of wealth is a religious exercise, and that association with the business man in that task—the gospel of hard work and low pay—is an avenue of salvation. Calvinism, in a word, provided a way of transition from a society in which economic life was dominated by religious conceptions to one in which, with the growth of secular power, religious conceptions should be expelled from economic life. Not, indeed, until the threshold of the early nineteenth century was the evolution at all fully accomplished. But the basis of its coming is clearly present, once economic growth was made the basis upon which the national state was to wax strong.

Mercantilism is essentially the system which expresses, in its first large phase, the result of the decay in religious discipline which the Reformation marks. It is impossible to define it in a phrase. Rather it expresses a series of tendencies which in any given country exist in varying degrees of emphasis. The mercantilists were never a school, and they did not completely agree with themselves nor teach a consistent body of doctrine. In general it may be said that they were the proponents of four large principles. They insisted on the value of possessing a large supply of the precious metals. They preached the superiority of foreign trade over domestic and, as an almost necessary inference, of industries which manufacture from, over industries which supply, raw materials. They argued, finally, that the state

can by its deliberate policy artificially promote these desirable ends. Nor is it difficult to see why these views should have seemed desirable. To a generation which had seen the advent of a money economy, the virtual identification of wealth with bullion was natural enough. To one, further, which saw the rise of great centralized monarchies and an immense growth in the number of officials, a sense of the power of the state was inevitable. To the state itself industry seemed a natural field to foster, and the prohibition of imports a wise policy to pursue, since each led to an increase of revenue and thus an increase of the striking power of the nation. So, also, to use colonies as the reservoir of exports, to prohibit even them, so far as possible, from manufacture, was to strengthen national economic power. Mercantilism, so regarded, was a natural expression of the actual policy of the time. Traders urged it upon governments to protect themselves from foreign competition; and governments accepted it as the obvious path to the enhancement of their authority.

Mercantilist doctrine is, in fact, characteristic of any period in which liberal theories are at a discount. For liberalism tends to a cosmopolitan outlook, and the day for that standpoint had not yet come. The doctrinal expositions we have are essentially practical treatises intended for a particular state, and considering mainly some special and immediate national advantage. Thus the currency revolution effected by the discovery of the American silver mines led to a spate of treatises on money, some of them, like the *Réponse au M. Malestroit* of Bodin, very partially mercantilist in outlook. But in the *République* Bodin expresses the typical views of the system. He is strongly in favor of state intervention in industry, and eager for high duties on foreign imports. In England, almost simultaneously, the author of the *Briefe Concepte of English Policy* went further and actually proposed not merely the exclusion of all foreign goods capable of being made at home, but also a prohibition upon the export of raw materials abroad. Within thirty years Antonio Serra was striving, in his *Breve trattato*, to use the prosperity of Venice and the poverty of Naples as proof that the industrial state on mercantilist principle is definitely superior to the agricultural state.

The volume of this literature in the seventeenth century is enormous. In France Montchrétien has secured an enviable reputation for his *Traité de l'économie politique* (1615) in which the name of the science appears for the first time; but the book is in fact a mass of wholesale and unacknowledged plagiarisms from Bodin and his own contemporary Laffemas. The need for colonies, the importance of government control, the danger of economic individualism, are all emphasized with enthusiasm. Thomas Mun in England did a similar work. Laying down witn passion the thesis that the business of the state is so to arrange the balance of trade as to attract money from abroad, he indicated a host of expedients to this end. Mun is merely typical of a number of writers, like Misselden and Pollexfen, who urged the same views.

By the middle of the century, however, there are signs that faith in mercantilism is beginning to waver. The remark of Colbert that protection is a crutch with which the sound limb dispenses is well known. While Sir Josiah Child was a mercantilist upon colonies and the rate of interest, he did not object to the export of bullion, supported the Navigation Acts upon political rather than economic grounds, and saw that an import trade is the unavoidable result of foreign commerce. Charles Davenant, at the end of the century, while mercantilist upon colonial policy, went much further toward liberal ideas in other directions; and Sir William Petty, in this, as in much else, a mind of profound originality, laid down a body of doctrine which links him directly with Hume and Adam Smith. Indeed it may be said that by the end of the seventeenth century England possessed in Barbon, Dudley North and the anonymous author of the remarkable *Considerations on the East India Trade* (1701) an economic outlook which denied at their root all the fundamental mercantilist notions.

France, moreover, was tending in the same direction. The disastrous policy of Louis XIV resulted in a general economic impoverishment, and even in an age when criticism was dangerous, protest against mercantilism began to make itself heard. Boisguillebert was the ablest of the dissidents from the traditional form of mercantilism. In his emphasis on the importance of agriculture he combined what may be called an agrarian mercantilism with elements of a newer doctrine. While he believed in high import duties for the products of industry, he was specially concerned with the problem of improving the position of the agriculturist. He approved not only import duties on wheat but

also export bounties. He was freely cited by the physiocrats because of his insistence upon the primary importance of agriculture. But in fact his approach to the problems of economic policy was quite different from that of the physiocrats. Vauban's analysis, however, was built rather on social sympathy than upon economic insight. But he too has a profound sense that the mass of governmental regulation inhibits rather than promotes prosperity, and his proposed scheme of taxation would have wrought a revolution in the economic policy of the state. The fact, moreover, that a moral philosopher like Fénelon can urge the necessity of freedom of trade shows clearly that liberal ideas were gaining ground.

The reason is not far to seek. Industrial policy in the preceding age had been made subordinate to military policy; or, as with the suppression of the Edict of Nantes, to considerations which totally disregarded secular well-being. The zest for adventure was unsuccessful, and the economic theorists began, like those in matters of religion and politics, to look to freedom from governmental interference as the key to social good. Exactly, in other words, as experience of the state or church as an organ of repression led Voltaire and Diderot, Montesquieu and Holbach to look to religious toleration and political liberty as the ideal, so did the mistakes of the state as the arbiter of commercial destiny lead to an emphasis upon the desirability of laissez-faire. The movement did not come all at once. After Vauban and Boisguillebert there is a period of stagnation which lasted for almost thirty years; for men like Dutot and Melon were still set by the ancient ways, and Montesquieu, although an advocate of economic liberty, nowhere attempted systematic exposition in the economic field. It was not until the rise of the physiocratic school that a liberal policy was developed as a complete philosophy of economic life.

The originator of the physiocratic doctrine was Quesnay, the physician of the Pompadour; but the school of thought he may be said to have founded had wide ramifications. The elder Mirabeau, Mercier de la Rivière, Dupont de Nemours and Baudeau are only the most notable of the direct disciples; but Turgot and Condorcet were deeply influenced by them. Their power over public opinion was never great, and it may be said to have ended when Adam Smith embraced the most valuable part of their teaching in an outlook wider than theirs. But they were the first group of thinkers systematically to study economic problems in terms of liberal principles. They had, as Dupont said, "a body of doctrine defined and complete, which clearly lays down the natural rights of man, the natural order of society, and the natural laws most advantageous to men united in a society." Their starting point was the belief that there are natural laws underlying the social world as final and as real as the laws which explain the physical universe. These laws men must obey in order to secure the advantages of social organization. With their special economic doctrines, as with their insistence upon the value of benevolent despotism, we cannot here deal. What is important is their insistence that maximal production is the effect of the greatest possible liberty to trade. They object, accordingly, to all restrictions upon labor; and their defense of the individual's right to acquire property is, at bottom, an argument that interference with individual effort is an injury to national prosperity because in hindering ownership it removes the basic stimulus to production. Their view of society as essentially an aggregate of individuals, each of whom is not merely pursuing his own self-interest but is also the best judge of that self-interest, naturally led them to regard government as a necessary evil, whose interference should be limited to protecting the rights of one from invasion by another. The ideal government thus becomes that which has least concern with its citizens. Enlightened self-interest, in their view, was much more likely to result in social good than the system of minute regulation and hampering restriction. Obviously this outlook represents the deep distrust of men who had known mercantilism by grim experience. Their view of society was builded upon the political and psychological considerations which made Locke the messenger of liberation to the eighteenth century. Their attitude to nature showed the impact upon them of the scientific revolution. For them reason can discover the laws of the social world, and no government can disregard the relentless operation of these laws.

They came in their due hour; though Germany still remained, with rare exceptions as at Baden, tied fast to the ancient ways. For in Germany economic theory was essentially a by-product of public administration and not an independent criticism of state policy. It arose out of the teaching of economics to men who were to devote their lives to some form of administrative effort. The cameralist tradition,

as it is called, was thus inevitably an effort to clarify, and not to criticize, the work of government. The professors of economics were themselves civil servants, holding chairs founded to enable them to offer practical instruction. The result is a body of ideas intended especially to explain how administration can be best conducted to the best advantage. Such men could hardly be expected to belittle the sphere of the state; they were concerned with practical questions of tariffs, taxation, forestry, mining. Mercantilism naturally expressed the categories of thought they required; and all the leading German cameralists of the seventeenth century accepted, like Bornitz and Schröder, the traditional doctrine. Nor does the eighteenth century see much change. Justi and Justus Möser were unaffected by the new ideas; and though Zincke and Sonnenfels show gleams of a fitful temper, their order of thought was hardly in advance of that of Davenant or Melon. The dominant school was made by the physiocrats and their allies. They showed that the individualism which the Reformation portended had at least extended its empire to the economic sphere. Hutcheson and Hume, the physiocrats and Adam Smith, when they propounded the system of natural liberty, were only completing the triumph of that critical rationalism which was born of the revolutionary experience of the sixteenth century.

For it may be said without exaggeration that after the eighteenth century the policy of the state is above all distinguished by the subordination of its power to industrial need. The recognition is consequent that the commercial life of the nation is the supreme manifestation of its activity. The central theme of political policy thus became the supply of what commercial life required for its full expansion; and to this all effort in the community was increasingly subordinate. The religious discipline to which the individual had been formerly subject could then be replaced by an ethic derived predominantly from economic circumstance. The source of social regulation was no longer supernatural authority but rational utility. The system of natural liberty, moreover, was discovered to result in a harmony of interest between all members of society. This gave to liberalism the character of a doctrine entitled to optimism because, since the individual was thus simply able to realize himself most fully, no limits need be set to the bounds of progress. Laissez-faire as a program was the logical counterpart in social philosophy of Protestantism in the religious, of free inquiry in the intellectual, sphere. Each came as a herald of freedom to an age hampered by obsolete principle. Each definitely enlarged by its victory the area in which the human spirit was free to voyage in self-discovery. But each in its adventure was to find that the abolition of unnecessary social restraint was not identical with the creation of necessary social control.

HAROLD J. LASKI

VIII
The Revolutions

1. It is perhaps a fallacy to consider the revolutions of the latter half of the eighteenth century, the American, the French and the industrial, as manifestations of a common revolutionary spirit working to lay the foundations of modern society. Certainly the changes brought about in these years were complex enough, and sufficiently dependent on earlier changes, to make the historian cautious. Moreover the example of the eighteenth century writers themselves must serve as a warning against too inclusive generalizations. Yet there does seem to be in the western world at this time a very definite *Zeitgeist*, a common attitude distinguishable both in thought and in action. Saint-Just gave this attitude profounder expression than he doubtless knew when he told the Convention, "le bonheur est une idée neuve en Europe." Happiness for everyone was attainable, not in some distant heaven, but here and now on this earth. If old habits, old beliefs, old institutions stood in the way of this happiness for the common man they must be altered. One cannot look into the files of an eighteenth century magazine, or study the life of an eighteenth century man, without becoming aware of this acceptance of innovation. Experiment, in fact as in idea so foreign to the Middle Ages, had by the eighteenth century become a commonplace.

This change appears most obviously in what we may call the revolution in things. It was prepared by the remarkable progress of the physical sciences. Newtonian physics were brought by Voltaire to the level of the *salon*, and very ordinary men came to see the material universe ruled not by mysterious divine laws but by discoverable natural laws. These laws were, it is true, immutable; but once discovered, man had but to adapt himself to them to find himself perfectly at ease with his environment. Moreover was it not obvious that man, too, was a part of the material universe? Much of eighteenth century work in the social sciences is an endeavor to find for human society laws of nature, not in the sense Grotius gave the phrase, but in the sense Newton gave it. Both physics and chemistry progressed throughout the century by the work of careful investigators, and toward the close of the century Lavoisier gave to chemistry its modern form. The biological sciences did not attain the same completeness; but even here the work of so typical a man as Buffon is very important. For Buffon, although he was hardly a biologist in the modern sense, did help enormously to popularize the study of "natural history"; and from that study there emerged a clearly evolutionary concept of organic life, and a geology which Buffon himself had difficulty in reconciling with the book of *Genesis*. Academies and the learned societies increased their scientific activities, and all sorts of men busied themselves with scientific experimentation, and sometimes made valuable discoveries. Franklin, of course, comes to mind at once.

Franklin was not only a scientist but an inventor. His work is an example of the utilitarian purposes to which these studies were turned. Invention was a necessary element in the industrial revolution, and the work of Arkwright, Watt, Cartwright and other English inventors helped to determine the rise of manufacturing in England. Yet this familiar role of invention in the English industrial revolution is of less importance in the study of eighteenth century thought in the social sciences than is often assumed. The middle class in France and in England did indeed furnish most of the writers on social questions, and determined the nature of their thought; but this middle class had been enriched not by the industrial revolution, which had just begun, but by the earlier development of commerce. The literature of protest against the conditions brought about by the industrial revolution grew up much later, and began rather in France, where the industrial revolution was late, than in England, which was very early industrialized. The real importance of mechanical inventions in a study of the social sciences in the eighteenth century lies rather in their psychological than in their industrial effects.

For these inventions, applied to a host of domestic purposes, helped to give to the average

man something of the modern attitude that nature exists to be conquered. In 1783 the brothers Montgolfier sent their first balloon aloft, and two years later Pilâtre de Rozier achieved a very modern death attempting to cross the English channel in the air. In less spectacular ways land travel was speeded up enormously through improvement in road making, in coach building and in the organization of posts. Agricultural methods were improved, and household conveniences increased. In fact the eighteenth century was quite sure that it had already attained a state far ahead of previous ages. The carping conservative existed, of course, as he always has, but the feeling was quite general that man is a creature of great possibilities and that there is no limit to his ability to improve the conditions of human life on this planet. The idea of progress, discernible clearly enough in seventeenth century writers like Descartes and Bossuet, is fully developed in a host of eighteenth century writers such as Turgot, Rousseau, Condorcet and Adam Smith. The idea is even given a biological application in Lamarck's theory of evolution, where the will does wonders with environment. Need it be pointed out how far this perfectible man is from the fallen man of Christian tradition?

From improvement in material environment it is an easy step to improvement in political and social enviroment. The revolution in institutions was no less marked than the revolution in things. The characteristic form of this revolution up to the very end of our period, however, was not popular but autocratic. Most of the writers with whom we are concerned lived under a benevolent despotism. Frederick the Great, Catherine and Joseph II are stock examples, but George III and Louis XVI, each in his own way, were trying hard to be benevolent despots. Voltaire, for all his humanitarian enthusiasms, could hardly conceive any effective agency for reform other than a wise ruler. Modern knowledge made possible great improvements in the condition of the people, but the people themselves were too ignorant or too selfish to take the philosophic view, and reforms must be made from above. The king was no longer to rule by divine, but by philosophic, right.

Benevolent despotism, however, could not long contain the reforming spirit of the age. Too much, for one thing, depended on the personality of the despot, and the supply of despots was irregular. Moreover in France and in England the well-intentioned efforts of the crown met from the start with an organized opposition supported by what may be called the popular party. Reforms were usually made piecemeal, and often disturbed established interests without pleasing those supposed to benefit from the reforms. The career of Turgot in France shows how uncertain a reforming monarchy could be. Finally these reforms were essentially paternalistic, and gave insufficient outlet for the energies of the rising middle class.

That class was now in most of western Europe thoroughly prepared to fend for itself. For generations it had been growing richer. Less tempted than the nobles to spend money on mere luxuries and often indeed forced into plain living by Calvinist or Jansenist principles, the middle class had profited by the expansion of trade to secure a position of economic power more advantageous in many ways than that of the old landed nobility. And following what seems to be a law of politics, it was seeking to gain a political power corresponding to its economic power. With increasing wealth came also increasing opportunities for education. Pedagogy itself, in spite of Rousseau and Pestalozzi, made little progress in the eighteenth century. Most middle class boys received a thorough classical training, which later bore fruit in a host of revolutionary Brutuses and Mucius Scaevolas. What was really important, however, was the opportunity for a continuous adult education afforded by the great increase in newspapers, periodicals, lending libraries and reading clubs. Much of the literature of the time, from Defoe, the English essayists and their French and German imitators on to the encyclopaedists, is written for the middle classes and, if the Marxian implications of the phrase can be forgiven, is definitely class conscious. In a hundred plays and novels the besotted and vicious nobleman is outwitted by the virtuous commoner.

In the American and French Revolutions the middle class achieved political power. In England the revolution began with Wilkes and Middlesex, though it did not translate itself into institutions until 1832; yet the slowness of the change ought not to blind us to its reality. England, like the rest of the western world, underwent a political revolution in the eighteenth century. Fashions in historical writing have occasionally obscured the fact that the American Revolution was a social revolution as

well as a civil war. Certainly, however conservative a Hancock or a Washington may have been, the repercussion of the American Revolution in Europe had anything but conservative results. The French Revolution, however, remains the pattern of the modern democratic movement, and the focus of the ideas with which the middle class began its rule. A republican form of government, universal suffrage, equality before the law, universal education, abolition of government and other monopolies in trade, and the career open to talents—these, if not actually realized, were all a part of the program of the first French Republic. "Liberty, Equality, Fraternity," became a symbol in which the more idealistic aspirations of the people could be centered; patriotism became a fact which satisfied their more practical aspirations. Modern democracy had found its institutions.

The revolution in ideas is no less real than the revolution in things and the revolution in institutions. The textbooks have labeled this movement the rise of romanticism. Now there is no great objection to assigning to the word romanticism ethical and philosophical implications which cover the whole field of human thought, although clearer thinking might have resulted from limiting the word to aesthetics. But granted that romanticism is an attitude toward life, it was surely not the attitude of all the revolutionists. What was really new in late eighteenth century thought was an extraordinary blend of rationalism and romanticism. Rationalism employed the methods of logic, refined and improved by generations of thinkers, to demonstrate the weaknesses of existing institutions, and to construct in theory institutions without weaknesses. Romanticism brought to these theories a faith and an animal energy without which they could hardly have moved men to action. Romanticism in the age of revolutions was thus the complement of rationalism. The calculating Bentham and the mystic Wordsworth are both revolutionists; and sometimes, as with Rousseau, who wrote not only the *Nouvelle Héloïse* but also the *Contrat social*, the same man is both romanticist and rationalist. The two attitudes were soon to part company in the history of thought; romanticism, finding more emotional satisfaction in ancient irregularity than in modern uniformity, was on the whole to turn conservative, while rationalism, newly christened utilitarianism, was to continue on the side of the innovators. But the point for us to notice is that in the latter half of the eighteenth century the rationalist temper, seeking to translate into life the orderliness of the thought process, and the romantic temper, seeking an ecstasy beyond thought and sometimes beyond life, did collaborate in the attack on the *ancien régime*.

In such a historical setting it is not surprising that what we now call the social sciences should have attracted active minds. There seem to be good reasons for believing that in the latter part of the eighteenth century more intellectual energy was spent on the problems of man in society, in proportion to other possible concerns of the human mind, than at any other time in history. Such a statement is perhaps an exaggeration, and certainly is not susceptible of proof; but it ought to focus attention on the extraordinary place occupied by the social sciences in the life of the time. Hardly anyone seems free from sociological preoccupations. French literature is almost too perfect an example. It is hardly possible to find among French writers between 1750 and the revolution one who, like Villon, like Ronsard, like Racine, has wholly an artist's interest in his fellow men. Any literary form could be adapted to the purposes of the reformers. The public found political allusions in Voltaire's very classic dramas; moralists took over the novel, cleansed it of its picaresque impurities, and used it to persuade men to social virtue; and lyric poetry, which seemed of little use to the sociologist, was abandoned. The difference between pure literature and literature inspired by social purpose will be very clear from the slightest comparison of a work like Longus' *Daphnis and Chloë*, which is a real idyl, and Bernardin de Saint-Pierre's *Paul et Virginie*, which is propaganda in favor of the state of nature. But English literature is hardly behind the French in its preoccupation with the problems of man in society. Gray is almost alone in his elegiac indifference to so light and necessary an evil as politics. You may extract bits of Rousseau from *Tom Jones*; and as the century goes on, lesser novelists like Bage, Holcroft and Mrs. Inchbald are nothing but propagandists; Johnson was a moralist and a Tory, and certainly wrote no pure literature. In Germany literature from Gleim and Gellert to the young Schiller, though its main concern may be to nourish intensity of feeling, is certainly more moralistic in tone than lyrical.

The point we have made as to literature, that

it kept branching out into the social sciences, could be made in the same way about other fields of human activity. A few names will have to suffice: Frederick the Great, chiefly a king, but also a *philosophe* and author of an *Anti-Machiavel*; Turgot, civil servant and economist; Mirabeau, great lord and economist; d'Alembert, mathematician and moralist; Tucker and Price, clergymen both, the first an economist, the second a political philosopher; Priestley, chemist and political philosopher; Franklin, merchant, scientist, inventor and philosopher; Burke, at once a politician and a great political thinker—perhaps the most surprising combination of all. So far indeed did this invasion of other fields of thought by the social sciences go in France that the word *philosophe*—a word on everyone's lips at the time—though it can hardly be translated into modern French, is probably most nearly rendered *sociologue*.

Whether this extraordinary flowering of the social sciences came about through the revolutionary tendencies of the age, or whether these revolutionary tendencies came about through the flowering of the social sciences, are questions that can be finally answered by faith alone. But it may be pointed out that both the advancement of the physical sciences and the rise of the middle class determined, if not the existence of the social sciences, at least their character and development. The human intellect had mastered astronomy, physics and chemistry by discovering the uniformities or laws behind the apparent diversities of nature. What more natural than to attempt by the same means to discover the laws of politics or economics? Then, with the growth of the middle class in wealth and in education, there came an inevitable increase in interest in man as a social and political animal. For the middle class was too large to gain its experience of politics directly by personal contact, by struggle and intrigue. It was obliged to learn indirectly from books. Moreover it could not act as a body from direct knowledge, nor could it cohere, as could any oligarchy, through the intimate relations between its members. The middle class had to learn its politics from the printed page and the lecture platform; and its politics, in order to be workable, had to be translated into theories, symbols, a ritual. Finally, since fashion is hardly less influential in intellectual than in other human activities, once men of reputation got to writing on social and political matters others took it up. The French *salon* proved peculiarly adaptable to serious discussions about the natural goodness of man, the corrupting influence of bad governments, the relative virtues of monarchy, aristocracy and democracy and similar topics. There is no doubt that the social sciences were enjoying a boom.

Three general remarks may be made about the vast body of writings resulting from this interest in the social sciences: it is predominantly French; it is almost always politically partisan; it is comparatively undifferentiated as between separate branches of the study of man in society.

Great Britain contributed much to all the social sciences in the period, and economics is not too unjustly called in origin a British science. Yet France possessed in the eighteenth century a reputation as the center of thought and fashion which she has since lost, but which no single nation has acquired. Even English thought was spread largely through the western world in French translation or in French adaptation. The social sciences were cosmopolitan enough both in the origins and in the outlook of the men who studied them; but that cosmopolitanism has a tinge as definitely French as the manners and the clothes of the time.

Much of the political writing of the period is frankly polemical, even when it appeals to general principles, as with Voltaire; but even where the writer protests his dependence on the law of nature or on scientific principles, political purpose comes out clearly enough. A Hume may indeed maintain a skepticism about the customary explanations of the origins and continuance of civil society; but his philosophical skepticism only leaves him the freer to insinuate conservative preferences in practical matters. Most of the writers of the time, however, are definitely on the side of innovation. The *philosophes* in France were accused by their enemies of being a sect, and at the very least they were a political party of advanced views. English economics was revolutionary enough in its attitude to certain established institutions. In fact Burke is almost the only genuine conservative among the great political thinkers of the period.

What is most surprising to the student of today in eighteenth century social science is its lack of differentiation into fields—political theory, jurisprudence, sociology, social psychology, anthropology and so on. This may appear at first to denote a surprising versatility

in individual writers. Condillac is a psychologist and also an economist; Adam Smith is an economist and holds a chair in moral philosophy; Montesquieu is jurist, historian and sociologist; Rousseau an educational psychologist, a political theorist, even a bit of a theologian. But the difficulty goes beyond individual versatility to the works themselves. Just how is *De l'esprit des lois* to be classified? or *Dei delitti e delle pene* (which is obviously too humanitarian to be strict jurisprudence) or Raynal's *Histoire des Indes* (which is hardly history at all)? The fact is simply that specialization in the social sciences had not yet set in, and that we shall have to bear this in mind in judging what the late eighteenth century contributed in this field. And for the purposes of a brief review of the leading writers we shall have to employ a very simple classification: first, political writers, a necessary catch-all term to cover the very undifferentiated nature of the field; second, economists, a fairly definite group of men; third, historians, who again are pretty well earmarked as such.

Montesquieu's *Esprit des lois* (1748) is the natural point of departure for a study of the political writers of the age of revolutions. It quickly attained enormous prestige, it obviously had an influence on political action, especially through its emphasis on the doctrine of the separation of powers, and it remains today a political classic. What seems to us now its chief virtue is its attempt to explain existing laws in terms of the whole of human life. Montesquieu finds in any given state a set of laws; these laws have, he believes, been brought into being by the complex play of natural causes—the size of the country, its climate, the religious beliefs of the people, their wealth, their commerce, their morals, their political constitution. By a careful study, then, of these observable facts in the social life of a people he hopes to be able to show how their laws are adapted to their character and circumstances. Once he has succeeded in showing how this adaptation came about, he is in a position to suggest ways of making it more perfect, of providing for a given people a better set of laws. But he will not make the mistake of spinning out of his own brain an ideally perfect set of laws, suited to all times and to all places. By going to facts instead of to philosophy, he has become convinced that all legal systems are relative to particular, and varying, conditions of life. Although there is implicit in it a kind of historical fatalism, the *Esprit des lois* none the less approaches the study of law from the point of view of the sociologist, the psychologist and the historian; its method is essentially inductive. In these ways it is still a very modern book.

But Montesquieu had the greatest success with his contemporaries at precisely the points where he seems false to his method. No scientist of course believes that facts take care of themselves, even in induction. But in true induction hypotheses seem to grow out of a collaboration between observed facts and the mind of the observer. Montesquieu's famous classification of governments, which fills the first eight books of his work, shows evidence of a desire to fit facts into categories arrived at *a priori*, often for purposes of propaganda. There are three forms of government, republican, monarchical and despotic, which have respectively as principles virtue, honor and fear. Now this is inferior, both as to observation and as to logic, to Aristotle's famous classification. Moreover a despotism is merely a kind, even though a bad kind, of monarchy; Montesquieu is here clearly inspired by a partisan zeal to show Frenchmen the horrors of despotism and to prevent the French monarchy from turning despotic. He is, in short, being politically partisan. The well-known analysis of the English constitution, the principle of the balance of the three powers, executive, legislative and judicial, and the virtues of a mixed government, where king, nobles and people also contrive to effect a balance of power, is another example of Montesquieu's failure to avoid stiff, absolute, *a priori* categories. This part of his work came to reenforce Locke, and the two together have been tremendously influential; yet the modern social scientist will see in this rather an attempt to mold facts to a theory than a true induction. That the theory, in spite of its incompleteness, should have proved fruitful both in practical politics and in political thought need not surprise us. The eighteenth century had a way of jumping at conclusions and then acting upon them. But the importance thus given to the conclusions forced critics to a renewed and more careful study of the problem. The history of the doctrine of the separation of powers in the United States is a case in point.

The political thought of Voltaire is scattered throughout his vast work, in his histories, his *Dictionnaire philosophique*, his satires and his correspondence. He never wrote a systematic

treatise on government, and it is idle to seek to found an orderly system upon his "chaos d'idées claires." But his influence at the time was so great that the historian of opinion cannot neglect him. He is the great theorist of the benevolent despots. He has no faith in the common man, and is neither emotionally nor intellectually affiliated with the democratic movement. Yet he did in practise become its ally and, after his death, one of its patrons. Voltaire helped the democratic cause and incidentally the growth of the social sciences, first, by his steady opposition to intolerance and bigotry, second, by his willingness to criticize any established institution in the light of reason, and finally, by his admiration for the liberal elements in the English constitution. He is particularly important as one of the chief sources of inspiration for the anticlerical movement which has since played such an important role in European politics.

Rousseau is the third of the triumvirate upon which writers have often thrust responsibility for the French Revolution. The *Contrat social* (1764), though it no doubt served as a handbook for revolutionists, is as much a permanent addition to political thought as the *Esprit des lois*. The common criticism that men never did at any moment in history get together and sign a social contract is of course absurd. Rousseau never thought they did. The *Contrat social* is an unusually penetrating attempt to answer a fundamental question in political psychology: Why do men accept the authority of society? Rousseau employs what is after all only a figurative expression—the contract—to explain that in the long run men do what a given society wants them to do because by an act of faith they have identified their individual wills with the will of the society. Rousseau probably did think of this general will of society in metaphysical terms, as partaking of the reality which the Platonist assigns to universals. But the empiricist may well accept much of his analysis. For whether the group, and hence the group-will (general will), be real or not, the individual in his relationship to the laws and to the rulers of a group does almost always personify, or even deify, the group, and hence puts his obedience, even though unconsciously, on a religious basis. A man will accept willingly the constraints set upon him by society because he feels these constraints are set by a superior and a better will which is yet somehow the expression of something within him. At bottom the psychology of obedience to civil authority is the same as the psychology of obedience to religious authority.

The revolutionists, of course, found much more than this in the work of Rousseau. The general will came, at least in popular opinion, to be identified with the will of the majority, a confusion against which Rousseau himself had carefully guarded. Much of the phraseology of the *Contrat social*, like the famous sentence "L'homme est né libre, et partout il est dans les fers," lent itself to the uses of political radicalism. A great deal of what Rousseau had taken pains to show could apply only to the small city-states of antiquity and to their direct democracy was given a modern application. The most revolutionary of Rousseau's doctrines, however, that of the natural goodness of man, is not to be found in the *Contrat social* but in the *Discours sur l'origine de l'inégalité parmi les hommes* (1753), the *Nouvelle Héloïse* (1760) and the *Emile* (1762). Man, regarded simply as a creature of animal appetites and passions, is essentially good. If these appetites and passions now waste themselves in corruption, it is because civilization, with its laws, its institutions, its religions, its arts and sciences, has turned them into evil ways. Even the much praised master faculty of man, his reason, has aided in leading him astray. His heart is his one true guide. Rousseau, though he did not originate this doctrine, is clearly in the eighteenth century the center from which it spread. It became in the hands of some of his successors a thoroughgoing denial of the value of thought and an exaltation of the value of feeling, and as such is the leading theme of the romantic movement. Its political consequences are clear and important. In its mildest form it is merely a belief in the rightness of the plain people, and hence in the ordinary machinery of democracy; for the common people are less corrupted by manners, education and luxury, and hence are nearer nature. In its extreme form it amounts to anarchy. For if men's instincts, pure and uninfluenced by civilized corruption, are good, then we must trust each man to follow his own instincts, and not corset him with unnecessary and vicious laws. Moreover the doctrine of natural goodness brought support to egalitarianism. Goodness is in the natural man a matter of feeling; but men obviously differ less, even in the light of nature, in their capacity for feeling than in their physical and intellectual capacities. Equality in this sense seems almost a fact.

Rousseau's doctrine of the natural goodness of man led him toward individualism; his doctrine of the social contract, whereby the individual submerges his will in the general will, led him toward collectivism. He never seems quite able to choose definitely between these alternatives. In the same chapter of the *Contrat social* (bk. ii, ch. iv) he says that the social pact gives the body politic absolute power over all its members, but that individuals possess natural rights which they must enjoy as men; that though each citizen under the pact alienates all his powers, goods and liberty to the community, he alienates only the part of these which concerns the community; that, however, the sovereign is the sole judge as to what concerns the community. He probably leans somewhat to collectivism. Both collectivists and individualists appealed to his work for support, but on the whole his practical influence has been in favor of collectivism (the Jacobins, early socialism).

Most of the men commonly grouped together as the *encyclopédistes* wrote a great deal on social problems, although the great encyclopaedia itself does not devote much space to the social sciences. Although these men gave personal interpretations of their own to many questions, they none the less stood together on important issues, and it will not be unfair to select one of them for special treatment. Holbach's *Système social* (1773) is a work obviously inferior to those we have hitherto considered. It is full of bad rhetoric and special pleading and raises far more problems than it attempts to solve; or rather it solves them with a phrase, "let reason rule." Holbach starts with a definitely utilitarian psychology. Man is neither bad nor good; he is born with an instinct to seek pleasure and avoid pain. If he is allowed to follow these instincts, that is, to pursue enlightened self-interest, he will so act that his own pleasures, and therefore those of his fellow men, are maximized. The science of politics is simply the application in society of this simple moral principle.

Society is based on a social pact, actual or assumed. Holbach is not quite sure as to who are the parties to this contract. At first it is a contract between individuals to make a society; then it becomes a contract between the individuals governed and the government, or sovereign, set up by the previous contract. But in both cases Holbach retains the Lockian idea that the individual promises obedience, and society or the government promises protection of property and liberty, and that where this protection fails the contract is broken and the individual absolved from obedience. In the state so set up the form of government does not matter, and the old dispute as to the respective virtues of monarchy, aristocracy and democracy is an idle one. In the past they have all three proved bad, anyway. What does matter is that the civil laws of these states should correspond to natural laws, and that men should obey not other men but the law. This law of nature, about which there has been so much vain dispute, is very simple; it is simply the psychological law of enlightened self-interest. If men are properly brought up they will follow this law and, one would think Holbach obliged to conclude, will not need any government.

He does not, of course, so conclude, for he was hardly a logician. When he does abandon rhetoric for something like a concrete program, he is far from iconoclastic. Men have in the past always been the dupes of their vicious rulers; history is a long record of crimes and failures. Holbach, like all his fellows, attacks monarchy under the name of despotism. But he is no great admirer of the English constitution; the balance of powers is a balance of selfishness. Indeed in the latter eighteenth century French admiration for the English constitution was vastly lessened by the attack of the rationalist *philosophes* and by heightened national self-consciousness. Some form of popular government is desirable, but Holbach hastens to make clear that he does not mean that the ignorant and irresponsible masses should have political power, but only the merchant, the artisan, the professional man. Here again there comes in the class consciousness of the bourgeoisie. He leans toward individual liberty, even to laissez-faire, for the individual best knows his own interest. The book concludes with a reversion to the idea of the benevolent despot, and an exhortation to princes to let the light of reason prevail.

It should be clear that much of this radical thinking about nature, the rights of man, and the evils of monarchy touches doctrines we now call socialistic. Indeed Montesquieu himself writes that "the state owes to every citizen an assured subsistence, proper nourishment, suitable clothing and a kind of life not incompatible with health" (*Esprit des lois*, bk. xxiii, ch. xxix). Rousseau in the *Discours sur l'inégalité* blames private property for the fall from the state of nature, although in the *Contrat social* he

accepts it as necessary in the modern world. Yet the great political writers of the century do not in the main attack the institution of property; and the socialism to be found often enough in the work of lesser men is moralistic and utopian. There was as yet no large urban proletariat in France, no factory system, no proletarian class consciousness. Therefore there was no driving force behind socialistic ideas. That these ideas, in content essentially the same as socialistic ideas in the nineteenth century, should have cropped up in an environment apparently unsuited to them, makes an interesting problem in the relationship of political speculation to political practise. Here, apparently, ideas feed upon ideas, instead of upon social and economic necessity.

Since one must single out one of these socialistic writers for further analysis, it will be well to take Morelly, so little known in his own time that his chief work was attributed to Diderot, but since acknowledged by socialists as one of the founders of their faith. The *Code de la nature* (1755) constructs from the true principles of morals an ideal society. Man is gifted with so many varied desires, and nature herself is so generous, that if the fruits of this earth were not monopolized by the few through the institution of property, everyone could always have what he wanted. If someone had already eaten up the peaches, the hungry man could turn to the pears. In the state of nature these idyllic conditions obtained, but the first law givers permitted private property and gradually all existing evils grew up. Man, at bottom good, has been corrupted by institutions. Morelly next draws up a code to restore the state of nature, though it is not clear how men are to be made to accept the code; he admits the code could not be accepted in his own day.

This ideal constitution has three fundamental laws: there is to be no private property save in objects of personal use; each citizen is supported by the state; each citizen will labor for the state according to his strength, his talents and his age. There are in addition an elaborate territorial and family organization on a decimal system, provisions for public buildings and city planning, and a scheme for education and police. The whole suggests Fourier's idea of the *phalanstère*, but Morelly lacks completely the psychological subtlety of Fourier. What is particularly interesting in the *Code*, however, is a whole section (pt. ii) in which Morelly tries to find a basis in fact for his theories. Community of property, far from being a mere deduction from abstract principles, is, he says, a historical fact. Primitive communities did not have private property, and in our own day the Red Indians show how a people can pursue agriculture under a tribal community of goods. Early legislators corrupted European nations by codes of laws which permitted inequality; the best and most socialistic of these early codes, that of Lycurgus, was precisely the one that lasted longest. This appeal to experience may seem to us rather inadequate; but the important thing is that Morelly felt obliged to make it.

Almost all the currents of political speculation in eighteenth century France converge in Jacobinism; yet because Jacobinism was the creed of a political party and hence translated into action, and because its leaders formulated their ideas chiefly under the pressure of parliamentary necessity, historians of political thought have left the subject to general historians like Taine or Aulard, who are perpetually attacking or defending the party instead of analyzing the creed as objectively as possible. Now Jacobinism as a form of political philosophy, though composed of elements familiar to the student of eighteenth century thought, is, like all true compounds, a new element, and not to be understood as a mere sum of its parts. This philosophy is best sought in the writings and speeches of such leaders as Robespierre and Saint-Just. Rousseau's concepts of the general will, the social compact, the rule of virtue have been transformed into a democratic ritual. The metaphysical rights of man become the Declaration of the Rights of Man and are incorporated into the French constitution, where they promise protection to property, freedom of speech and other tangible things. The revolutionary government, said Robespierre, is "the tyranny of liberty against despotism." The opponents of the Jacobins are wrong, and one cannot be free to do wrong. To guillotine them is to prevent them from doing wrong—that is, in a sense, to free them. The general will is not the will of all, but the will of all who possess virtue—in theological terms, all who are in a state of grace. The external signs of this state of grace are outlined by Robespierre and Saint-Just: the unified nation state; a republican form of government; public worship of the Supreme Being; obligation of all to serve the state, particularly in war; simplicity and decency of manners; the absence of extremes of wealth and poverty, but with private property

and private commercial enterprises; universal education and hence universal suffrage, save of course for non-Jacobins. Robespierre's own standards of conduct were far too puritanical to have been applicable to French life, even had his political methods been wiser, and the failure of the Jacobin republic was inevitable. But the essential ideas of Jacobinism have influenced French and even other governments ever since.

All the representatives of French political thought just considered were hostile to the established order. Political thought in England, where political issues could be fought out in Parliament instead of in the press, and where social issues seemed less serious than in France, was less one-sided. Conservatives like Blackstone and Johnson were even more read than radicals like Price and Priestley. Those who are fond of distinguishing national differences will easily find other ways in which English political thought of the period had characteristics of its own. In method, however, there is little difference between eighteenth century French and English political thinkers. Both schools, indeed, went about the study of the social sciences in much the same way—a fact to which we shall later return.

David Hume was in politics a conservative; he was, however, a rationalist and a polite anticlerical. Had he been born a French citizen, circumstances might have overcome his temperament and made him a reformer like his friends the *philosophes*. But in England fashion was not unkind to conservatives. He never produced a systematic treatise on politics, but his *Political Discourses* (1752) contain some very interesting speculations. He thinks that politics may be reduced to a science, and a mathematical science at that. But the sort of scientific laws of politics his study afforded him may be judged from this one: "That an hereditary prince, a nobility without vassals, and a people voting by their representatives, form the best monarchy, aristocracy and democracy" ("That Politics may be Reduced to a Science" in *Essays Moral and Political*); and in another essay ("Of Civil Liberty") he admits that, even were the art of reasoning more perfect than it is, our paltry three thousand years of history do not provide us with enough materials to make scientific conclusions.

Hume points out how in his England each party has built up a philosophical system "to protect and cover that scheme of actions, which it pursues" ("Of the Original Contract" in *Essays Moral and Political*)—an anticipation of the modern psychologists' "rationalization." He attacks both the social contract, which he says is ridiculous if, as with Locke, it pretends that all government at all times depends on the voluntary consent of the governed, and the divine right of kings, which he shows can mean only that the divine power has instituted kings as it has instituted constables, and that therefore the authority of both king and constable is equally divine. We have finally left as an explanation of why men obey in civil society only mere custom or habit, which is to say little more than that men obey because they obey. Hume's politics, in spite of scattered aphorisms which are often very penetrating, is as bankrupt as his epistemology. He did, indeed, construct an ideal state ("Idea of a Perfect Commonwealth" in *Political Discourses*), which he would not establish by any violent means but which he is so sure is in accordance with the laws of politics that once established it ought to prove as near immortal as anything in this world can be. Yet even where Hume appears most abstract and rationalist, he is often, like so many eighteenth century writers, curiously near to facts. He proposes, for instance, a "court of competitors," composed of defeated candidates for his senate who shall have polled one-third or more of the votes of their constituencies, and gives this court power to criticize and impeach senators. We must remember that Hume wrote in the infancy of the party system, when most publicists considered parties as troublesome factions. He has gropingly seized the idea of "His Majesty's Opposition."

Of the school of writers who defended the English constitution as the best type of government actually realizable, the Genevan Delolme will serve as the best example. His *Constitution of England* (1775) was for a long time almost as popular in England as Blackstone's *Commentaries*, and illustrates the essentially conservative, if Whiggish, view that the eighteenth century compromise in English government deserved to stand as a pattern for the political efforts of mankind. Delolme starts with the important assumption that "it is upon the passions of mankind, that is, upon causes which are unalterable, that the action of the various parts of a state depends" (introduction). His book is an elaborate, and often acute, analysis of the machinery of the English government seen as an elaborate device for neutralizing the evil passions of men by a system of checks and

balances which allow the good passions as free play as possible. He sees the great part the lessons of experience have played in English politics, and insists that experience, not abstract reason, must be our guide in such matters. But though he claims to follow English lawyers and derive his "rights of Englishmen" empirically (bk. i, ch. iv), it is hard to distinguish these rights as he formulates them from the celebrated rights of abstract man. What is most interesting in Delolme's work is his complete failure to see the real significance of the facts he has carefully observed. The party system, the true nature of the royal prerogative, the union of "executive" and "legislative" powers in the cabinet, all escape him. Writing at the time of the Wilkes case and the quarrel with America, he could describe the English political system as perfectly adjusted, and could completely ignore the symptoms of grave social unrest evident in the rise of Methodism. These errors, like so many similar errors in eighteenth century political thought, lie not in a wilful ignorance of facts, but in a preconceived and dogmatically maintained interpretation of the facts.

Jeremy Bentham, in spite of his radicalism, appears as a thoroughly British political thinker, presumably because he attacked with violence the concepts of natural rights and social contract appealed to by the French revolutionists. His first work, the *Fragment on Government* (1776), however, exposes these fallacies in the work of a countryman, Blackstone. *The Principles of Morals and Legislation* (1789) is a working out in these fields of the great principle of utility, already announced in the previous work. Bentham's most active period of political writing lies in the nineteenth century; but though his radicalism on political questions increases with age, his methods of thinking do not change.

Men, for Bentham, seek pleasure and avoid pain. A careful observer, studying the actual physiological and psychological effects of the various forms of pleasure on man, can rank these pleasures in a sort of hierarchy and then, with the aid of mathematics, devise a scheme of human life whereby the maximum number of men would enjoy the maximum amount of pleasure. Existing institutions can be subjected to criticism by comparing them with this scheme of things; the critic can discover just wherein society now fails to provide the greatest good of the greatest number.

This principle of the greatest good of the greatest number, explicit in Bentham, is implicit in most of the other utilitarians of the time—Paley, Butler, Hume, Holbach. Bentham, however, pursued into all manner of fields—criminology, jurisprudence, constitutional law, economics, education—the guiding principle of utility. In many of them his work has been very fertile in practical results. Yet curiously so wise a guide as utility led to the same goal as that most foolish of guides, natural rights. Bentham's program was much the same as that of the French revolutionists—a republic, universal manhood suffrage, annual parliaments, abolition of the House of Lords, the ballot, codification of the law, secular education and freedom of speech and trade. The explanation of this coincidence is partly that the defenders of natural rights maintained that these were rights to pursue happiness and avoid pain without diminishing the happiness or increasing the pain of one's fellows—that is to say, they based rights on utility. But a more profound explanation is that the real criteria by which both Bentham and his natural-right opponents judged human actions were the same. Bentham carefully appraised the value of human pleasure, on the whole much as a thoughtful Protestant would do. Faced with the bewildering complexity of the world, he tries to simplify it and make it a neater and a nicer place. This is exactly what the French reformers tried to do. Both have a set of values which serve to clothe the abstractions "utility" and "natural right"; and these values are essentially those of the Protestant reform. Utility may seem at first sight, and in the hands of some thinkers may really be, a principle close to common sense and worldly things; in the hands of Bentham, in spite of the many tangible changes it helped to bring about, it becomes quite unworldly and unreal.

Bentham, like the Jacobins, would hold the individual to the moral and political compulsion of a republic of virtue. One hesitates, if only out of respect for tradition, to call him a collectivist; but he was certainly no anarchist. The privilege of providing modern Europe with the first political anarchist was, indeed, reserved for the land of political compromise and illogic. William Godwin, more courageous than his French masters, followed up his assumptions to their bitter and logical end. His *Enquiry Concerning Political Justice* (1793) is based on a touching, if un-English, faith in reason and in the perfectibility of man. Men's passions are under the complete command of their intelligence; their intelligence is capable of receiving the com-

mands of reason; the commands of reason are always exactly fitted to the necessities of the moment. Therefore it follows that only reason, freely working within his mind, should command a man to do something. That a man should oblige his fellow man to act according to reason is superfluous; that a man should oblige his fellow man to act contrary to reason is unjust. Similarly no man should be obliged to obey a written law which, if it applies to the case, is superfluous and which, if as is most likely it cannot apply to a case uniquely a combination of circumstances, is unjust. Therefore there must be no interference by force with a man's will; we may, indeed we must, reason with him, and then of course he will act rightly. Godwin has considerable trouble explaining how so many men in his day have lost this complete possession of reason. He is not very clear on the subject but implies that so many human actions became habitual that men ceased thinking about them, and a partial atrophy of reason set in. The remedy is to set our minds at work continually revising our beliefs. In the present order, of course, vicious institutions keep many men poor and ignorant.

Godwin's anarchism is complete. The family naturally falls before it. Private affections cloud the intellect, and prevent our treating all human beings alike according to the dictates of reason. "The abolition of the present system of marriage," he believes, "appears to involve no evils" (*Political Justice*, 4th ed., 2 vols., London 1842, vol. ii, bk. viii, ch. viii, p. 244). Even voluntary cooperation, as in musical concerts, seems evil to him. Naturally the state, which implies a cooperation in part involuntary, cannot stand. Godwin finds that all government—monarchy, aristocracy, democracy—rests upon the fraudulent assumption by certain men of the power to substitute their wills for the free thought processes of their fellows. The pretensions of a representative assembly to decide matters with the authority of its constituents are ridiculous. Godwin ends by reducing government to a minimum of purely local policing necessary to prevent the evils of anarchy (the word anarchy having bad connotations for him, he does not use it to describe his own system). *Political Justice* may of course be dismissed as the culminating absurdity of the method of deducing a political system by abstract logic from unexamined premises. The present renewed interest in the book, after a century of neglect, is hard to explain. Perhaps our social scientists are unusually anxious to profit by the mistakes of their predecessors; perhaps Godwin's philosophic anarchism flatters underlying human desires increasingly unattainable in the modern world.

The criticism generally leveled against American political development, that it has not produced political speculation of a high order, is certainly not true of the eighteenth century. If only because of the necessity of working out the relation between the federal and the state governments, the American experiment would be important for the political theorist. Out of the mass of interesting pamphlet literature on the rights of the colonists, the rights of man and the proper form of the new government there emerge particularly the names of Hamilton, Jefferson and John Adams. One general caution must be observed in any study of these men. America has never quite been Europe, and Jefferson himself proves the existence of an opposition even at this time. But Europe was not yet condescending, and the superiority which certain Americans cherished was one based on their nearness to nature—to nature in the eighteenth century sense, the mother of philosophy and natural right. One cannot of course leave Braintree out of John Adams, or Piedmont Virginia out of Jefferson; but as political thinkers and especially in a rapid survey such as this, they are best seen as contributors to a body of thought common to the western world. They belong quite simply to the age and company of Blackstone and Bentham, Mirabeau, Condorcet and Beccaria.

John Adams, both as a politician and as a political thinker, presents certain obvious and often remarked analogies with Burke. For neither of them can there be any question of genuine apostasy from political beliefs founded in conscience. Adams' *Defence of the Constitutions of Government of the United States of America* (London 1787–88) and his *Discourses on Davila* (written as newspaper articles in 1790, published in book form, Boston 1805) stand as the assertion of these beliefs, and it is idle to fling at him bits of his writings of the seventies in apparent contradiction of them. These pamphlets, together with some of the writings of Calhoun, are perhaps the best examples to be found in American thought of formally theoretical political speculation. With their apparatus of classical learning, their wide range of reading among the proper philosophers from Plato on, their clear-cut generalizations, their aristocratic

prejudices, and their curiously personal quality which can perhaps be described, in a villainous paradox, as a sort of cold gusto, they seemed to the nineteenth century rather old-fashioned. Today, now that some of their qualities are again in good repute, they seem less remote.

Adams here is definitely a conservative. Men are not born equal; fitness in each sort of human activity is the gift of the few. Obviously even government should be conducted by the fit. His well-known definition of an aristocrat, unfortunately too long to quote (letter to John Taylor, *Works*, ed. by Charles Francis Adams, 10 vols., Boston 1856, vol. vi, p. 457) is an excellent example of his style and thought. History shows him that democracies can be as tyrannical as absolute monarchies, in that they make possible the tyranny of the majority over the minority. The people are quite as given to luxury as their betters; luxury is self-indulgence, and the footman is as fond of gin, porter and pudding as his master is of burgundy and ortolans (*Defence*, vol. vi, p. 94). He admires the English constitution, and believes in the necessity of checks and balances, of which he discovers eight in the American constitutions. We cannot follow further into the details of his thought, of which the foregoing must serve as examples. The roots of his conservatism (if conservatism be taken to mean a distrust in the capacities and intentions of the ordinary man) lie probably in Calvinist Christianity; yet in some ways Adams' conservatism seems less built out of mystic religious experience and more out of common sense and a politic acceptance of the world than Burke's. In method, certainly, Adams is far from the abstract, geometrical school denounced (and partly invented) by Taine. He has at command much apt and picturesque detail; his generalizations are often made with dogmatic warmth, but they are never empty and abstract.

Hamilton stands today in symbolic opposition to Jefferson. Yet his most important political writings, the *Federalist* (1788), in collaboration with Madison and Jay, and the letters in defense of Jay's treaty, signed "Camillus" (1795), do not as directly contradict Jefferson's fundamental political philosophy as do Adams' pamphlets. Hamilton, however, was directly identified with the American business and financial aristocracy, and helped to formulate their characteristic attitude in politics, an attitude which has on the whole been that of American conservatism ever since. Briefly Hamilton may be said to pass over so lightly the assumptions of the natural rights school that one might almost assume he accepts them, and to devote his chief attention to getting the government to working in the traditional ways of a strong and efficient plutocracy. This does not detract from his originality or his sincerity. Hamilton supplies what Adams lacks, a certain sense of political contingency. The *Federalist* is of course a classic piece of controversial writing, and one which really seems to have decided the controversy. But it is much more than that. It is one of the best examples in the history of thought of the interaction between political speculation and the necessities of actual politics. One realizes, watching Hamilton struggling to adapt them to his needs, what currency such generalizations as the separation of powers, rotation in office, government by the consent of the governed, the social pact, natural rights and others of the same sort had at the time. In the reaction against the view of the American constitution as struck off from the mind of man, we have perhaps gone too far. The fact is that the American constitution, like the French constitution of 1791, was deliberately framed, and framed in a society where interests, habits, traditions and ideas were competing in extraordinary freedom. The *Federalist* otherwise could hardly have been written.

Jefferson has left even less systematic political writing than Hamilton. Nevertheless his state papers and his correspondence form a body of political thought which, despite the derivative nature of its basic assumptions, has a high degree of originality. Jefferson had a universal curiosity and an experience of all sorts of knowledge, a feat still possible in his century. He had the gift of the catching phrase (witness the Declaration of Independence) and of political aphorism. But there was something else. Jefferson's political philosophy was on the whole that of the French theorists before the revolution—he trusted the common man, thought men more nearly equal than not, especially in virtue, distrusted a strong central government, in which the common man could not directly participate, and which would therefore soon become an oligarchy, and wished the necessary minimum of government to be conducted in small local units. But this philosophy he arrived at by observation of the farming communities about him. He never believed it workable in Europe. "It is my principle that the will of the majority should prevail . . . . this reliance cannot deceive us as long as we remain virtuous . . . . When we get piled upon one another in large cities, as in

Europe, we shall become corrupt, as in Europe, and go to eating one another as they do there" (letter to Madison, Dec. 20, 1787). America was the elect, not of God, but of philosophy.

This feeling of America's mission, which has colored, sometimes garishly but never meanly, American patriotism ever since, gives substance and reality to Jefferson's abstract principles. The America in which he hoped to realize them is dead. The central government is stronger, and certainly more ambitious, than most European governments, local government is devolving on city managers, and the urban population outnumbers the rural. But the principles remain, and we still hold certain truths to be self-evident. Would Jefferson, were he alive? The answer is not easy, for his was a surprising and complex personality, and seems uneasier in others' formulae than in his own. The lover of his fellow men could write: "The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants. It is its natural manure" (letter to Col. Smith, Nov. 13, 1787).

II. Italy continued to the end of the eighteenth century in a state of political helplessness. Her numerous petty governments were usually backward and often cruel; and yet the Italian people did not of their own initiative produce a political revolt, as did the French, nor an intellectual and literary revolt, as did the Germans. It is one of the numerous difficulties faced by the intellectual historian in his attempt to relate his subject to social and political history that the contribution of Italy to eighteenth century thought, and particularly to thought in the social sciences, should none the less be considerable. Perhaps the best explanation is that Italian thinkers were an *élite* writing under French and English influences, and anxious for a European, rather than an Italian, reputation.

The Marquis Beccaria was both the pupil and the teacher of his French masters, the *philosophes*. His *Dei delitti e delle pene* (1764) was soon translated into the principal European languages, was incorporated into the program of radical thinkers everywhere, and actually did influence such practical reformers as the Englishman John Howard. Beccaria's condemnation of torture and secret accusation in criminal trials, and his demand for reasonable and clear penalties in place of the extreme and therefore frequently evaded punishments common even in English law of the time, have now been universally translated into practise. His condemnation of the death penalty has been less universally accepted. His book is a mixture of fashionable rhetoric on natural rights, of equally fashionable humanitarian sentiment and of effective reasoning. And for a pioneer work in criminology it is remarkably sound. Beccaria was one of the first to make clear that the prevention of crime is the purpose ultimately served by the punishment of crime.

The book has pretentions to be more than a treatise on crime and punishments. Beccaria pins his specific attacks on abuses and his suggestions for reform to a system of generalizations about society that mark him as an eighteenth century man. The laws which are born of the social compact exist for the sake of "la massima felicità divisa nel maggior numero" (ch. i). Men are moved by self-interest, and therefore yield up to society only that portion of their liberties necessary to secure peace and tranquillity in society. The sovereign created by the compact can wield a power measured by the aggregate of liberties so yielded up. The right to punish—to deprive a man of all his liberties—is thus limited to the minimum exercise calculated to restrain men from breaking the social compact. All punishment beyond this is unjust and contrary to nature. Again, to take a representative passage: "For a punishment to obtain its effect, it is sufficient for the evil of the punishment to exceed the good of the crime, and in this excess of evil must be calculated the infallibility of the punishment and the loss of the good anticipated from the crime" (ch. xv). Although Bentham would have objected to phrases about rights and compacts, he must have accepted not merely Beccaria's practical conclusions but much of his intellectual approach.

The Neapolitan, Gaetano Filangieri, although he lived under what was perhaps the worst of Italian governments, and was even employed by that government, produced one of the most radical of eighteenth century political treatises. His *Scienza della legislazione* (1780–85) set out to continue and improve the work of Montesquieu. The *Esprit des lois* had been too much concerned with what the laws were; Filangieri's work set out to show what, with due regard to historical and geographical differences, as well as to the principles of reason, they ought to be. There is little originality in the book; its interest lies in the completeness with which Filangieri applies to all the subjects he con-

siders—economics, general jurisprudence, criminal law, education, religion—the test of conformity to reason. He is no anarchist and no collectivist, and he is guided in his specific suggestions for reform by no fundamental philosophical assumptions beyond the characteristic eighteenth century utilitarian psychology. His radicalism comes from the application to each problem of a practical sense which is yet far from common sense. He is the extremist among the theorists of benevolent despotism. Yet Filangieri abounds in occasional bits of wisdom, and now and then gives way to sensible doubts. He has an interesting passage (bk. iv, ch. xxxviii) on the method of the social sciences, where he points out that in chemistry elements may be isolated, weighed and measured, but that in politics, even though it may help to assume that causation operates as in the physical sciences, we cannot apply the methods of mechanics and mathematics.

The Enlightenment in Germany was rather a moral and philosophical movement than a political one, and those who reacted against it, like Kant and even Herder, belong rather to the intellectual history of the nineteenth century than to that of the eighteenth. Germany was still a collection of states under the remains of the mediaeval empire, she had suffered an unbelievable setback in the Thirty Years' War, her upper classes were slavish imitators of French court manners, and her middle classes prosperous enough, or custom ridden enough, to accept the political order without complaint. The Enlightenment is indeed a movement parallel with the similar rationalist movements in France and in England; but in Germany it is singularly superficial and devoid of explosive power. German political thought continues seventeenth century natural-rights philosophy (which gets reduced to a sort of scholasticism) and grafts upon it certain importations from the French, and an insistence on the omnipresence of the state which is explicable enough in terms of German political experience, but which hardly jibes with some of the premises of the natural-rights philosophy.

Of these philosophies of the Enlightenment Christian Wolff may be taken as a type. His *Vernünfftige Gedanken von dem Gesellschafftlichen Leben* (1721) and his *Jus naturae methodo scientifica pertractum* (1740–48) form a system based on the equality of men before nature. Differences in rights are acquired, the results of historical growth. By nature, however, all men have the same rights and the same duties. No man has the power to interfere with other men. By nature all men are free (*Jus naturae*, ch. i). The aim men pursue in the state is *Vollkommenheit*, perfection or self-realization, which can never be attained, but toward which men are gradually moving. Here are liberty, equality and progress all in black and white. But for Wolff these are apparently the necessary and philosophic abstractions with which one approaches the study of politics. His actual program is purely a theory of the benevolent despot, and gives an extraordinary scope to state action. One cannot even say that he is consistently in accord with the rationalist philosophers who would use state action to create a new society based on logic and not on history. He is for the old guilds, limitations on the number of apprentices, and against freedom to emigrate. He defends censorship of the press, and even goes so far as to admit a mild and humane use of torture in criminal trials. Wolff's theories of the origins of society take on the fashionable form of the compact. The government created by the pact, however, is bound to conform not only to the laws of nature but to the fundamental laws agreed upon when the society was formed. If these laws are violated, the people have the right of resistance. From Wolff's whole political writings it is perhaps not unfair to conclude that the natural-rights formula had no necessary connection with revolution; it had become so universally accepted that it had no practical implications.

The beginnings of the peculiarly modern and literate type of nationalism may be seen in German literature of the latter half of the eighteenth century. In political writing the followers of the French had never been unchallenged. Justus Möser, who spent his whole life as lawyer and judge in the little Westphalian town of Osnabrück, is only one of many eighteenth century publicists in Germany who repudiated the new cosmopolitanism. Möser wrote an introduction to the history of Osnabrück, in which the value of social, as opposed to purely political, history is emphasized, as well as numerous political essays, the *Patriotische Phantasien* (1778). He is a traditionalist, a conservative who believes in defending the good old Germany of the soil. He detests modern reformers who would abolish history in the name of reason. In point after point he opposes the individualistic and utilitarian tendencies of the time, even when they are turned into humanitarian channels.

With the natural rights of illegitimate children, for instance, he has no sympathy. Society owes them nothing, for they menace the most sacred human institution, the family. Möser, if he insists that history and not logic is the first teacher of the political philosopher, can nevertheless hardly be called a realist. For he finds in history a vague ideal of Teutonic freedom, antedating the abuses of the Middle Ages—the freedom of German tribesmen uncorrupted by inequality of property holdings.

There are, however, political thinkers who seem even more completely opposed than these German patriots to the normal way their contemporaries went about the study of politics. No account of eighteenth century thought would be complete without the mention of two men who yet scarcely fit any of the commoner generalizations about it—the Neapolitan, Giambattista Vico, and the Irishman, Edmund Burke.

Vico, whose great work the *Principi di una scienza nuova intorno alla natura delle nazioni* (1725–44) was little known until the nineteenth century, is often given credit for founding the philosophy of history, a form of intellectual activity highly developed in the days of Hegel and Comte, but held by professional historians in disrepute until the present moment, when it bids fair to become popular again as a methodology or synthesis of the social sciences. In this field Vico developed a theory of the flux and reflux of civilization through different societies—Greece, Rome, the Middle Ages—which is elaborately worked out, with a somewhat scholastic fondness for the figure three. Vico finds three sorts of government which succeed each other in order of time in all societies: the divine, when men make gods to rule them; the heroic, when heroes, demigods, rule them; and the human, when intelligence rules them and they devise laws and the idea of civil liberty. This is the height of civilization a given society can attain. Reflux begins, men become overcivilized, and the third form reverts to the first. Whether Vico thought this process was an eternal repetition, or whether he believed each cycle had benefited from the previous ones, is not wholly clear. Vico also figures as a forerunner of Montesquieu in the sociological approach to the study of law, though it is to be doubted if the French philosopher could read the *Scienza nuova*. And there is, especially in Vico's careful study of Roman law and early Roman civilization, a great deal to justify this statement. But perhaps Vico's general philosophy, and in particular his theory of knowledge, is more important even for the social scientist than the results of his investigations into historic fact, which were partly invalidated by his peculiar superstitions, such as his fondness for triads, by his religious mysticism and by his lack of tools for research. His theory of knowledge, however, definitely anticipates the nineteenth century reaction against Cartesianism which was to be so important for the social scientist. Vico refuses to accept the Cartesian *cogito ergo sum*, and the resultant tests of truth by clarity and of scientific method by mathematics. He identifies *knowing* with *creating*. God alone has perfect knowledge, since God alone created all things. But of the feeble knowledge vouchsafed man the best, apart from divine revelation, is that which corresponds to the field in which he exercises his creative power. Now man has created the society he lives in, though he has not created the universe about him. Hence our best knowledge is not of mathematics and the mathematical sciences but of history and the historical sciences. It is not abstract speculation that is valuable, but the hard fact, the individual; it is not the superficial similarities of things the thinker should pursue, but the fundamental differences. Real knowledge is a conquest to be won literally by the sweat of one's brow. Vico's whole work, in the very confusion and trouble into which his restless desire to get beyond the smoothness of thought into the roughness of things causes him to fall, is a striking contrast to the cocksureness of much eighteenth century thought.

Although Edmund Burke never wrote a formal treatise on politics, there are more political ideas in his speeches and letters, and especially in his pamphlets on the French Revolution, than in most treatises. He is, however, a difficult man to get into a few words. His complexity is one of depth as well as breadth, and sets him off even more completely than Vico from his century. Of his breadth there is sufficient evidence in the fact that political thinkers of such different allegiances as the liberal Morley, the conservative Hugh Cecil and the laborite Harold Laski should all find in his philosophy important elements of truth. Of his depth the sober analysis whereby in 1790 he predicted the Napoleon of 1804 should prove an adequate example. Burke denied the existence of rights and defended political expediency; but he was no utilitarian. He distrusted the common man and believed in aristocratic rule; but he was not an

unimaginative standpatter. What lies at the bottom of Burke's thought, however, makes him in 1790 almost a heretic among publicists; he is a Christian, a pessimist and no believer in progress. He lived too much in the world, of course, not to have uttered at times words which seem to contradict this. But any thorough study of his whole work will bring out these fundamental conservative beliefs. To Burke man was a fallen creature, not to be redeemed on this earth; to give him freedom was to unleash the brute. Civil society and law, tradition, custom, habit, loyalty operating within it almost miraculously make men behave far better than a psychological study of the isolated individual would lead one to think possible. But society represents at any moment a delicate equilibrium between rest and unrest, and if you disturb it, as the French are doing, to rewrite all the laws according to reason, you destroy the equilibrium, and the brute in men, which the old laws and the old loyalties have put to sleep, is awakened and will have no respect for your new and perfect laws. Burke's pessimism enabled him to see things most of his contemporaries were too hopeful to see, and his literary skill has embodied his observations in aphorisms scattered throughout his works. This, and a certain moral earnestness that seems to underlie even the ravings of the *Regicide Peace*, may account for the respect which men of such different political faiths have felt for the writings of Burke.

III. Economics, even in the latter half of the eighteenth century, was hardly a special science. Most men who wrote on economic subjects also wrote on other subjects, or incorporated their thoughts on economics into political or literary works, as, for example, Montesquieu, Filangieri and Hume. The originality of the *Wealth of Nations* is partly one of form; it is the first complete systematic treatise on economics in the modern sense written by a thinker of the first rank. Of course the day has long gone by when Adam Smith had no predecessors and few contemporaries. Mercantilists, cameralists and physiocrats (*supra*, p. 121–24) may now be admitted to have contributed much to the methods, the material and even the theories of the most scientific of the social sciences. In the confusion of writings on economic subjects in the eighteenth century it is extremely difficult to say, "This went into the making of classical economics, and this did not," or, "This is orthodoxy, and this is heresy." That dull mercantilist, Steuart, has interesting anticipations of Malthus on population; Italian mercantilists such as Genovesi do useful work on monetary theory. We shall therefore mention hastily some British thinkers who are perhaps better catalogued as "forerunners of Adam Smith" than as members of already existing schools, and then turn to the founder himself.

Mandeville, though he fell into the shocking make-work fallacy, yet brings forward in his *Fable of the Bees* (1705; enlarged ed. 1714) a theory that private vices make public virtues, that is, that men working selfishly in their own interests will unconsciously cooperate in working for the public good. Josiah Tucker, dean of Gloucester, wrote many pamphlets on politics and economics. It would appear from the point of view of a later period that he kept his politics and economics in separate parts of his mind, for he was both a conservative and a free trader—a combination, however, not as surprising in eighteenth century England as it would have been in 1840. As a Tory he thought the American colonists' arguments about their indefeasible rights sheer nonsense, but as a free trader he came to the conclusion that the colonies were a nuisance and should be cast off. Wars for the sake of trade, he predicted, would one day seem as absurd as the crusades. Hume in his economic writings is as clear-sighted and as fragmentary as usual. He sees at once the fallacy of the mercantile position on the accumulation of money, an attempt which is as ridiculous as trying to keep water above its natural level. He emphasizes the stock of labor as the true source of wealth. His monetary theory is surprisingly sound, and even his often criticized remarks about the stimulating effects of rising prices are true in themselves. Smith himself owed much to Hume, whom he knew and reverenced, as well as to his teacher Francis Hutcheson, to whose chair of moral philosophy at Glasgow he succeeded. The latter's influence upon Smith was no doubt largely in the field of philosophy; nevertheless Hutcheson mixed economics with ethics, and in his *System of Moral Philosophy* (1755) has familiar ideas on the division of labor, value and interest. He makes a clear distinction of the sort Smith was later to make between value in use and value in exchange (*System*, vol. ii, p. 53).

The *Wealth of Nations* (1776) shares with the work of the physiocrats the honor of elevating economics from a narrow study of the mechanism of commerce to a genuine discipline,

to a study of the production and distribution of wealth. In a sense everything of importance Adam Smith wrote has been supplanted. In the more complicated reaches of economic theory —including value, rent, money, population and much else —the successors of Smith have gone far beyond him, and even the so-called "classical economists" from Ricardo to J. S. Mill differ from him in many ways. But Adam Smith did bring out clearly many ideas about the division of labor, the distinction between value in use and value in exchange, between wages, interest, profits and rent—to give merely a few examples —which have since become commonplace. He brought out clearly in his treatment of the details of economic life certain principles whose political, and even scientific, influence is still very great—notably that of the non-interference of government in business (summarized, though not by Smith himself, as laissez-faire) and that of free trade. Finally, although his language is the literary tongue of his century and although he therefore hardly appears as an inventor of a special scientific terminology, he marked out much of the ground which economics (and especially economics as distinct from sociology) has since occupied. For these reasons he deserves the salient position among economists that common opinion has always given him.

Adam Smith serves as well as lesser men to point the commonplace that thinkers depend on their physical environment. Just as Quesnay, country-bred and citizen of an agricultural nation, stressed land as the ultimate source of wealth, so Smith, citizen of a great commercial country already stirring with the industrial revolution, stressed labor as the source of wealth. The labor of artisans and business men seemed to the physiocrats inferior and even "sterile" labor; to Adam Smith the capitalist and the business man are integral parts of the machinery for the creation of wealth. But our beliefs depend partly on the beliefs held by our contemporaries, and of this somewhat neglected commonplace Adam Smith is also a good example; moreover the question of Smith's affinity with other eighteenth century thinkers, and especially that of his ideas of a natural order with similar ideas held by other workers in the social sciences, is one that is very close to the aims of this survey.

Some commentators have discovered an antinomy between the *Moral Sentiments*, where Smith founds morality on human sympathy, and the *Wealth of Nations*, where he founds economics on human selfishness. Such a view is unjust, for to Smith sympathy and self-interest are simply complementary aspects of natural human activity. Sympathy is a kind of inverted self-interest that serves to check us automatically in our relations with our fellow men. When men act as they want to, their actions, isolated and anarchical though they may seem at first sight, are really in accord with an underlying scheme of things, a natural order established by Providence. The careful investigator into men's economic activities, for instance, will find beneath the apparent disorder of hundreds of different enterprises, the higgling of the market, the conflict of thousands of interests, the clear principles and admirable order so well described in the *Wealth of Nations*. Governments, for lack of true knowledge, have often interfered with this process. But they have added real and harmful disorder to the merely surface confusion of natural economic life, and have thus prevented the designs of Providence from working themselves out completely. Therefore governments should in general refrain from interfering with the economic activities of their subjects. In the next century critics like Cliffe Leslie held that Smith's belief in a natural order was arrived at *a priori*, that it was a part of the false thinking common to his century, and that it therefore vitiated somewhat the enormous amount of direct observation embodied in the *Wealth of Nations*. As this is a point which involves in general the methodology of the social sciences in the eighteenth century, we shall return to it later. But it may be remarked here that Smith himself did not hold as rigidly to the principle of laissez-faire, nor insist as warmly on absolute, immutable economic laws, as did some of his nineteenth century successors.

The most interesting book on economics published in France in this period is Richard Cantillon's *Essai sur le commerce* (1755, but written about 1730). Cantillon was an Irishman who had made a fortune in banking in Paris, and his little book shows an extraordinary grasp of practical detail as well as much speculative ability. Though Adam Smith refers to it, the book was little known until Jevons rediscovered it and held it up as the most complete of the forerunners of the *Wealth of Nations*. Cantillon's opening sentence is in the best style of the eighteenth century, clear in definition and compressed: "La terre est la source d'où l'on tire la richesse; le travail de l'homme est la forme qui la produit; et la richesse en elle-même n'est

autre chose que la nourriture, les commodités et les agrémens de la vie" (pt. i, ch. i). Note that in that one sentence Cantillon emphasizes equally the role of land and labor (which neither the physiocrats nor Adam Smith did), and that he gives the modern, as opposed to the mercantilist, definition of wealth. Cantillon's theory of value (pt. i, ch. x) shows the same merits of brevity, apt illustrations and ability at generalization. He concludes that "intrinsic value" is measured by the land and labor involved in production, allowing for the goodness or product of the land and the quality of labor. He then distinguishes between "intrinsic value" and market values. He arrives at these generalizations by studying Brussels lace, for instance, and he has constructed elaborate statistical tables to show how the amount of labor involved in lace making, together with the cost of material, etc., about equals the price. Cantillon has interesting passages anticipating the study of the role of the entrepreneur, is good on money, and extremely good on international trade. The essay was apparently written about 1730, nearly half a century before the *Wealth of Nations*. This fact suggests that, if the influential works in the history of thought are dependent on social and economic conditions for their success, the human mind itself is perhaps somewhat less limited, and may sometimes steal a march on its environment.

Most of the continental economists of this period may be classed as physiocrats or mercantilists, and need not here be considered. But a word should be said about Condillac, who in his *Le commerce et le gouvernement, considérés rélativement l'un à l'autre* (1776), though not otherwise very original, does anticipate the psychological theory of value. We value a commodity because of the use we think we can get from it. Scarcity gives a commodity greater value, and abundance gives it less, but this value is based less on its actual scarcity or abundance than on the opinion we form of its scarcity or abundance (pt. i, ch. i).

IV. The greatest historians of the eighteenth century are included in the school usually called "rationalist" (see Section VI). But there are other, and as far as the later writing of history goes, more important ways of approaching history than that exemplified in the elegance and speculative acuteness of Hume or Gibbon. By 1800 great progress had been made in the accumulation and criticism of source material, and in the writing of social, as opposed to merely political, history.

The *Acta sanctorum*, going back in conception at least to Heribert Roswedye (1569–1629), and treating the lives of all saints under the day consecrated to their worship, had by 1786 proceeded from January 1 to October 11. Their great founder was John van Bolland (1596–1665), and the patient monks who worked with him and after him in what still remains one of the greatest monuments of scholarly cooperation are known as the Bollandists. The level of the different lives varies greatly, but the *Acta* as a whole contain an enormous amount of material, not merely for church history, but also for political, constitutional and social history of a period which, in the eighteenth century particularly, was very little known. It was one of the collaborators in this work, Daniel von Papebroeck (1628–1714), who began the study of diplomatics later worked out by Mabillon.

To Jean Mabillon (1632–1707), of the Benedictine Abbey of St. Germain des Prés, and to the Maurists who followed him, belongs the credit of working out a whole critical apparatus for the study of historical documents. Mabillon's *De re diplomatica* (1681) sets out criteria for judging the authenticity of original source material, outlines the beginnings of a science of palaeography and even of such very special subjects as sigillography. The Benedictines continued during the entire eighteenth century their careful reconstruction of mediaeval history and the working out of historical method, and in 1765 the monks of the congregation of St. Maur issued their *Art de vérifier les dates*, where scientific methods are first introduced into the confusion of historical chronology. The century often supposed contemptuous of history and fond of glib generalizations and easy synthesis is also the century of painstaking research and of critical establishment of canons for sifting evidence.

This critical spirit appears in other fields of history, notably in those of Greece and Rome. The study of classical antiquity, revived by the great scholars of the Renaissance, suffered from the undue reverence which the humanists had for their subject. In the eighteenth century with such men as Barthélemy and Winckelmann archaeology emerges as a distinct discipline. Vico had begun the search for the social origins of Roman law and had anticipated Wolf on Homer. At the very end of the century Niebuhr inaugurated the modern study of early Rome,

destroying a mass of uncritical ideas springing largely from Livy and kept alive by the current system of education. A book like the Huguenot refugee Thoyras' *Histoire de l'Angleterre* (1724), once extremely popular in England, is representative of much eighteenth century work. It is full of prejudice in favor of the Protestant cause; it is moreover ill-digested, quite lacking in the flow and form of the rationalists. But it is full of material gathered from original sources, and it constantly attempts to show how what are now regarded as national characteristics have a historical origin.

Another contribution of the eighteenth century to historiography is to be found in its interest in social history. It is not, of course, that such history was particularly new. As far as his subject matter goes, Herodotus was a social historian. But what characterizes modern interest in social history is a more or less definite belief that the conditions under which ordinary men live can be scientifically analyzed and therefore modified for the better. This interest is a part of the democratic movement which marks the rise of the middle class. Once that class was established, it began to seek in history some compensation for the dulness of its ordinary life, and the romantic schools of historians arose. But in the eighteenth century history remains sober, whether it deals with kings or peoples. Voltaire's *Essai sur les moeurs* is of course social history, and so is much of Montesquieu. Charles Duclos' *Mémoires pour servir à l'histoire des moeurs du XVIIIme siècle* (1751) is an example of much contemporary writing on the borderland between sociology and history. But social history flourished best of all in Germany, with such men as Möser and M. J. Schmidt. A passage from Schmidt's *Geschichte der Deutschen* (1778) has a familiar sound: "Most historians are content to chronicle the changing rule of princes and aristocracies, without bothering about the condition of the people . . . . But if at the same time the historian does not consider the degree of national happiness he does not seem to me of much use" (preface).

V. It would be impossible, of course, to include in this essay all the important writers in the social sciences in the latter half of the eighteenth century. No doubt discoveries can still be made, and many monographs are still to be written in this field. For the convenience of the student and the general reader who may wish to go into the subject for himself, the following list of names is appended. The list is not, of course, exhaustive but, taken with the names already considered, includes what is important in the four chief modern tongues and Latin.

POLITICAL WRITERS:

D'Argenson, Babeuf, Blackstone, Brisssot de Warville, John Brown, Burlamaqui, Condorcet, Camille Desmoulins, John Dickinson, Diderot, Cl. Dupin, Adam Ferguson, Sir Philip Francis, Franklin, Frederick II, Abbé Grégoire, Helvétius, Jurieu, Linguet, Mably, Sir James Mackintosh, Madison, Mercier de la Rivière, Mirabeau, Morellet, Otis, Paine, Paley, Price, Priestley, Abbé de Saint-Pierre, Bernardin de Saint-Pierre, Shaftesbury, Siéyès, Thomasius, Vattel, Volney, James Wilson, Mary Wollstonecraft.

ECONOMISTS:

Mostly mercantilists or physiocrats, but the Abbé Galiani and Verri, in addition to those mentioned in the text, are worth looking into.

HISTORIANS (excluding the "rationalists"):

Algarotti, Anquetil du Perron, Thomas Birch, Carli, Gatterer, Grosley, Sir William Jones, William Maitland, Joh. Muller, Muratori, de Pauw, Roscoe, Schlözer, Sismondi, Spittler, Soulavie, Tiraboschi.

No attempt at summarizing in a critical fashion the social-scientific thought of the second half of the eighteenth century can do justice to the subject. Certainly we cannot accept the evaluation of eighteenth century thought by such nineteenth century critics as Taine, although theirs is still the current view. The thinkers of the age of revolutions were, according to this view, imprisoned in an artificial universe constructed out of Descartes and Newton. From Descartes they learned to distrust all knowledge not capable of mathematical formulation. From Newton they learned to seek even in human relations for laws of mechanical causation. Their thought is therefore abstract and inhuman; their conclusions apply only to an artificial man of their own creation, a man as unlike existing human beings as a geometrical figure. Their program of reforms, built to suit this artificial man, cannot apply to human beings. To dangle it before real, imperfect men is highly dangerous, as the French Revolution proved.

Now there is no use denying the element of truth in this criticism of eighteenth century

methods in the social sciences. But in its extreme form this criticism is as far from facts as it believes the eighteenth century to have been. In the first place, it is obviously truer of minor thinkers like Holbach than of great ones like Montesquieu. Again, it fails to take into account the complexity of the intellectual interests of the time, to include Burke, Vico, the German patriots, Adam Smith, the Rousseau who inspired the romantic movement. Even the cruder thinkers, who fell most easily into generalizations about the natural man, were partly led into a false method by a desire to get things done, to arrive at conclusions that would influence their fellow men to action. It is notable that, although much early eighteenth century work is in Latin, almost all work done in the second half of the century is in one of the modern languages. Up to a point, as any study of the Jacobins will show, a certain amount of abstraction is extremely practical as political propaganda. Finally these men were pioneers of a sort, and subject to the rashness and overconfidence common to intellectual pioneers. They were trying to put on paper the lofty aspirations of the growing middle class.

Such explanations—one might almost say, such apologies—are necessary for the normal level of thought which is determined by the "spirit of the age." But it is almost a commonplace that the great men of an age, though they embody its spirit, also transcend it. For such men as Montesquieu, Adam Smith, Rousseau and Bentham no crude formulae about *a priori* thinking can hold. Indeed the whole problem of the use of the deductive method by eighteenth century thinkers is one that deserves a more truly critical treatment that it has commonly received. Certainly the men of the time thought they were appealing to experience. Most of them were willing enough to appeal even to historical experience. The facts which they used to build up their theories may seem to us now insufficient in number and even inadequately established as facts, but as facts they did command the respect of the thinkers who used them. French republicans sought to model themselves on Roman republicans; even the utopian socialist, Morelly, tried to find socialism in fact in ancient Sparta.

But is not this mere appealing to an arbitrary set of facts to confirm an arbitrary theory, or rather is it not molding fact to desire? No doubt many eighteenth century thinkers saw only the facts they wanted to see. But are desires and hypotheses utter aliens to each other in the consciousness even of the modern scientist? The eighteenth century did at least avoid the error that facts can take care of themselves, that induction is a process that goes on in the mind of the thinker, indeed, but without any active cooperation on his part. What the modern scientist means by a theory or a hypothesis is what the eighteenth century thinker meant by a law of nature. For both, the chaotic, accidental world as it appears to the senses—and even to common sense—can be made to appear orderly to an inquiring and persistent mind. The social sciences today, as well as the physical sciences, are more aware of the complexity of the sense world, more aware therefore of the necessity for careful research; they are more tentative and less dogmatic than in the eighteenth century. There adheres to the eighteenth century idea of natural law something more of ethics and theology than is fashionable nowadays, at least under those names. But the concept of a "natural order" not apparent to the unthinking man is common to both centuries.

What, then, is left of the social sciences in the latter part of the eighteenth century? A great deal of propaganda, of popular writing that first helped arouse a class consciousness in the middle classes, and made great numbers aware of the existence of social problems; a tradition, therefore, of the intimate connection between the social sciences and practical politics; the work of certain great founders, like the economist Adam Smith and the sociologist Montesquieu; a great deal of patient research, an accumulation of facts that can still be used to support theories other than those held by the workers who first uncovered the facts; and, finally, the concept of a natural order for which all science is a search.

CRANE BRINTON

IX

Individualism and Capitalism

I. What were the inescapable facts and ideas which surrounded and impinged upon the senses of the thinkers who formulated social theories in the early decades of the nineteenth century? Before settling down to an examination of that problem we should consider briefly a closely related philosophic question which has accompanied speculation since the days of the Greeks, namely, which is older, the fact or the idea? "In the beginning was the Deed" (*Am Anfang war die That*), we are informed by the poet Goethe. "In the beginning was the Word," we are told by the theologian. The great debate has never been closed to the satisfaction of the contestants, but William James has given us a fair working formula in the declaration that the worlds of fact and idea have evolved together. Their relations are reciprocal and no sword of reason has yet been forged with an edge fine enough to separate them. Whoever would seek to penetrate to the heart of an age or indeed to divide indivisible time into ages must reckon with this instrument of thought.

Undoubtedly new facts are easier to discover than new ideas, assuming for the moment that the two are separable for the purposes of thinking about them. The first use of the steam engine to turn wheels, the first loom driven by power, the first successful crossing of the Atlantic by a ship driven by steam were new facts in the history of the world. But the cluster of ideas associated with each of these facts wears ancient aspects. Indeed the idea that such things could be done was as old as Roger Bacon at least, to make no reference to the use of steam by the Greeks. Yet for the great mass of humanity the appearance of each of the material phenomena mentioned above was a new fact, stirring up old ideas and suggesting new ideas.

There are times in the history of the world when facts almost stand still, when ways of living, working, traveling and fighting change so slowly that thought more than catches up with them—seems in reality to control, rather than to reflect, them.[1] Broadly speaking, such a period was the Middle Ages. Then again there are periods when new facts come pell-mell upon the world, devastating wars and revolutions, epoch-making inventions, defying old systems of thought, making them appear incongruous with the world of reality and compelling a revision of logical patterns once satisfactory to their possessors. Sometimes these new facts come so swiftly and spread so widely that thought is apparently incapable of reducing them to a system, to say nothing of controlling them in relation to ideas, inherited or novel.

Nevertheless even in such periods of history the relations of idea and fact are still reciprocal. If, for example, modern emphasis on the production of goods seems to flow from the fact of machinery and tends to a secularization of thought, it must be said that the secularization of thought which accompanied the renaissance of pagan learning stimulated interest in this world as distinguished from the next, lending sanction to the enjoyment of goods and thus promoting their manufacture. Long before the Protestant revolt and the rise of Calvinism, to which too large a part of the commercial spirit is now uncritically attributed, secularism was growing in Catholic learning and doubtless would have increased had the quarrels of princes and popes never taken place—assuming for the moment that, given the contemporary movement of ideas and facts, such quarrels could have been avoided by some process.

However closely a new fact of high significance may be related to a pre-existing cluster of ideas, it nevertheless runs like a sword into the old web of ideas. At first it must be considered in terms of those ideas, their logical form and phraseology. It may excite wonder and surprise, produce ejaculations of amazement and incredulity, but when its implications are considered, the nature and purpose of control over it (if any) must be geared up to the inherited stock of opinions, morals, creeds, laws and sayings. Gradually the new fact is worked into

[1] See George O'Brien, *An Essay on Mediaeval Economic Teaching* (London 1920) p. 189 *et seq.*, for changes in scholastic theories of interest and usury accompanying increasing opportunity to accumulate and lend money. Also Edmund Schreiber, *Die volkswirtschaftlichen Anschauungen der Scholastik seit Thomas v. Aquin* (Jena 1913) p. 227 *et seq.*

the old body of thought, effecting changes in it, making some of it obsolete, giving novel direction to the remainder, and suggesting idea patterns which at least have the appearance of novelty. This operation of readjusting facts and ideas requires time; hence there is always a lag between the appearance of an important fact and the formulation of systematic thought about it. And inevitably such systematic thought, being the product of thinkers, bears some kind of relation to the connection of the thinkers with the fact, a connection that may be close, remote, friendly or hostile. Perhaps it is principally for this reason that the political philosophies of countries seem to vary so materially in rhetorical form. For example, when the English middle classes overthrew absolutism in the seventeenth century, the dominant body of inherited thought was religious—hence the Puritan revolution was defended in Biblical imagery; but when the French carried out the same kind of revolution more than a hundred years later, natural science had made such strides that "natural" rights appeared to be more real than the admonitions of the God of the Old Testament.

II. Now the central fact that gave decided character to the decades between the French Revolution and the middle of the nineteenth century was the rapid, almost bewildering, rise of capitalism to a position of dominance in western civilization. The term calls for definition. What is capitalism? Laying aside all collateral issues and going to the heart of the matter, it is a system of production, involving social relationships, in which the primary object is the gain of profit through exchange.[1] Among the primary social relationships created by it is the association of employers and employees in the process, the former as dominant directors and the latter as the source of labor skill and strength. Capitalism is not synonymous with machine industry, although it has flourished most luxuriantly in the age of technology. It is not synonymous with manufacturing; indeed conceivably it might take over the entire scheme of agricultural economy. It is not synonymous with objective capital goods or accumulations of instruments of production, for in that sense feudalism was capitalistic in that it had instrumentalities devoted to production.

Yet wherever this system of production has overtaken the static order of feudalism and guilds—production primarily for use and exchange at "a just price"—it is accompanied by certain outward signs, material and human: (1) mines, factories, machines, railways, stores, warehouses and other implements of production and banking and systems of credit on a large scale; and (2) owners of the means of production, directors, technologists and laborers ranging from skilled craftsmen to casual workers. The seats of capitalism are in the cities, not the open country. In the main it is employed in the creation and distribution of manufactures. Unlike agriculture and handicraft industry, producing for use or local exchange at a just price, capitalism has apparently indefinite boundaries for expansion. The amount of land available for cultivation is fairly limited (though science works wonders here also), but the area of capitalistic operations has no limits visible to the naked eye. The amount of wealth that can be amassed by it, the number of men and women who can be employed by it, seem capable of indefinite expansion. That is not all. The agriculture of a country is carried on within its geographical boundaries and under its flag, while the capitalism of a nation may carry on operations under many flags in all parts of the world. Conceivably the capital of any particular nation invested abroad might exceed in value the capital invested at home.

In its economic methods and also in its technological aspects, capitalism is essentially rational, involving no mystic elements for guidance in practise or in the increase of goods. The uncertain elements of nature which plagued the agriculturist of the ancient type—rain, drought, insects and declining fertility, to be influenced by exorcism of spirits—do not appear in the capitalist's world. As to the technical aspects of capitalism, there can be no doubts; it is governed by the laws of mechanics and physics which can be expressed in terms of mathematics: mass, weight, extension, number, movement, etc. If capitalism is restricted to its proper economic meaning as a social relation, still its essence is rational. Every operation is based on calculable factors which can be mirrored in balance sheets; extension of plant, raw materials, "hands," output, prices, sales and profits. Capitalists may pray for riches, but they know that the invocation of saints will not automatically, by some unseen process, make them rich. They may need "psychology" to improve "industrial relations," but such improvements are reflected in ledgers and registers.

[1] P. Rostock, *Der Ausgang des Kapitalismus*, p. 1–8.

III. The age which witnessed the rise of this system of production to a position of dominance in western civilization is the period of early capitalism. In this connection "early" is a purely relative term, in a strict sense scarcely correct. In essence early capitalism is no different from late capitalism, for the system of production does not vary in itself, but it takes time for capitalism to spread over a wide area of a nation's economy and at last reach a position of dominance. That is self-evident; hence the justification for the application of the term "early capitalism" to the period of history here covered.

But how can we discover just when capitalism has reached a position of dominance? This question is not so easy to answer. One measure, of course, and an important measure, is the value of the instruments used in capitalistic production as contrasted with agriculture. Another measure is the proportion of workers employed in capitalistic enterprises, as contrasted with handicraft and agricultural undertakings. Still another measure is the influence exercised by the possessors of the bulk of the capital goods in the processes of government, domestic and foreign, an influence difficult to assess, but none the less real. Historians could throw some light on it if they would. Systems of suffrage and representative government afford outward signs; secret documents sometimes unearthed help to reveal the true inwardness of politics.

Judged by such standards early capitalism passed over into high capitalism at different periods in the different nations of western civilization. Approximate dates may be fixed for convenience. For England the year 1846 may be chosen: English capitalism, triumphant in the world market, had no need for a protective tariff, especially on grain consumed by its employees; in that year it smashed the agriculturists in Parliament and forced the adoption of the free trade principle—extended later. In the United States the value of the instrumentalities employed in the capitalistic process overtopped the value of the land about 1850; and in 1865 the armies of the southern planters laid their swords at the feet of northern victors. The Revolution of 1848 in France, which revealed the power of organized labor, likewise revealed the power of capitalism; and the latter triumphed in the struggle, announcing the new day. It will not be forgotten that the Orleanist monarchy established in 1830 was avowedly a bourgeois monarchy. In Germany capitalism did not get into full swing until after 1870 and its triumph was not politically realized until after the collapse of 1918. In southern and eastern Europe generally, the capitalist process had not advanced beyond its early stage at the opening of the twentieth century—delayed by many factors, including the competition of the countries already far on the way.

IV. An inquiry into the nature of this social giant, equipped with steel and steam, must be prefaced by some reference to its origins, especially as there is a tendency to make it identical with the spectacular appearance of inventions in the eighteenth century and to connect it intellectually with the Protestant revolt, more narrowly with Calvinism. Indeed the late Sir William Ashley said that Calvin's letter lending theological sanction to interest (and usury in practise), written in 1545, marks a turning point in the history of European thought. Other writers with less critical discrimination seem inclined to make this the beginning of a capitalist philosophy, inspiring a great upswing in capitalism. Max Weber finds the true "spirit of capitalism" in Benjamin Franklin's *Advice to a Young Tradesman*—a document appropriate to Calvinistic Boston.[1] Indeed, if some thinkers of this persuasion are to be believed, the idea preceded the fact: capitalism sprang from the soil of Calvinism: thrift, promptness, industry, honesty the best policy, economic expediency, coupled with interest and profit. Thus the prejudices and passions of religion are associated with the process of attempting to understand the greatest phenomenon of the modern age.

At the other end of the scale are the economists who find the origins of capitalism in sources less mysterious than Calvinism, in primitive accumulations, the gold of the New World, and oceanic commerce opened in the age of discovery. All explanations in this direction are little more than variations on the statement made by Marx in the closing chapters of the first volume of *Capital*. With sweeping dogmatism he crowds everything into a few lines: "The discovery of gold and silver in America, the extirpation, enslavement and entombment

[1] Max Weber, *Gesammelte Aufsätze zur Religionssoziologie*, 3 vols. (Tübingen 1922–23) vol. i, p. 30 *et seq*; Henri Hauser, *Les débuts du capitalisme*, p. 45 *et seq*. Protestants from capitalist countries, proud of the achievement, accept the allegation as an honor; while Catholic writers, whose religion flourishes best under pre-capitalistic conditions, accept the allegation as a discredit to Protestantism. Science is not concerned with the merits of this controversy.

in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins signalized the rosy dawn of the era of capitalist production. Those idyllic proceedings are the chief momenta of primitive accumulation. On their heels treads the commercial war of the European nations, with the globe for a theatre . . . . Capital comes dripping from head to foot, from every pore, with blood and dirt." Like the Calvinistic explanation, this has the merit of simplicity. When modified or extended in the hands of such writers as Sombart, it still seeks the origins of capitalism in external facts rather than ideas—leaves out of account certain subjective factors without the presence of which no system of bare robbery could permanently flourish.

The truth is that neither simple explanation of capitalism is tenable. Great emphasis can be given to Calvin's teachings on interest only by scholars who are unfamiliar with the doctrines of the scholastics—especially the later writers of that school who sought to apply the principles of Thomas Aquinas to changing circumstances, with a high degree of theoretical and practical success. There was in fact nothing in the dogmas of the mediaeval theologians which would have prevented the rise of capitalism had other conditions of the time been favorable. They did, it is true, forbid usury, that is, to use Dr. O'Brien's definition, "the payment of a price for the use of a sum lent in addition to the repayment of the sum itself." In other words, there was to be no charge for the "use" of money lent. But if the lender suffered any damage by making the loan—found himself in a worse position—then he was entitled to compensation in the form of interest. If the money was not paid back on the day it was due, it was lawful to exact a payment for the delay; and in practise loans were often made payable in a day or two with the understanding that there was to be delay and therefore interest damages for breach of contract. If there was a loss of opportunity to make a profit some other way, the lender could collect interest. If there was any special risk, the lender could exact something in addition to the principal of the loan. It was not unlawful to pay interest as an expression of gratitude for the favor. As business increased during the thirteenth and fourteenth centuries, the scholastics worked hard at interpreting the earlier doctrines, and long before Calvin was born they had established ingenious sanctions for making capital accumulations and taking what amounts in fact to interest on loans. Calvin's famous letter on interest is important only to those who ignore the scholastics or neglect the evolution of their ideas.

V. When any capitalistic system is analyzed into component parts, it will be found that a certain intellectual climate, as well as technological conditions, is essential to its facile development. Concentrating on the production of goods for profit, capitalism calls for the predominance of secular interests in intellectual life, emphasis on science, business, government, economy, commerce and other related branches of thought. Using the state to maintain order, advance its enterprises in foreign markets and protect its most distant commerce, it requires a freedom of the state from entangling alliances with classes founded on landed possessions—landlords and clergy—a secular state separated from church and justified by secular performances rather than divine sanctions. Resting, at least in its early stages, upon the enterprise and labor of individuals rather than corporations, capitalism needs for its fruition an emphasis on individualism as distinguished from emphasis on the excellence of a settled order of classes such as held the center of the economic field in the Middle Ages. Making use of exact methods, especially as its technical equipment increases, it can live only in an atmosphere of mathematics and calculations, which happen to be at the same time indispensable instruments of the applied science that is so serviceable to capitalism. Buying and selling without respect to person and rank, employing talent wherever it can find that capacity, it thrives on democracy and equalitarian doctrines —the wider spread the better for trade. Finally a wide distribution of knowledge is also necessary for the extensive functioning of capitalism; the directing personnel must read and write; Charlemagne might be illiterate but the humblest factory manager cannot enjoy that luxury; working people must at least be able to read the rules and instructions; and the buying populace must be able to read advertisements if its wants are to be stimulated.

If such intellectual conditions are necessary to capitalist development, it follows that movements in ideas, either as the result of abstract speculation and dialectic processes or as the reflection of novel changes in material circumtances, must be taken into account in explaining the rise and development of capitalism. Now

among the intellectual movements that helped to usher in the capitalist age, the humanism of the Renaissance was the central feature. Although it was connected with the development of mediaeval commerce, it was not a product of that commerce; it was the recovery of a rich pagan learning. Above all it was secular, related to this world, justifying its ways and pleasures. And it must be remembered that humanism was a Catholic, not a Calvinist or even Protestant product: Protestantism hindered rather than promoted its development. Catholics were mistaken, perhaps, when they thought that they could play with Greek fire and yet preserve intact the closed system of Christian theology, but they took the risk nevertheless. Another aspect of Catholic thinking which contributed to the secular interests and individualism of capitalism was the nominalistic philosophy of the schoolmen. This philosophy regarded the world as a concurrence of persons and things and worked as a disintegrating force on the creed of realism with its theory respecting a framework of underlying reality appropriate to a rigid society. Ground between humanism and nominalism, the intellectual heritage of the Middle Ages was in process of disintegration before Calvinism came on the scene.

No doubt Protestantism accelerated this process in many ways. It intensified the old conflict between church and state, aided in the establishment of the supremacy of the state in Protestant countries, and lent countenance to sequestrations of clerical property which helped to decimate the clerical wing of the landlord class. It is true that for a time Protestant states maintained a public religion, but the multiplication of sects made the practise an object of attack and emphasized more and more the secular character of government. Yet we should be on our guard against attributing too much to Protestantism *per se*; for even in Catholic countries conflicts of one kind or another led to the dissolution of the Jesuit order, to sequestrations of clerical property, and finally to the separation of church and state. How far those operations were due to ideas that filtered in from Protestant nations or to the rise of the bourgeois among Catholics is a matter of speculation which historical research has not yet determined. Indeed the extent to which Protestantism was an economic movement is still the subject of animated debate among scholars. Yet when all pertinent facts are assembled and weighed, it will certainly be conceded that Protestantism facilitated the secularization of the state, relaxed considerably the clerical control so useful to the landed classes, and gave the state a freer rein in creating conditions favorable to capitalism.

By the middle of the nineteenth century the supremacy of the state was firmly assured in all countries of western Europe; such remnants of state-church union as remained had clearly become anomalies to be eliminated in the course of the next few decades. The state was emancipated from scholastic economics, theories of the fixed social order and other doctrines appropriate to a society founded on status as distinguished from contract. The ground was thoroughly cleared for economic action by the state and for an economic philosophy of capitalism that viewed the state as a policeman keeping order for the owners of property.

In other relations Protestantism prepared the way for capitalistic economy. Under its influence the clergy, supported by landed foundations administered by clerical agents, practically disappeared; for the economically independent clergy it substituted a clergy dependent in the main upon voluntary contributions from the members of the congregation. In short the pulpit was subjected to the pew and inevitably took on more or less the thought coloration of the parishioners. At the same time the dictatorship of theology declined and the secular preoccupations of church goers deflected the stream of theological tendency. By the reduction in the number of holidays and festivals Protestantism released more time for productive labor, and by emphasis on salvation by faith rather than works it released more of life for the business of money making and wage working. Laying stress on the direct and immediate relation of the individual to God, it contributed to the individualism in thought and practise which served capitalism in obtaining its necessary supplies of entrepreneurs and wage workers. In praising the virtues of thrift, sobriety, promptness and industry, Protestantism facilitated the growth of a system of economy founded on monetary accumulations and regularity in productive processes. Grass may grow and sheep may graze if the peasant lies drunk under the hedge occasionally, but the wheels of mills cannot turn steadily if boiler stokers must have frequent debauches. A state of affairs calling only for amused comment in one set of circumstances becomes intolerable in another. The Puritanism of Protestantism served the promotion of capitalist enterprise.

Incidentally and apparently without calculation, Protestantism aided the cause of education, so essential to economy founded on exact knowledge. With a view to keeping their children loyal to their particular set of dogmas, the members of each sect early adopted the practise of teaching their offspring the rudiments of learning so that they could read at least the catechism and the creed. Faced by the disintegrating rivalry of Protestantism, the Catholic church adopted a similar practise. But having opened the gateway of learning, they could not set bounds to the outcome. The growing secular preoccupations of the age pressed through the portals of educational institutions. The high cost of sustaining religious schools led to the practise of asking for state assistance for education, and the rivalry of sects, which was increased by this action, contributed steadily to the secularization of educational control and the educational process itself. Where churches insisted on maintaining religious schools they were nevertheless compelled to adopt secular curricula to prepare their children for earning a livelihood in competition with children prepared by the public schools. By the middle of the nineteenth century even the religious schools were supplying boys and girls well enough equipped with secular learning to take part in industrial processes. At the same time the development of printing machinery and the application of power to presses made possible the publication of cheap books and newspapers, feeding secular and practical interest outside of the schoolrooms. Learning and the distribution of knowledge had passed beyond the control of clerical authorities.

Forwarding the same secular and individualistic tendency, the doctrines of natural right and equality, associated with the name of Rousseau, operated powerfully in the capitalistic direction. Defying divine right, advocates of natural right laid emphasis on man as an enjoying, producing and consuming animal, thus lending sanction and rationality to the creation and use of goods. At the same time the individualism affiliated with equality worked against old associations and fixed structures such as guilds and feudal ranks and in favor of freedom of opportunity for entrepreneur and laborer. It was in the name of Rousseau that the vestiges of feudalism were destroyed in France during the revolution, that guilds were abolished, and the way cleared for the bourgeois order of things. If that same equalitarianism made trouble for the bourgeois later, its service as a stimulus to economic activity cannot be denied. As for natural right, it clothed in a realistic garb the undertakings of capitalistic enterprise which was nothing if not natural—employing the materials and powers of nature in the creation and distribution of goods with a view to earthly rewards.

The development of natural science, which ran parallel with the evolution of natural rights, besides contributing to the technical side of capitalism, also made profound alterations in the intellectual climate, adding features more favorable to that process. Lord Bacon, the father of the movement—to make an arbitrary break in an endless stream of thought—set an example to the coming generations by resorting to experimentation with natural phenomena and glorifying the application of this method to the creation of objects of utility. Bacon's work was advanced by Descartes who helped to break the dominion of authority over reason and made substantial additions to mathematics and physics. Turning from the earth, Newton applied the same mental processes to the starry heavens, discovering one law underlying the structure of the universe. In every department of science the idea of natural law was utilized with fruitful results. Carried into France, the underlying concepts of naturalism were made the basis of an immense intellectual effort, culminating in the *Encyclopédie*, and were employed in the intellectual manipulations that accompanied the triumph of the bourgeois in the revolution. Temporarily checked by reaction, this concept of a material universe subject to natural law flowered again during the opening decades of the nineteenth century, adding philosophic sanction to the production of goods while fertilizing the application of science to the same ends. Hence it may be said that mathematics, the rationalism rooted in its logical processes, analysis of the materials of the world through the aid of chemistry and physics, and belief in the universality of natural law, enriched the climate for the flowering of capitalism—itself the quintessence of rationality.

VI. While mathematicians, natural philosophers and physicists were at work developing the technology and intellectual climate favorable to capitalism, political events marched in the same direction. The Napoleonic wars dealt death blows to feudalism in Spain, Italy and Germany; Napoleonic decrees abolishing feudalism, sequestering clerical property, suppressing convents and wiping out internal cus-

toms lines over wide areas of Europe, could not be permanently undone by the most vigorous reaction. In Germany Napoleon not only leveled hundreds of feudal principalities to earth and secularized clerical property; he prepared the way, through partial consolidation, for the unification of Germany, a condition prerequisite to the flowering of capitalism beyond the Rhine. Equally important in the same direction were the collateral consequences of his wars and policies. It was in girding herself for the war of liberation against Napoleon that Prussia, under the leadership of Stein and Hardenberg, abolished serfdom, created a popular army and called into life the ardent nationalism which later supported the Zollverein. Napoleon himself was a titanic rationalizer; his contributions to finance and banking, to the codification and simplification of the laws, to administration by technically competent officials, to military organization and supply, to the development of industries on the continent, to the construction of roads and public works, all marked him out as the child of his time—no divine Alexander or Caesar, as he himself once humorously remarked, but the genius of the age of reason, the forerunner of triumphant capitalism.

If the defeat of Napoleon was marked by a temporary and partial clerical and feudal reaction on the continent, it immensely facilitated the advance of capitalism in England. Through the additions of territory won by arms and confirmed at the settlement of 1815, Great Britain widened her trading empire and extended the markets for her manufactures. Enriched by the profits of twenty-two years of fighting, English capitalists now completely overtowered in wealth and effective power the landed aristocracy already heavily diluted by the infiltrations that had been going on since the seventeenth century. In the Reform Bill of 1832, extending the suffrage to these and other bourgeois, was registered the political outcome of irreducible economic fact. With the decline of the landed aristocracy went a decline in the clerical estate attached to its fortunes. If the universities still controlled by the Church of England clung to the classics and to religion, English thinking outside of the universities swung heavily over to utilitarianism, economy and naturalism; consider Bentham, the two Mills, Ricardo, Lyell, Darwin and Spencer. If the masses remained attached to the church or to the evangelical sects, the prophets of the new industrial order went in for rationality and skepticism. With her peasantry expropriated from the soil and her landed aristocracy subjected to mill owners and merchants, England passed into the stage of triumphant capitalism before the middle of the century, and thus led the world in that form of economy and in the development of the intellectual patterns and colorations appropriate to it.

On the continent, where temporary reaction restored the appearances of clericalism and feudalism, the forces of economic evolution made headway in spite of all attempts to erect the old barriers anew. Fifteen years after the Bourbons were restored they were finally expelled in the Revolution of 1830, which frankly established a bourgeois monarchy, supported by bankers and rentiers. When the banking aristocracy which sustained Louis Philippe refused to make concessions to the mercantile and manufacturing elements, it was overthrown in the February Revolution of 1848. By its very stubbornness it rendered impossible a smooth transition to simple bourgeois order and brought about a crash which awakened a new estate, the working classes, to political activity, threatening capitalism by a premature communism. Nevertheless, with the aid of the third Napoleon, the communistic danger was averted, the empire was restored, and conditions favorable to business enterprise were established. "Sooner or later war will have to be declared on the Americans," remarked Empress Eugenie to Napoleon III one day in 1853. "War, my love," replied the emperor, making a false prophecy, "is no longer possible in France; we are, so to speak, hemmed in by material interests and trade, which are all in all." To such a point had come the nephew of the great Napoleon who sneered at the English as a race of shopkeepers. The romantic age of the Bourbons had passed forever. France was on the way to the third republic.

In Germany and Italy the consolidation process so swiftly advanced by Napoleon I was completed shortly after the turn of the mid-century. It was in 1834 that the unifying Zollverein was inaugurated; thirty-three years later, in 1867, the North German Confederation was launched, to be completed by the addition of the south German states four years afterward. The theater was being prepared and energies released for a remarkable upswing of capitalism in Germany. It was in 1861 that Victor Emmanuel was crowned king of united Italy and in 1871 that his capital was moved to Rome. In

the meantime the Austro-Hungarian complex of states and peoples was being reorganized on a compromise basis and a vast territory prepared for unhampered trading relations. How far this state-building movement was the result of railways, improved roads and rising industries cannot be determined by economists, but there is no doubt that by enlarging the trading area, eliminating tariff barriers, facilitating the construction of railways for strategic reasons, political unification created economic and legal conditions favorable to the expansion of capitalism as against feudalism.

During these years of consolidation in central and southern Europe, domestic legislation, as well as wars and constitution making, aided the capitalistic process by eliminating various restraints of feudal tenures on the free movement of labor. As already indicated, in 1807, Prussia abolished serfdom by a decree designed to "remove every obstacle that has hitherto prevented the individual from attaining such a degree of prosperity as he is capable of reaching,"—a formula which would have suited Franklin and Calvin. By a law put into effect on July 1, 1848, serfdom was extinguished in Austria, and by an act of September 7, 1848, there was a sweeping abolition of feudal vestiges in that realm, in language which recalled the famous French decree of August 4, 1789. During the same revolutionary year, 1848, the serfs of Hungary and Croatia, under various laws and decrees, obtained "personal liberty." In 1861 Alexander II emancipated the serfs of the Russian Empire, thus carrying the liberation movement to the gates of the Orient. Although the abolition of serfdom destroyed the legal foundations of servitude it did not of course produce the same results everywhere; neither did it always give land to the former tenants or free them from charges in the nature of indemnities. But broadly speaking, it worked a revolution in agricultural economy and, what was more significant, legalized more or less the freedom of migration, national and international, so useful in supplying labor for capitalist enterprise.

Beyond the borders of Europe were occurring events hardly less significant for western civilization: the development and settlement of Australia, the opening of China and Japan to western commerce and intercourse, the penetration of Africa, the independence of Latin America and the exploration of distant islands of the seven seas. Across the Atlantic a new political power was rising on the world horizon: the United States of America. During this period Louisiana and Florida were purchased, Texas was admitted to the Union, and war was waged with Mexico, ending in annexations that carried the borders of the country to the Pacific; in 1867 Alaska was purchased, with distant islands near the outposts of Japan. This period witnessed the triumph of Jeffersonian and Jacksonian democracy and finally, in 1865, the victory of capitalism and freehold agriculture over the slave planting system. American industries and agriculture furnished an outlet for the overflowing populations of England, Ireland and Germany; and wheat from American fields exerted a more powerful influence on European economy than the gold of the Spanish conquistadors. To the United States European political and social philosophers, such as de Tocqueville and Harriet Martineau, came to find illustrations and confirmations of their European predilections. A republic and a democracy, anticipating by generations the fate of Europe, America was both an inspiration and a menace to contending parties in the Old World. Neither the rage of Carlyle nor the meditation of Sir Henry Sumner Maine could leave the United States out of its sweep.

To add to this account of intellectual movements, political events and economic legislation, a description of the great inventions of the period under consideration would be a work of supererogation. Yet it may not be amiss to call attention to the fact that between 1800 and 1865 steam navigation was established and transoceanic lines opened to all parts of the world, railways were inaugurated and a network of lines spread over western and central Europe, and telegraphic communications began to be employed among all the great centers of commerce. Meanwhile improvements in textile machinery, the steam engine, iron-working equipment, and indeed the whole outfit of manufacturing, poured in such bewildering rapidity from workshops and laboratories that nothing short of an encyclopaedia can give an adequate impression of their number and importance. For our purposes their significance lies especially in the acceleration of the capitalist process as a productive and an accumulative operation, in the creation of capitalists and working classes, in the disintegration of feudalism as an economic and social relation, in the extension of rationalization over increasing areas of human activity, in setting fixed orders of society afloat—in short, revolutionizing the social and intellectual heri-

tage of the Middle Ages from the bottom to the top. Indeed it would be well to remember that during this period Justus von Liebig (1803–73) made his revolutionary applications of chemistry to agriculture, invading a field long dominated by rule of thumb, signs and omens, and bringing to rural methods and mentality the dissolving alchemy of rationality, supplementing the work of Stein in refashioning mankind's oldest work in the image of scientific capitalism.

VII. A transformation in economic and political arrangements so fundamental as that just outlined could not fail to produce novel patterns of thought and to bring about novel applications of inherited patterns. Naturally the center of intellectual interest was moved ever nearer to the new center of actual interest, capitalism and its system; and the conflict of ideas that raged around this realistic social structure and process spread to the uttermost borders of thinking, even into music and aesthetics. In beginning a survey of this intellectual revolution, it is well to recall that none of the participants were disembodied spirits, not even the cold-blooded scientists who so passionately announced their lack of passion. All of the thinkers in this period, as in all other periods, stood in some relation to the feudal order that was crumbling or the capitalistic order in the process of becoming. By family origin they were of feudal, capitalistic, mercantile or mixed ancestry, and in living and earning a living were involved more or less in the one system of economy or the other. Their education leaned either to the clerical and philosophical, on the one side, or to the practical and scientific, on the other. Some of them were, no doubt, more or less detached from their environment, but the detachment was a matter of degree, not of absolutes. If economics boasted of being a science of actuality, it is appropriate to remember that a large body of critics looked upon it as a defense mechanism for capitalism, and Karl Marx turned its leading doctrines to the ends of a communist revolution! When economists declined to answer questions respecting the evolution and outcome of their subject matter, on the ground that such inquiries were irrelevant, they were admitting limitations rather than improving the status of their science.

New conditions in England were especially favorable to the development of what may be called "pure economics," that is, thought about business untinged by clerical and scholastic aspirations. In that country the feudal aristocracy was practically submerged under capitalism. Advancing far ahead of France and Germany in technology and large scale production, masters of the world market by virtue of their earlier development of machine industry, English capitalists needed no protective tariffs to save them from foreign capitalistic competition. Hence free trade was decidedly to their interest and in promoting it they were not compelled to make terms with the landed aristocracy; on the contrary, they could force free trade upon the country by their own action. Isolated by the sea and defended by the navy, they needed no standing army with its feudalistic heritage and mentality. Rejecting military aid as a defensive force against foreign countries, they could, with more logical consistency, reject it in domestic affairs. For these reasons, therefore, they had to make no serious compromises with feudalism or cameralism, and could go straight to the promotion of capitalism with fewer handicaps of heritage than their brethren on the continent. Practical interests, material circumstances and intellectual climate favored a concentration on "pure economics" as distinguished from "political" economy and an emphasis on the economic man in contrast to the man affiliated with a class order (*Standesordnung*). Thus temporary and local conjunctures gave to English "economics" a validity akin to that of natural science, at least in the minds of its creators and beneficiaries.

Realistic thinking about this order, that is, thinking undisturbed by metaphysical and clerical inquiries, was distinctly favored by the full-flowered development of English materialism. Hobbes, Locke and Hume had made immense contributions to this scheme of world interpretation, and as the eighteenth century turned into the nineteenth, Jeremy Bentham applied it to social phenomena in his *Introduction to the Principles of Morals and Legislation* (published first in 1789 and in a new and corrected edition in 1823). "Nature," he declared, "has placed mankind under the governance of two sovereign masters, pain and pleasure. . . . They govern us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection will serve to demonstrate and confirm it. . . . The community is a fictitious body, composed of the individual persons who are constituting, as it were, its members. The interest of the community then is, what?—the sum of the interests of the several

members who compose it." Out of this theory of utility flowed Bentham's theory of political economy: "The business of government is to promote the happiness of society by punishing and rewarding." In other words, the function of thinking about society and its component individuals is a matter of calculation and balancing, akin in spirit to the bookkeeping operations of the counting house. To such a point had the materialist conception of life brought the speculative technology which the economists of capitalism were to manipulate during the first half of the nineteenth century.

In the field of theory four men—Ricardo, Senior and the two Mills—and in the sphere of practise two men—Cobden and Bright—developed the colorative system of capitalist philosophy into a logical structure of dogma, all within a framework of property conceptions rescued from the ruins of feudalism. Yet it is not easy to portray that structure, for it was composed, in part, of "iron laws" of rent, profit rate and wages, subjected to ruinous limitations and exceptions, and, in part, of moral aspirations quite foreign to the strict business of natural science. Broadly speaking, however, it consisted of the following parts: Society is composed of individuals, each struggling to avoid pain and to secure pleasure-giving goods. Where legal freedom of contract and of motion is allowed, the individual applies his talents and capital to the enterprise for which he is best fitted. Competition guarantees the survival of those who render economical services at the lowest price. Competition and rent regulate prices, profits and wages, so that each productive factor in society obtains a reward fairly apportioned to its deserts. Pressure of population keeps wages near the subsistence level, and the improvidence of the poor assures an abundant labor supply. Everybody is the best judge of what is beneficial to him, and by trusting to his instincts and reason can find the place in society to which he is best adapted. Attempts to control prices and wages are interferences with natural law, ruinous in consequences and bound to fail. The freedom that works so well within the state works equally well among states; under a regime of free trade each nation produces the goods for which it is equipped by nature—climate, soil and resources—and by talent; and a free exchange of goods among states results in the widest benefit to all, each party to the transaction receiving the most desirable goods at the lowest price. If private monopolies arise and control prices they violate natural law; if trade unions make the same attempt to control wages they also violate natural law. As for the state, its duties are clear: its business is to protect property and to keep order, allowing the economic machine to function freely under its own momentum—the profit-making passion and the struggle for existence. Obviously this is a scholastic-Newtonian scheme of thought, founded on a fixed-order notion of things—not Hegelian and Darwinian, based on the concept of eternal flux. Indeed it was a fashion in the early years of the nineteenth century to refer to Ricardo as "the Newton of political economy."

Yet as a matter of fact, as Paul Rostock points out, Ricardo's iron law of rent rested on mobile factors—the progressive decline in the productivity of land, pressure of population on subsistence and the ruin of capitalists by the recipients of rent. Although Ricardo himself put off the evil day by reference to technology and improvements in agricultural economy, as Rostock continues, that was a subterfuge, not a square facing of his own logic; and had Ricardo been keener he would have been forced to inquire whether the landlords would go back to feudalism or use their rent to build a new capitalism, or whether labor would smash a system which brought ruin to great masses of mankind. If John Stuart Mill built his political economy on the same Newtonian order of thought he nevertheless privately did not believe in the irrefrangibility of his own system, as his autobiography conclusively shows. But by that time the latticework of "iron laws" was hopelessly shattered by criticism, and within a few years the editor of the *Encyclopaedia Britannica*, confessing that the once solid system of political economy was in ruins, omitted the subject entirely, offering in exchange a historical review of the theme which was notable mainly for its tone of melancholy resignation.

Although the Newtonian economics of the English classicists made some headway on the continent, both economic and political conditions rendered impossible such a complete intellectual victory there as occurred in England. It is true that some French and German thinkers took over the whole creed of Manchesterism; it is true that Napoleon III, first and foremost a theorist, who had lived long in England, coquetted with free trade doctrines; but the most influential of continental economists, such as Adam Müller and Friedrich List, worked in the direction of nationalism; and Napoleon III was

vigorously opposed in the French Parliament in his free trade negotiations. The reason is not far to seek. French industrialists demanded protection against the advanced competitors in England. Exigencies of national defense required the construction of railways and other public works with respect to strategy as well as economy. The struggle for unity in Germany and the popular revolt against Napoleonic power gave a national turn to economics that contradicted at many points the cosmopolitan materialism natural enough in English economics. Moreover the survival of feudal monarchies, such as that of Prussia, with their bureaucracies and cameralistic traditions, kept intact many barriers to the free play of bourgeois economic interests. It was by no means accidental, therefore, that List entitled his great work, published in 1841, *The National System of Political Economy;* neither was it due entirely to his long sojourn in the United States; the realities of life in Germany made the order-of-nature economics of the Ricardian school unworkable, if not unthinkable—certainly inappropriate—for a country that was not an island and was still governed by feudal estates.

VIII. From many angles the system of political economy favorable to the development of capitalism was brought under a fire of criticism and confronted by alternative schemes of thought, occasionally in the guise of natural science. Some of these criticisms flowed from the ideology of the feudalism which capitalism was supplanting—the *Standesideal* of the *Standesordnung*, characteristic of the agrarian, handicraft and mercantile economy of the Middle Ages. The vast literature of Catholic reaction which welled up after the storm of the Napoleonic wars comes almost entirely under this head. Only with difficulty could the Catholic church, which flourished best in agricultural countries and had long been supported mainly by landed endowments, bring itself to accept capitalism as a system of production, and never did it reconcile itself with the natural science, skepticism and utilitarianism of that order. One of the fatal mistakes listed in the *Syllabus of Errors*, issued in 1864, was the error that "the Roman pontiff can and ought to reconcile himself to, and agree with, progress, liberalism and civilization, as lately introduced." Idealizing the feudal relation in which superior persons protected and subordinate persons served, Catholic writers attacked the cold-blooded economy which enabled an employer to wash his hands entirely of all responsibility to labor, even in times of industrial crises when thousands were on the verge of starvation.

Nor was this type of thinking confined to Catholic writers. In England it was represented by the vehement Protestant-skeptic Thomas Carlyle. When the sources of his inspiration are explored and the types of his illustrations classified, it will be found that he was the philosopher of idealized feudalism. In praising aristocracy and crying down democracy he was celebrating the heritage of feudalism. In his *Past and Present* he contrasted the feudal ideal with the capitalist order around him. His hero Frederick the Great was a war lord who talked about serving his people. When Carlyle assailed capitalists he assailed them for not assuming toward their laborers the obligations of responsibility which a chivalric lord was supposed to have assumed toward his serfs. If he laid stress on natural inequality, it was not to assure Ricardo's capitalist an abundant labor supply but to emphasize the reciprocal duties of employers and employees which he conceived in mediaeval terms. Liberalism, democracy, laissez-faire, utility and the entire intellectual baggage of capitalism Carlyle looked upon as sheer anarchy, destructive to morals and hence impossible as the philosophy of a going society. "A high class without duties to do," he once exclaimed, "is like a tree planted on a precipice from which all the earth has been crumbling." Although he never pictured his reconstructed capitalism in concrete terms, Carlyle's teachings were certainly hostile to political economy as handed down by Ricardo and exerted a powerful influence on English social speculation during the period under consideration.

Carlyle's companion in arms, John Ruskin, combined the *Standesideal* of his friend with a passion for the aesthetics of the Middle Ages. To him also the materialistic teachings of political economy, its indifference to moral as distinguished from market values, were utterly abhorrent; for the liberalism of Gladstone and the conservatism of Disraeli he had only amused contempt; for the feudal ideal of subordination, reciprocal duties, just price and established quality he maintained to the end an unbroken admiration. To give the title "captain" of industry to a modern capitalist who lived well while his army was either miserable or starving from unemployment was to Ruskin scarcely short of sacrilege. If in his search for a remedy

for evils as he saw them he turned to a kind of state socialism, it was not because he had any sympathy with social democracy of the Marxian type; it was because he believed that capitalists themselves would not establish a system of moral reciprocities and that only the government could be induced to create the new social order. In itself that order, as sketched in the preface to *Unto This Last*, was a kind of feudal socialism in an idealized form. Moreover he emphasized in his scheme a phase somewhat neglected by capitalist economists, namely consumption, especially as a moral act. "Wise consumption," he insisted, "is a far more difficult art than wise production." Political economy, he contended, "consists simply in the production, preservation and distribution, at fittest time and place, of useful or pleasurable things." In other words, it is a science of making the natural order conform to mankind's moral and material needs, not a science of a natural order commanding mankind's obedient adaptation. Of Ruskin's great influence there can be no doubt; and in many ways he was more of a prophet—hence more scientific—than Ricardo or Richard Cobden.

With appropriateness and acumen capitalism was attacked in France by the scion of an ancient noble family, Comte de Saint-Simon, who had served in the American Revolutionary War and was proud of calling himself a soldier of George Washington. Although he made a fortune speculating during the French Revolution, Saint-Simon was never affiliated in work or thought with the capitalist process. In spite of his devotion to the idea of progress he clung to feudal concepts of economy and Christian concepts of social ethics; when he issued his comprehensive attack on capitalism and his program of socialism, he entitled it *The New Christianity* (1825). It was from the work of Saint-Simon that his pupil and disciple Comte derived the inspiration and general drift of thought which evolved into the positive philosophy and the grand sociological concepts associated with it.

In the same general class came the Swiss historian and economist Sismondi, who frankly confessed that it was not science but the observation of the distress caused by panics and pauperism—the disharmony of the capitalist system—which led him to attack it and to propose instead a cooperative order of society. Accused of being a conservative romanticist, looking back to the established order of old times, he freely accepted the characterization and made the most of it. Of noble origin and classical training, he had little sympathy, practical or intellectual, with the materialistic economists, such as Adam Smith and Ricardo. Without attacking machine industry, he proposed to transform it in the image of the inherited moral order. It was as a prophet of this direction that he became an influential contributor to the development of utopian socialism.

Indeed it might be said with justification that the whole philosophy of utopian socialism, to be generalized from the works of Owen, Saint-Simon, Fourier and Sismondi, corresponded with strange exactness to the fixed order of the just price and established quality idealized by the mediaeval economists. None of the utopians accepted the idea of mankind as the helpless victim of economic laws; all of them insisted, on the contrary, on the possibility of creating an ideal moral order out of the materials at hand. If Owen clung to a curious kind of deterministic materialism, he entitled his utopia "the new moral world." If the utopians made use of natural science in their speculations, none of them ever surrendered to the Newtonian concept of an iron-law nature. All of their utopias were small colonies combining agriculture and handicrafts, assuring a minimum subsistence to the participants, production for use rather than for profit, and quality standards such as the old guilds were supposed to maintain. It would be almost safe to contend that the utopian socialism, so vigorously opposed to realistic capitalism, was at bottom a *Standesordnung*, borrowed from the feudal age and adapted to the technology of the early era of capitalism. Perhaps this may help to account for its transitory character and its failure as a practical force in the first half of the nineteenth century. Still it would be a mistake to underestimate its influence on social thought; it was one of the powerful intellectual currents of the age.

Another variant on the contemporary antithesis to capitalism and capitalist economics was Marxian socialism and Marxian economics, which should in truth be separated. Coming after utopian socialism had flowered in many forms and capitalist economy had found its Newton in Ricardo, Marxian economics was a clear fruit of both, nourished no doubt by the revolutionary events of 1848. Although Marx could hardly find words scornful enough to express his opinion of the utopians of every brand, he was familiar with their writings and derived ideas from them, perhaps even the most

utopian idea of all, namely that at the close of the capitalist period would be ushered in the final order of freedom for mankind. His collaborator Engels, who deserves more credit for the labors of the partnership than he has ever received, was not only acquainted with Owen's utopianism, but wrote for Owen's utopian paper, *The New Moral World*. Hence we cannot avoid the conclusion that both Marx and Engels were thoroughly saturated with utopianism—a scheme of thought strangely conforming to principles of scholastic economy. As Otto Rühle says in his *Karl Marx: Leben und Werk* (Dresden 1928; translated by Eden and Cedar Paul, New York 1929), "Paris was, at the time Marx lived there, a great melting pot full of socialistic and revolutionary ideas. There were to be found remnants of Saint-Simonism, ruins of Fourier's phalanx movement developed by Considérant, Christian socialism according to Lamennais, petty-bourgeois socialism in the variations of view represented by Sismondi, Buret, Pecqueur, Leroux, Vidal and others. At the beginning of the forties Etienne Cabet appeared in Paris again, after he had studied in England the utopianism of Sir Thomas More and the practise of Robert Owen" (p. 87 of German text). In the development of their economics, however, Marx and Engels used primarily the writings of Adam Smith, Ricardo, McCulloch and the classical school, and turned "iron laws" and materialism against the very system mirrored in and defended by them.

While making heavy borrowings from classical economics and utopian idealism, Marx and Engels also collected fundamental concepts from history, both written and observed. The idea of the class struggle, which they so extensively exploited, stood out firmly in the writings of Aristotle, Machiavelli, Harrington, Hobbes, Locke and many other social philosophers; and it was well known to thinkers in Europe and the United States, especially to the framers of the American constitution and defenders of it, like Hamilton, Madison and Gouverneur Morris. What they did not discover by study Marx and Engels learned by direct observation. "After the establishment of great industries," wrote Engels in his work on Ludwig Feuerbach, "especially at least after the European peace of 1815, it was no longer a secret to any person in England that the whole political struggle there turned on the quest for power on the part of two classes, the landed aristocracy and the bourgeoisie. In France, with the return of the Bourbons, the same fact came to consciousness; the historians of the restoration period from Thierry to Guizot, Mignet and Thiers were unanimous in agreeing on it as the key to the understanding of French history since the Middle Ages. And after 1830, in both countries, a third contestant for dominion was recognized, the working class, the proletariat. Relations had so simplified themselves that anyone would have been compelled to close his eyes to escape seeing in these three great classes and the opposition of their interests the driving force of modern history; at all events, in the two most advanced countries." Students of history, Marx and Engels were subdued to a dynamic sense foreign to the Newtonian economics of the bourgeois; observers of contemporary political conflicts, they could not avoid seeing the inevitability of a social struggle even within the framework of a "natural order."

Besides approaching capitalist economy from the historical angle Marx and Engels looked at it through the intellectual structure of German philosophy, especially Hegelianism. As Germany did not shake off feudalism and clericalism with the same thoroughness as "the nation of shopkeepers," so it did not develop until the nineteenth century a school of materialistic thinkers comparable to Hobbes, Locke, Hume and Ricardo. In being more "reactionary," German speculators escaped the facile superficiality of the sensationalist school and combined mediaeval mystification with a profundity of thought not nourished in England. Perhaps, also, the political and armed conflict between France and Germany from 1793 to 1815 contributed not a little to the rejection of the materialism of the Diderot-Holbach direction. At all events German thought during the opening years of the nineteenth century gave a distinctive environment for the consideration of economic, social and historical questions Marx, brought up on Hegel, could not by any stretch of the imagination see eye to eye with English economists of the natural-order persuasion.

In a passage of striking power Engels expounded the Hegelianism that counted so heavily in the Marxian formulation of political economy: "With Hegel the truth which had to be recognized in philosophy was not a collection of ready dogmatic propositions which, once found, would only have to be learned by heart; the truth lay in the process of cognition itself, in the long historical evolution of knowledge, which rose steadily from lower to higher stages

of cognition without, however, ever arriving, through the discovery of a so-called absolute truth, at the point beyond which it could not go, the point where nothing more was left for it to do except to lay its hands in its lap and stare at the absolute truth now attained. . . . Each stage [in thought] was necessary, therefore—proper for the time and conditions to which it owed its origin; however, it was untenable and unjustifiable with respect to the new and higher conditions, which were gradually evolved out of their own internal structures. . . . So this dialectic philosophy put an end to all ideas of a final, absolute truth and absolute human circumstances corresponding to it. Before it nothing stands as final, absolute, holy. . . . Nothing stands before this philosophy except the unbroken process of becoming and passing, the endless march from the lower to the higher, the mirroring of which in the thinking brain is philosophy itself."

While it is true that Marx rejected the idea that history is the progressive revelation of the divine idea and boasted that he found Hegel standing on his head and put him on his feet, this intellectual and gymnastic achievement was not as revolutionary, from a philosophic standpoint, as Marx imagined. The Hegelian concept itself was the revolutionary element, a concept equally opposed to the *Standesordnung* of scholastic economists, to the natural order of the Newtonian world imagined by the classical economists of England and, if Marx had been daring enough in his logic to see it, to the positive socialist order to be established after "the death knell of capitalism" was rung. Such was the underlying dynamic of Marxian and Engelsian socialism, which possessed the philosophic validity inherent in Hegelianism, spread beyond the borders of economics into history, ethics and sociology, and when fortified by the Darwinian concept of evolution in the animal kingdom became a powerful intellectual force in the mid-century, both dissolvent and constructive, combining faith in the iron laws of nature with the divine hopefulness of the theologian.

IX. From still another angle, that of anarchy, capitalist economy was attacked, Proudhon, the poverty stricken son of a French cooper, taking the lead. Yet in many ways it was merely the extension of Manchesterism to a logical conclusion; the state should not even protect property and life; it should be abolished, and the free operation of natural forces, limited perhaps by voluntary artificialities, would create the ideal order of things. Proudhon even went so far as to declare that domestic questions could be solved by a bureau of statistics, and that international questions could likewise be resolved by a bureau of international statistics. While there were elements of social control in his scheme, anarchy, the abolition of political dominion of man over man, was the goal which he set before him and the end toward which he thought society was moving.

More violent in temper and methods, still more clear-cut in his anarchist goal, was the Russian agitator Bakunin, who appeared on the revolutionary scene of western Europe during the upheaval of 1848. In his own words Bakunin summed up his attitude to classical economy and Marxism: "Marx is an authoritarian and centralizing communist. He wishes what we wish: the complete triumph of economic and social equality, however, within the state and through the power of the state, through the dictatorship of a very strong and, so to speak, despotic provisional government, that is, by the negation of liberty. His economic ideal is the state as the sole owner of land and capital, tilling the soil by means of agricultural associations, under the management of its engineers, and directing through the agency of capital all industrial and commercial associations.

"We demand the same triumph of economic and social equality through the abolition of the state and everything called juridical right, which is according to our view the permanent negation of human right. We wish the reconstruction of society and the establishment of the unity of mankind not from above downward through authority, through socialistic officials, engineers and public technicians, but from below upward through the voluntary federation of labor associations of all kinds emancipated entirely from the yoke of the state." Illuminating this creed by more technical knowledge, Bakunin's compatriot Kropotkin forecast an anarchistic society combining fields, factories and workshops in a single system of communal economy, decentralized and federated, employing no engines of state in direction and control.

An analysis of this system of thought shows that it unites in itself the natural order of the English economists carried to a logical extreme, the equalitarianism of the Rousseau school, and the hatred of the state common to despotic countries where the state was personified in an absolute ruler. From an economic and techno-

logical point of view it was pre-capitalist; that is, it rejected with the scholastics profit making as the prime mover of economic activities, and the society forecast by it was a simple combination of agriculture and petty workshops. When Russians visualized it they usually saw the Czar and the landed nobility swept away and the villages and handicrafts left intact as they had existed for centuries. It was built upon a localized primitive economy, not on a national order, to say nothing of international finance and exchange. Yet it agreed with classical economy in its faith in the excellent outcome of self-directed economic activities undisturbed by state interference. Perhaps its vogue and influence were due to its services to capitalistic opposition to state intervention rather than to the intrinsic power of its appeal as a system of thought.

A fifth attack on capitalistic economics came from the direction of nationalism tinged with socialistic ideas. Practically the work of bringing about political unity in Germany and Italy was entrusted by destiny to leaders of feudal affiliations; in Germany the Prussian state, in Italy the Sardinian state, took the leadership; in both countries the bourgeois, while desiring unity, hoped to effect it by constitutions rather than the sword and were, therefore, more or less in opposition to the actual process of national unification. Bismarck's troubles were with the bourgeois, not the Prussian landlords. In his conflict with the middle classes he even flirted with the fourth estate and cooperated with Lassalle in the formulation of policies. Springing from a landed family, serving the Prussian state, constantly struggling against the restraints of mercantile liberalism, Bismarck could not possibly adjust his mentality to the economics of Manchesterism. The use of the state for economic ends had been a historic practise in Prussia; Bismarck continued it. While socialism was a rising power, he helped to direct it against the bourgeois; after it grew into a menace he made concessions by furnishing instalments of state socialism. When Schmoller became a professor of political economy at Halle in 1864 and Wagner took up his duties at Berlin six years later, state socialism was already in the air, making German economic thinking well-nigh impervious to the reasoning of the Manchester school. That which seemed perfectly "natural" to Cobden did not seem "natural" at all to Lassalle, Bismarck, Wagner and Schmoller, and for reasons "natural" to both situations.

X. Passing outward from economics to the wider implications gathered under the head of sociology, we encounter the same operating forces of circumstantial reality and the same intellectual climate as the conditioning environment. Indeed it is difficult to distinguish sociology from economics on the one hand and from socialism on the other. Comte, who may well be called the founder of the discipline, was a disciple of Saint-Simon, the French utopian socialist; and yet he was at the same time a student of the natural sciences and the naturalistic philosophy which had furnished nutriment for classical economics. His concept of the three stages of social evolution—theological, metaphysical and positive—reflected with striking precision the scientific assurance of his period; and the outcome of his sociology, an ideal society tinged with religion, was appropriate to a thinker early trained in the utopianism of Saint-Simon. Yet by escaping the iron laws of Newtonian economics Comte came more nearly to forecasting the trend of social thought and practise than did his contemporary Herbert Spencer. By emphasizing the contention that neither economic nor political reorganization would alone lead to the goal indicated by social evolution, and by laying stress on intellectual readjustment and universal education, he helped to rescue both politics and economics from the sterility of mathematical inevitability so attractive to the classical economists and the Marxians. More than that; in spite of his vagaries, he widened the periphery of thinking about human society, gave a certain social wholeness to speculation about it, and, by pointing out the synthetic character of modern civilization, helped to prevent an overemphasis of ideas or facts.

It was the breadth of view which characterized Comte, no less than his vagaries, that led the English rival Herbert Spencer to declare that his chief debt to the French sociologist was negative. Spencer's resistance to Comtism was the opposition of a practical and confirmed exponent of Manchesterism, classical economy and materialistic science. In explaining "how little influence Comte's teachings have had on scientific thinking in England," Spencer said with a certain air of hauteur: "Those whose education has been mainly literary are unable to realize the mental attitude of those whose education has been mainly scientific—especially where the scientific education has been joined to scientific tendencies and a life of practical

science continually illustrating theoretic science, as in my own case." In this single sentence Spencer revealed his strength and weakness. Here is the strength of Cartesian mathematics, Newtonian physics, Ricardian economics and Darwinian materialism; here is the weakness of a mind which imagines that the kaleidoscopic motions and emotions of life can be covered by statements akin to chemical formulae in exactness. It was in this spirit that Spencer, a child of the utilitarian age, applied, after a fashion at least, what purported to be rigid canons of thought to the origins of religion, to the rise and development of ceremonials, to social, military and industrial institutions, and to current political practise. The range of his influence was proportioned to the dominance in various countries of the modes of life and thought which he represented; and his work ran the full gamut of scientific expressionism throughout the world. Even if it had not been given the powerful aid of Darwinism its pressure in the currents of thinking would have been immense.

XI. Through the historical writing, no less than through the economics and sociology of the period, rang repercussions of the great political and economic struggles of the age, making necessary many adjustments in the heritage received from the preceding epoch. In the pages of the English historian Macaulay could be traced the long conflict between the capitalistic and landed classes in England and the evolution of their associated ideologies. The passing of the military caste in the island kingdom and the rapid advance of parliamentary government favored the cultivation of research in political institutions, which finally flowered in 1873 in the publication of the first volume of Stubbs' *Constitutional History of England*, the progenitor of a long series of institutional studies. Although the general outlook was widened by Buckle, whose *History of Civilization in England* (published in 1857) aroused a sensation in two hemispheres, it was found on examination that his structure of thought had been reared on economic Manchesterism and the hypothesis of materialism, and reflected current political and theological controversies. Across the Atlantic, in the United States, the Democrats found their historical oracle in George Bancroft (trained in Germany), who united some of Hegel's dynamics with the optimism of Jacksonian democracy; while at the same time the past was reconstructed for the Whigs by Hildreth, a scholar brought up in the federalist school. In France the historical works of Thiers, Guizot, Thierry, Mignet, Lamartine and de Tocqueville bore deep traces of the controversies which had shaken France since 1789, the new social ideas which stirred Paris to a socialist revolt in 1848, and the contests which the respective authors witnessed. Indeed most of the French historians were statesmen or politicians and mingled the emotions of the forum with the ratiocinations of the study. Their great theme was the justification or condemnation of the upheaval of 1789 with corresponding pertinence to contemporary issues.

If German historical scholarship appeared to be more thorough and more profound it by no means escaped the impacts of the day. In the dark hour of humiliation at the hands of the first Bonaparte, German nationalism, personified best perhaps in Fichte, girded itself as a young giant, making use of universities and all disciplines of thought to strengthen the state for liberation and to inspire the masses with confidence in their native powers. As Cunow says of von Maurer, this school of thought sought in the German past for the secret of a better future; here is the root of the Teutonic theory of racial genius which dominated so much of German thinking of the nineteenth century and passed swiftly into England (a partner of Prussia in the destruction of the Latin Napoleon) where it exfoliated richly in the works of Palgrave, Kemble, Freeman, Stubbs and Green; and then leaped the Atlantic to Johns Hopkins University where it made a powerful impression on a generation of American historical scholars between 1876 and 1900. Besides developing inquiries into Teutonic origins, the German historians of the period, taking note of the struggle for parliamentary government raging on every hand, also laid great emphasis on institutions; hence the monuments of erudition erected by Waitz, von Maurer, Brunner and Gneist, which were so assiduously studied across the channel by English contemporaries. Although Ranke announced a new ideal when he declared it to be the business of the historian to see things as they actually had been, his underlying philosophy was more akin to the faith of Martin Luther than to the materialism of the French and English philosophers (Friedrich Meinecke, *Die Idee der Staatsräson in der neueren Geschichte*, Munich and Berlin 1924, p. 471). After Hegel struggled through the phenomenology of the spirit and the

philosophy of history he came out with an apotheosis of the Prussian monarchy!

From a strictly scientific point of view the most important achievement of the period was the beginning, in various countries, of great collections of documentary and source materials and the foundation of scholarly journals for the publication of minute researches, thus undermining in detail the huge structures erected by the generalizers of the epoch. But it could scarcely be said that this new documentation exercised much influence on the histories of the period done in the grand manner—the histories that made the deepest impression on social speculation and practise. "Scientific history," claiming a kind of disembodied emancipation from temporal affairs and general ideas, belonged to the future; thousands of doctoral dissertations and specialized studies were to prepare the way for its short-lived triumph near the close of the century.

XII. With respect to the political theory of the period under consideration, the four points of the compass were: the individualistic anarchy of Bakunin and the socialist dictatorship of Marx, the capitalist-constable state of English Manchesterism and the feudal-police state of Prussianism. All other schemes and themes were but variations from these four types of opinion. Whoever starts on a journey through the tangle of political speculation must take his guidance from these fixed points of observation. It matters not whether it is the theory of Fichte, Ranke, Schelling, Hegel and Treitschke, heavily laden with learning and philosophy, or the laborious periods of Karl Marx fusing German ideology and English capitalistic experience, or the dogmatic assertions of Bakunin, or the reasoning of Herbert Spencer's *Social Statics*; the animus is there and the Q.E.D. of the syllogism is implicit in the assumptions of the first assertion. The political thinking of the age mirrored its realities, with their varied gradations and circumstances. Having long served as a shield of defense for a prevailing order or a foil of attack upon some dominant arrangement in politics, political theory did not emancipate itself from its heritage. If there could be a science of politics akin to the science of physics, no philosopher of this period discovered it.

Perhaps the nature of what passed for "scientific reasoning" respecting the state during the epoch can best be illustrated by the following propositions advanced by Spencer: "Everything in nature has its laws. . . . As with man physically, so with man spiritually. . . . Mind has its laws as well as matter. . . . As with man individually, so with man socially. Society as certainly has its governing principles as man has. . . . Analogy shows us that they must exist. . . . The laws of society are of such a character that natural evils will rectify themselves by virtue of a self-adjusting principle. There follows the inference that it is needful only to maintain order—that the function of government is simply to defend the natural rights of men—to protect person and property—to prevent the aggressions of the powerful upon the weak—in a word, to administer justice."

Far less tenuous in its thinking was the school of historical jurisprudence founded by Savigny and his generation of German jurists. Two special features of their field saved them from the vagaries that plagued speculation in politics. The first was the logical and almost artistic perfection of the Roman law which they made the object of such profound and affectionate study. Compare, for example, the *Corpus juris* exploited by Savigny with Machiavelli's *Prince* so assiduously cultivated by Hegel and Fichte! The second was the practical requirements of their profession which held the lawyers nearer to the business of living and working. The first half of the nineteenth century was a period when the old confused laws of feudal relations were being transformed to meet the exigencies of modern economy and codified for the convenience of legislators and practitioners. Echoes of the Code Napoléon reverberated through Germany and Austria to Budapest and Belgrade on the far banks of the Danube. It should not be forgotten that Savigny, besides being a professor in the University of Berlin, was also a politician, a Prussian official from time to time, and above all minister for the revision of legislation from 1842 to 1848. Doubtless experience as a public official or legal draftsman would have altered the angular political theories of Fichte, Marx, Bakunin and Herbert Spencer, bringing them more near to the inevitable course of things. Historical jurisprudence was a powerful corrective to loose political speculation, a useful guide to exact thinking about social relations capable of legal definition, a check on facile hopes and, equally, on facile aspirations for a return upon the past.

XIII. Strangely involved with all the events and disciplines reviewed above was the doctrine

of evolution associated with the name of Darwin, including all its implications for anthropology, psychology and social science. "Involved" is the just word, for besides exerting a profound influence on all departments of thought, Darwinism was a product of this age—the age of early capitalism, materialism and sharp social conflicts. In fact, Darwin himself confessed that while he owed much to his observation of the struggle for existence in the animal world, the idea of natural selection came to him after reading Malthus. In a letter to Haeckel Darwin wrote: "Having attended to the habits of animals and their relations to the surrounding conditions, I was able to realize the severe struggle for existence to which all organisms are subjected. . . . With my mind thus prepared I fortunately happened to read Malthus' *Essay on Population*; and the idea of natural selection through the struggle for existence at once occurred to me." And what was the essay by Malthus? A cold, scientific study originating in the passionless pursuit of truth? On the contrary, it originated as a political and social tract to combat the "dangerous" social doctrines of Godwin. Thus inspired in part at least by a class controversy appropriate to the age, Darwinism naturally lent sanction to the tooth-and-claw struggle of Manchesterism, to the individualistic gospel of early capitalism.

At the same time Darwinism was the logical outcome of a line of scientific research and thinking which ran far back into the eighteenth century, to say nothing of Greek and Roman concepts of biological development. It was foreshadowed in the work of Buffon, Erasmus Darwin and Lamarck. It was worked out to some extent independently by Alfred Russel Wallace. Its advance was promoted by the geological investigations of Hutton and Lyell, the botanical studies of Linnaeus and the innumerable researches of specialists in Europe and America, not overlooking the debt to Asa Gray of Harvard, so generously acknowledged by Darwin himself. All the thinking of the age respecting plant and animal life was subject to the pressures of contemporary natural science and finally eventuated in the *Origin of Species* published in 1859. Inevitably this feverish scientific research forced its way into speculations respecting the origin, development and destiny of mankind. All those who thought widely in that period were profoundly affected by the influences which produced the doctrine of natural selection and survival of the fittest.

Darwin's second great work, *The Descent of Man*, although it did not appear until 1871, was likewise a product of this age, especially of anthropology as developed by the inveterate German traveler and student Bastian, his Marburg compatriot Theodor Waitz, Haeckel at Jena, Canestrini and Barrago in Italy, Lubbock, Tylor, Spencer and McLennan in England. And this anthropology itself was in no small measure the fruit of the commercial and exploring age, of innumerable voyages opening up the most distant and backward places to travelers and observers, of continuous traffic and intercourse between Europe and all quarters of the globe. By swift clippers and later by steam vessels, merchants, naturalists and curiosity seekers, as well as preachers and priests, sailed for all known parts of the earth; secular observers supplemented the reports and interpretations of missionaries, breaking down the limited, parochial views of western Europe and bringing to bear upon social thought a wide knowledge derived from the study of human societies in all stages of development. Like a gust of fresh air anthropology swept through the social speculation of Europe burdened by thirty centuries of limited and traditional theorizing concerning the nature of man and human society, thrusting new ideas into the European heritage and into the rationalizing processes of a period beset by social conflict. Though thrown for a time into violent collision with theology, the new science of anthropology made steady headway as the most emancipating discipline of the epoch. World travel, world geography, world geology and world anthropology were doing more to reveal the nature of man to himself than all the fine-spun speculation that had been accumulated by the opening of the nineteenth century.

XIV. If from departments of knowledge, which are after all highly fictional divisions, we turn to the great ideas of the period which penetrated all branches of thought, we find that they may be conveniently summarized as follows:

State ideology, developed around the Prussian monarchy, especially by Fichte and Hegel, in a time of national uprising against Napoleonic domination and advancing to the state socialism of Bismarck, Lassalle, Wagner and Schmoller.

Nationalism, promoted particularly by the struggle for unity in Germany and Italy.

Anarchy, or the negation of the state, in the decidedly limited form of Manchesterism and the logical and violent form of Bakuninism.

Proletarian socialism, erected into a system by Marx and Engels, and projected on the political stage with the founding of the first International in 1864.

Evolution, from the universal flux of Hegelianism to the systematic naturalism of Darwin, working widely in all departments of thought.

Materialism, with antecedents running back to the Greeks, especially promoted by the philosophers of the eighteenth century and the natural scientists of the nineteenth century, reaching pontifical assurance in the work of Büchner.

Christian ideology, the ethics of the fixed order, with the scholastic theory of just price and just wages as its essential economic creed.

The idea of progress, launched by Abbé de Saint-Pierre early in the eighteenth century, exploited by Saint-Simon in a socialist direction, by Spencer in the individualist direction, and taking its place finally as a kind of Providence in skeptical circles.

Out of such ideologies, composed of many strands and formulated with varied illustrations, was woven the social thought of the first half of the nineteenth century, a part of the heritage with which all must work in our day.

CHARLES A. BEARD

X

Nationalism

The great changes in social and political thinking during the generation following upon the last years of the sixties remind one of a famous passage in that standard source of the history and psychology of liberalism, the *Autobiography* of John Stuart Mill. The author relates (ch. v) how, through an involved and painful process just after the completion of his twentieth year, he became aware of all the cruel one-sidedness of that extraordinary and precocious education bestowed on him by his father, and how it dawned on him "that the imaginative emotion which an idea, when vividly conceived, excites in us, is not an illusion but a fact, as real as any of the other qualities of objects; and far from implying anything erroneous and delusive in our mental appreciation of the object, is quite consistent with the most accurate knowledge and most perfect practical recognition of all its physical and intellectual laws and relations."

What happened so early in one man's short lifetime, it took the mass of liberally educated European and American thinkers several generations to discover. For a while the ideas of French materialism and English utilitarianism seemed about to flood all civilized mankind with the standardized harvest of their social and political convictions and habits. But precisely at this time the tide began to turn slowly, yet steadily, and ideas and conceptions that appeared to be "illusions," dead and gone, began unexpectedly to make themselves felt as "facts."

If one tried to find a broad preliminary formula indicating the chief lines along which this change affected the social sciences, one might say that the simpler and more vulgarized the liberal doctrine of government and society became, the more it was in danger of being overcome on both its wings by two forces that had been its dangerous critics almost from the outset. One of these was the "organic" conception of social growth first strongly voiced by Burke and the teachers of the Restoration. The other was the "socialist" interpretation introduced by the great English and French pioneers in this field. It is surely not without significance that the political development of the leading capitalist countries was marked, during this period, by constitutional readjustments of a closely parallel nature. In 1867 Disraeli's second election reform enfranchised the great mass of the urban working classes on whose support "Tory democracy" relied against liberalism. The same year Bismarck, on the advice of Ferdinand Lassalle, made an even bolder stroke in the same direction by incorporating in the new constitution of the North German Federation the same demand for complete universal suffrage that had been made during the Revolution of 1848. Finally what else is the meaning of the reconstruction period in America's history but a similar alliance of Republican conservatism, and even imperialism, with an overwhelming majority of the toiling masses who had been, a generation before, the main support of Jacksonian democracy? It is true that in America and still more in Europe, where socialism started directly organizing its own parties, the conservative-socialist alliance could only be either a passing event or a recurring ideal. But as such it had immense influence in weakening and modifying the hold of liberalism on the modern world.

One of the first prominent results of this influence was the rise of a new nationalism. From the point of view of revolutionary France and of English liberal world politics, national aspirations had been valuable only in so far as they tended to promote the growth of democratic government throughout the world or, to put it in terms of realistic political sociology, in so far as they furnished natural supports for the French and English governments of the period. And, correspondingly, it was found that in German and Italian movements toward national union the cosmopolitan leadership of the bourgeoisie and the intelligentsia far outweighed the influence of more radical and nationalist forces that came to the fore only in times of revolution and of war, and were dismissed again after successes as well as after failures. In contrast to all this, the epoch of the sixties is characterized, on the one side, by the definite victory of the

young German and Italian national governments, accomplished more or less directly at the expense of the last French monarchy; and, on the other side, by the menace of the Russian Empire and of the new eastern nationalism that raised a multitude of disruptive forces in the shape of "nationalities" in the Austro-Hungarian monarchy. The effect of the Franco-German War was not only to complete the eclipse of France and Austria-Hungary but also to complete the union of Italy and to abolish the limitations of Russia's naval power in the Black Sea, thus enabling her to unloose immediately the nationalist forces of the Balkans against the Turkish Empire. The new nationalism was not confined to the continent of Europe. In the England of Disraeli it took the form of that imperialism which not only gave India the imperial name and occupied Egypt but definitely halted the "Little England" spirit in favor of a creative development of the dominions based on self-government and a new consciousness of British racial community.

Second in order of time, though hardly of importance, were the economic implications of the new nationalism which have made the historians call the close of the century the neomercantilist age. In a very significant way the fundamental policies intended to inaugurate an age of shrinking tariff frontiers and of ever widening free trade, produced results exactly the opposite of those intended. The great "most favored nation" treaties between France and England (1860) and between France and the German Zollverein (1862) were equally unsuccessful, the first provoking the economic discontent that brought about the overthrow of the Second Empire, the second showing by the consequent ejection of Austria from the Zollverein the double edged workings of free trade inside and outside the areas of commercial treaties and customs unions. With but slight variations, such as the Morrison tariff in the United States and the Caprivian era of commercial treaties in Germany, the spirit of the period thus grew strongly and increasingly protectionist. There were other developments in the economic history of the time, such as Germany's social insurance, Russia's state railways and France's colonization activities, which recalled the economic leadership of governments in the mercantilistic states of the sixteenth, seventeenth and eighteenth centuries. Even in England the last great remnant of mercantilism had scarcely disappeared with the dissolution of the East India Company (1857) when the new imperialism unconsciously went back to the Elizabethan models of state monopolized organizations of foreign trade in the creation of the big chartered companies of Cecil Rhodes and his African rivals.

All this was to prepare the way for startling transformations. The capitalistic economy which had so triumphantly spread with the destruction of the older mercantilism and the advent of the free competitive market in commerce, industry and agriculture was on the verge of reaching that new and different stage which has been described as the "high capitalism" of the twentieth century. A new and unheard of development of machine production, financial organization and marketing technique began to evoke new and unheard of economic forces, mostly in new places. An age of steel, instead of iron, dawned after the experiments of Bessemer, Kelly and Holley in America, and of Thomas, Gilchrist, William Siemens and Martin in England. In the later years of the period the perfection of the basic process shifted the center of European steel production from England to the German furnaces fed with the phosphoric ore of the newly acquired province of Lorraine. In precisely the same manner the new era of electricity was born and fostered in the laboratories of Werner Siemens and Emil Rathenau, and the analytical chemistry of coal was inaugurated by the scientific exploits of German universities and technical high schools. Lastly the growing volume of business was taking production and marketing out of the range of the individual entrepreneur, who had been the dominant figure of the competitive economy, and was leading it on to new forms of organization essentially monopolistic in character but as varied in appearance as German government-protected syndicates and American trusts struggling, successfully indeed, with a theoretically free-trade judiciary and legislation.

This tremendous expansion of productive powers was possible only in connection with the new movements of population. One who wishes to understand more than superficially the socialistic side of the neomercantilist epoch must keep his eye on the adjustments that took place in population. The nationalist fermentation of Italy and eastern Europe furnished the United States with the "new immigration" needed to supply its expanding business with cheap and docile masses of raw labor. The same effect was produced in Germany by an extensive process of

internal migration from the agricultural northeast to the centers of industrial production in the west, drawing in its wake a corresponding immigration, temporary or permanent, of still cheaper agricultural labor from Russia and Austria. Karl Marx and Friedrich Engels were not mistaken in applying the experience they had had of earlier English capitalism and the lessons they had learned from English trade-unionism to the new economic and political situation of their native country. In America radicalism took the form of agrarian movements like the free-soil and free-silver agitations.

Now when we remember that the social sciences represent the self-consciousness of society, and that political economy is the oldest and most developed among them, it is not surprising that we should find the structural changes of the society of the epoch most exactly mirrored in the new and very decisive turn taken by economic thought. After the disintegration of Ricardian teaching, brought about quite as much through popularization as through heterodoxy, the time was ripe for a reconsideration of that great body of doctrine called the "classical economics"; and in the sixties English, Austrians and Germans were busy laying the foundations of two huge new wings to be added to the old building on each flank; namely marginal economics on the one side, and the historical school on the other.

It is possible to interpret marginal economics as a reaction against the deadlock to which the classical theory of cost value had been brought by Karl Marx's powerful exposition of labor costs and the surplus of exploitation. Indeed one of the three founders of modern marginalism, Marie Esprit Léon Walras, was through his own father a direct heir to the typical kind of mathematical price theory which the French bourgeoisie had tried to set up in defense against the socialism of Proudhon. But surely if there had never been any French or German socialists, classical economics would still have reached a stage where it would have been in urgent need of restatement. That stage was marked by the passing of the limited period which, in the words of John Maurice Clark, "began with the breakdown of the mediaeval guild restrictions and ended with the growth of industries using large fixed capital." It was only during this period that economists could have been satisfied with the simple concept of value and price as being directly determined by elementary factors employed in the production of commodities. With the advent of "large fixed capital" production, economic analysis had to fall back upon an earlier and more general, if less simple, aspect of the market, where the ever changing equilibriums of supply and demand would end in the apparently contradictory phenomenon of costs determined by prices. In fact the simultaneous inquiries which in the early seventies reconquered from oblivion the eighteenth century device of marginal analysis as an application of the differential calculus to economic reasoning, were only historically different approaches converging upon this goal of a new "subjective" theory of value and prices. William Stanley Jevons stands, as it were, in the middle, continuing, despite all his opposition to Ricardo, the old utilitarian tradition of the classical school, and so paving a way to the ultimate reconciliation reached by Alfred Marshall and F. Y. Edgeworth early in the nineties. On one side of Jevons, Walras, with the mathematician's aloofness from both realistic and psychological treatment, exerted a sobering influence which resulted in a *risorgimento* of Italian economics rather than in any more marked effect on France herself. On the other side, Karl Menger bequeathed to the Austrian school, of which he was the founder, that subtle but unmathematical psychology which in his country was a heritage of the best of Catholic scholasticism. There also were remarkable crossings and blendings among the three national streams, such as Auspitz' and Lieben's mathematical theory of prices, or Fisher's *Mathematical Investigations in the Theory of Value and Prices*. Correspondingly strong differences inside the national schools came to the fore. In Austria, for instance, the new method was used to attack the more complicated social problems of distribution, so that Menger's school after 1884 was more or less openly split into the more radical group committed to Eugen von Bohm-Bawerk's time theory of interest and the more conservative group inspired by Friedrich Wieser's conceptions of social productivity. Finally in Sweden Knut Wicksell prepared the return to an "objectivism" later perfected by Gustav Cassel, while American economics succeeded in keeping a rather independent position in which the English inheritance was tempered by the early influx of Austrian teaching chiefly by way of Smart's translation of Böhm-Bawerk's volumes on interest. But John Bates Clark's *Distribution of Wealth*, the outstanding work of the close of the century, evoked in support of its marginal pro-

ductivity theory the memory of the great German pioneer of the doctrine, Johann Heinrich von Thünen. After the model of the Verein für Sozialpolitik, founded in 1872, the American Economic Association tried, as in Edwin R. A. Seligman's early work on the theory of taxation, or F. W. Taussig's on the tariff, to connect theoretical economics with economic policy. On the whole America was the only country outside of Germany to do justice by the second most important movement of modern political economy, the German historical school.

It has been the fashion for some time to draw a rather sharp line between what used to be called the older and the younger historical schools of German economists. The former has been identified with the names of Roscher, Hildebrand and Knies; the latter, with the name of Schmoller; and the line of distinction has usually implied a "value judgment" of some sort on the superiority of the former as compared with the latter. Now there is indeed much to separate those older writers from later historical teachers and economists. Although on the surface they seemed as hostile to English classicism as the German university "cameralists" had been ever since Adam Smith's time, they had really a great deal in common with their English post-Ricardian contemporaries, being genuine philosophical liberals with a fairly marked theoretical interest. This is precisely the reason why the historical school did not exert its main force until this generation had passed and the group led by Schmoller took its place. In spite of the famous "battle of methods" between him and the Austrians in the eighties, Schmoller's service to economics in the new German Reich was more closely akin to the new departure of Menger's subjectivism than one might expect. It was another part of the great reaction that had set in against the one-sidedly deductive methods of orthodox utilitarianism and that had been philosophically led on in England itself by the inductive logic of John Stuart Mill. In fact there is the same craving for realism, after an age of self-satisfied "pure" reasoning, in the opening pages of Menger's *Principles* as there is in Schmoller's contemporaneous work on the small crafts in Germany; and their difference, if momentous, is less in the ulterior aim of economic research than in the theoretically rather careless belief in factual inquiry that made Schmoller and the other founders of the Verein für Sozialpolitik disinclined to wait with Austrian patience for theoretical solutions of the social problems of the new Germany. That Schmoller was as little of a government economist as his Austrian colleagues, who in many cases served their government even in official cabinet positions, is proved in part by his campaign against the social aloofness of Treitschke, the official historian of Prussianism. His position is even more clearly indicated by the fact that both he and his associates in what their opponents called *Kathedersocialismus* were deeply influenced by the constructive side of the spirit of the great German socialists. Instead of viewing the historical school, as is too often done, exclusively in the light of Schmoller's latest period—the period of extensively organized research in the process of Prussian history that really belongs to the succeeding century—one ought to think not only of Schmoller in his entirety but of the whole breadth and depth of the work done in a spirit of friendly rivalry, and not seldom of opposition too, by the other masters of "historical" economics in Berlin, Munich, Strasbourg and Halle. There was Adolph Wagner, most theoretical and (scarcely by coincidence) most radical of all, who in the wake of Karl Rodbertus sustained social criticism on the basis of the Ricardian theory of rent. There was Lujo Brentano, convinced free trader, who yet gave the English the first theory of their trade unions. There was Georg Knapp, historian of agricultural emancipation, whose state theory of money comprised a century's experience of managed currencies. And, lastly, there was Johannes Conrad, whose eminence as a teacher has left a considerable impress even upon many non-German countries, especially America, where he sent Patten to revive the protectionist ideas of Carey. On the whole, although the training of most of the older American economists in the German historical school may have actually had only a slight influence upon them, and the thought of men like Emile de Laveleye, Charles Gide and Emile Levasseur in Belgium and France was at that time certainly much more akin to the German than to the American spirit, there is probably no escape from Schumpeter's conclusion that the deepest meaning of the German effort has nowhere been better resumed and perfected than in the empiricism of the American institutionalists of our day.

It must not be forgotten that since the days of the physiocrats and of Adam Smith there had been a tendency to regard the other social sciences as an outer group circling about the

specialized and segregated science of political economy. Compared with what their state had been in the eighteenth century, their growth had been rather retarded by the concentration of public attention on their "dismal" sister. And not until the latter, with the increasing want of historical and realistic treatment, was again reminded of her more general social backgrounds, could there be sufficient interest created in the progress of the sister branches that were to clear up those backgrounds. Naturally the triumphant development of economics forced itself for a long time upon these other branches as a model of "exact" science. They had only to go one step further back to find the model of the natural sciences that had been so suggestive to economics itself. Thus, while much of the economic work of the period was in rebellion against the older types of the mechanical concept of society, this concept was far from having lost its influence over the rest of the social sciences, and some of the best work done by them could never have been achieved except with the help of naturalists and naturalist thinking.

This is of course especially true of those aspects of social life which are conditioned by the more or less pure physiological data of human nature and its surroundings. These data had from the eighteenth century onwards been viewed preeminently in the light of the individual *homme machine*. With the advance of socialism their significance came to be regarded more and more from points of view that transcended the individual and that were represented mainly by the two great biological doctrines of evolution and of the social community. As to the first, Darwin's mechanical theory of natural selection remained supreme at the close of the nineteenth century, and its application to social problems of history and politics fascinated the philosophers. As to the more markedly social and contemporaneous manifestations of human life, naturalism seemed to lend itself to yet another and still more important series of conclusions. It furnished the basis of that "materialism" which the German socialists caught at so eagerly as definite proof of the hegemony of economic conditions in society and of the complete dependence on them, as a half illusory "superstructure" (*Ueberbau*), of the whole realm of cultural, moral and religious values.

Against this general background the history of the several social sciences during the period naturally follows the most diversified tendencies. The large comprehensive science of social relations that had been attempted by the Saint-Simonians and by Herbert Spencer under the much criticized title and program of sociology had in the fullness of the age of liberalism arrived at as dead a level as liberalism itself. In the case of Comte the inborn mysticism of Saint-Simon's school had definitely overthrown the democratic ideal in favor of a new autocracy of scientific leadership; while Spencer's more jejune, but also still more mechanical, panacea of peaceful industrialism has been accused by Albion W Small, probably with some justice, of being responsible for the remarkable barrenness of English sociological work during the next generation. It is significant of the interlocking of the social sciences that what there was of a new impetus to sociological theory in England came from the neighboring fields of specialistic social inquiry. Patrick Geddes in Edinburgh took up the "regional and civic survey" type of research propagated in France since the fifties by Frédéric Le Play. Edward A. Westermarck in Finland brought the methods of continental ethnology to bear on the problems of the history of the family and sex relations which had up till then, through the methodical shortcomings of L. H. Morgan's American Indian studies, been chiefly used as props for the dogmatism of the German socialists. Political science, in writers like T. H Green and L. T. Hobhouse, succeeded in outgrowing, by fruitful discussion with continental learning, the traditional moralism of Paley. And earlier and more powerful than all these, comparative jurisprudence gathered the scientific harvest furnished by the administration of the British Empire in Sir Henry Maine's great and at least theoretically lasting discovery of the primitive village community and of the law of progress from status to contract.

In 1887, in Germany, Ferdinand Tönnies long familiar with Hobbes' realism of social concepts, enunciated his famous theory on the succession of *Gemeinschaft* and *Gesellschaft* that has swayed German sociology and kept it in touch with international sociological thinking ever since. Just enough of a liberal rationalist to put philosophical and statistical generalization above historical vision, of a social critic to denounce liberal complacency, and of a conservative psychologist to feel the foundations of society in the simple and primitive, Tönnies occupied an unusually advantageous position amid the cross-currents of social controversies at home and abroad. But for the moment it was precisely this balance of mind and height of

philosophical aim that postponed his popularity, if not his influence, until well into the twentieth century, while the official leadership of German sociology passed from the Spencerian liberalism of P. von Lilienfeld and G. Schäffle into the hands of the Austrian racial sociologists L. Gumplowicz and W. Ratzenhofer. Children of the same social and political unrest as the economists of Karl Menger's school, these two men, one a Polish Jew, the other a German officer, greatly and deservedly impressed the world of the social sciences by summing up, as it were, the political situation of the Austro-Hungarian state in the striking, if one-sided, formula of racial or national group interests blindly drawing individuals into economic, social and political stratifications. And in this case also, Austrians were certainly offset by what might be called a Prussian or north German group of sociologists, although here psychological finesse happened to be on the side of the latter, after having been practically discarded by racial sociology. There is perhaps no other proof so convincing of the genuine fertility of the historical school as that it should have brought forth, at least indirectly, the first systematic attempts at execution of its proposal to treat economics as part of sociology. Only then the "historical materialism" of Karl Marx began to be replaced by something both more critical and more inclusive than itself. As a pupil of Adolph Wagner, Franz Oppenheimer laid out the ground plan of his "liberal socialist" system of sociology by which the "political economy" of feudal landlordism took the place of capital as a monopolizer of labor, and so might be overthrown by the "pure economy" of harmonious competition. Starting from the ranks of the Schmoller school, George Simmel rounded out the century with that most decidedly economic, and at the same time most systematically sociological, of all his works, *The Philosophy of Money*. Last but by no means least, Max Weber, severe critic though he was of Schmoller's lack of system and easy governmentalism, clearly showed by his early work in ancient economic history and modern agricultural policy that the germs of his later encyclopaedic range of sociological induction lay in the common stock of the "socialists of the chair."

While thus German and Austrian sociology, despite all conflict, was held together by the economic issues of the "social question," the sociology of France after 1871 had, above all, a political and cultural task. With the relapse of Comte into mysticism before its eyes, a new generation of sociologists was found to resume the exploration of the rational and democratic possibilities of social progress by means of education that had been the driving force of social thought in France from the time of the *encyclopédistes*. This impulse became the central idea of the two social philosophies of Gabriel Tarde and Emile Durkheim. Tarde, a lonely worker using the scientific foundations laid down by Spencer, produced what is very imperfectly called, after one of his books, the theory of imitation. (All depends on how imitation is set in motion by the original forces of invention, in a multiplicity of systems that remind one of the "vortices" of his countryman Descartes.) Durkheim, on the contrary, rallying the full forces of national learning and instruction in an effort to create a scientific foundation for a new secular education, went directly to mental laws, creating a *fait social* in the mind of primitive societies, in his search for social levers of equal power with those of the great rival of laicism, the Catholic church.

In America, finally, the first energetic steps were being made by sociology "up from amateurism," as Small has justly emphasized. For the particular advantage, as well as difficulty, of America consisted in the broad philanthropic and humanitarian interest which American churches, schools and societies understood to be the true aim of a new science of society. The later spread of university and even school teaching in sociology, comparing so favorably with that in any European country, did not, it is true, begin until the next century. But meanwhile Comte's and Spencer's projects were patronized by scientists and doctors, ministers and judges, and there was one danger, which had been absent in Europe, that the spirit of patient reasoning and inquiry would be crushed under attempts to lay hold of the new study for the exclusive privilege of dilettante theories or reforming activities. In this situation it was the lasting merit of Lester F. Ward that he created for American sociological research a first model by, at the same time, making "social forces" a part of a comprehensive system of dynamic "nature" and yet never forgetting the "social" character that assigned them a role of their own, and in fact the highest of all roles in the dynamic universe. And it is hardly a matter for blame that Ward should have been inclined to transfer the naturalist's belief in the exactness of his results to the new subject on which he too had ventured as an amateur, and thus to establish his system

too dogmatically as the last word on the subject. Younger men learned from him and went beyond him. Against the Comtian concept of sociology as an aggregate of sciences, Franklin H. Giddings took from Spencer the cue for treating it as an underlying method and basic principle of study, although for him too, and once for all, Ward had broken the Spencerian spell of automatic social evolution. So there was ample room for further development, systematic as well as specialized. W. G. Sumner, who held the first chair of sociology at Yale, began the realistic study of classes and groups of population that might so easily have been neglected in a rapidly standardizing society and yet was destined to become one of the most important branches of applied sociology. E. A. Ross, relative and personal pupil of Ward, was started by him on his laborious career as a field researcher and traveling conqueror of ever new realms of sociological understanding. C. H. Cooley threw the first solid bridge over to the restlessly progressing work of American psychology and in doing so made enduring gains, like Simmel in Germany, in the difficult task of conceptional classification and nomenclature in sociology.

So far as the rest of what we now comprise under the wider notion of social sciences, history, jurisprudence and anthropology is concerned, the time had hardly come for even an outright recognition of their social viewpoint and consequent common relationship. Perhaps even some "progress backwards" was made by them from this viewpoint, under the stress of specialization as well as of opposition to former philosophical attitudes. But even these backslidings in the end served to arouse discussion and to give the period a general character of fruitful experimentation.

Thus in history the new national consciousness inevitably resulted in attempts to unite the knowledge of periods and institutions in a consecutive and comprehensive view of national development, the scientific conceptions of evolution and race, here as elsewhere, entering into a somewhat strange alliance with political purpose and emotion. Heinrich von Treitschke provided the bourgeoisie of the new German Empire with a historical outlook which, in its peculiar blend of monarchical and popular, centralist and racial elements, was the exact reflection of the "constitutional monarchy," while to Austria fell the task of basing the study of the Middle Ages on a new perfected "diplomatics" (shaped from documentary sources), as a sort of parallel to the theoretical technique of the Austrian economists. In Italy Pasquale Villari gave his *Storia politica* to the united nation. In France the standard national history of Ernest Lavisse resolved to a certain extent the historical debate of the parties, while embodying the mediaeval harvests of the Ecole des Chartes. And even in England and America the immense literary and scientific influence of J. R. Green culminated in a liberal apotheosis of the Anglo-Saxon political genius, before the work of John Seeley opened new vistas of imperial magnitude. But despite all this, definite claims were put forward on behalf of a non-political and a "cultural" principle of historical research by W. E. H. Lecky, the Irishman, and on the continent by Karl Lamprecht, who showed perfect willingness to cooperate, in his economic research, with all the other branches of the brilliant philosophical faculty of Leipsic University.

In jurisprudence, too, the stage lights were turned on the German generation that first, after the revolution, dared to incorporate the sum of nineteenth century legal development in a great civil law codification. Otto Gierke, although hardly satisfied with what the new code took up of "Germanist" doctrines, became both an international teacher and a national adviser in the bulky volumes of his *Genossenschaftsrecht*. In a chair at Vienna, on the other hand, Rudolph von Ihering started his brilliant career as a fearlessly modernistic interpreter not only of Roman law, but of the meaning of law generally, in terms of will, purpose and struggle, as opposed to Savigny's view of harmonious organic growth. And it was in an attack upon Ihering's rationalistic analysis of Shylock in *The Merchant of Venice* that Joseph Kohler first showed himself to be a powerful renovator of Hegel's philosophy of law in the modern garb of a universal student of primitive and comparative law. If in this way even the theory of law seemed to end in historical relativity, the science of public law, in the dawn of modern imperialism, was limited by the disposition of its interpreters to rest content with accounting for and comparing factual systems. While Paul Laband and Otto Mayer analyzed the positive contents of constitutional and administrative legislation, the early work of Georg Jellinek began to wander into the historical and comparative field, as did the great schools of R. Dareste and A. Esmein in France.

Last of all, anthropology (a name applied by the classical writers, like Kant, to a quite general, even psychological, knowledge of man)

began to give promise of becoming not only a universal basic social science but also a rival of sociology from the point of view of what purported to be the firmer standing ground of the physiological and biological roots of human existence. An increasing dissatisfaction both with the "objectivity" and the broader human significance of current political history made the effort to write the "history of civilization" or of "mankind"—the old aim of the *encyclopédistes* and later of Buckle—the center of anthropological efforts. Very little of all this has been able to survive on account both of a lack of methodical depth and of an inverse wealth and rapidity of material progress. Medical celebrities, like Rudolf Virchow and Armand de Quatrefages, tried to put to anthropological use the material furnished by the great standing armies of Germany and France, only to quarrel over the latter's rather preposterous theory of a *race prussienne*. More successfully Wilhelm Wundt left medicine to found the first laboratory of experimental psychology in Leipsic, and fully made up for what the philosophers thought his deficiencies in their field by a wonderful and stimulating interest in the whole gamut of social and historical anthropology. In fact he and his Leipsic colleague Friedrich Ratzel, the geographer, became the heads of a rich family tree of German and international schools with all the anthropological and ethnological branches. In contemporary England John Lubbock (later Lord Avebury) concentrated on the problems of the origin of civilization; E. B. Tylor brought back from Mexico the critical and comparative viewpoint that was to inspire the early work of W. B. Spencer and F. J. Gillen on the Australian, and of Franz Boas on the American, aborigines; the Evanses carried the ethnological method into Celtic and Mediterranean archaeology; and J. G. Frazer made a first imposing attempt to take stock of the scattered treasures of folklore. Even comparative philology, which had hitherto given preference to dead languages and written sources, was touched by the impulse of Darwinian evolutionism and tried to join the "natural" sciences, keen on the "physiological laws" of change and relationship, under the influence of Max Müller, August Schleicher and the school of the "young grammarians" in Germany. And curiously enough, racial pride, which furnished the basis of Count Gobineau's protest against English cosmopolitanism at the culmination of the liberal age, drank life instead of death from the rising tide of naturalism and relativism, and in cultural philosophies such as Wagner's and Nietzsche's grew into an inseparable element of the new age of nationalism and imperialism. A striking illustration of this is found in the Russian novelist Dostoevsky, who even in the atmosphere of the Eastern church crowned the life of a revolutionary by fanatic assent to the creed of the pan-Slavists.

A great many short cuts had yet to be proved delusive before all the conflicting elements in the social sciences could be harmonized in John Stuart Mill's conception of political economy as "a branch of social philosophy so interlinked with all the other branches that its conclusions, even in its own peculiar province, are only true conditionally, subject to interference and counteraction from causes not directly within its scope; while to the character of practical guide it has no pretension, apart from other classes of considerations."

CARL BRINKMANN

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XI

The Trend to Internationalism

I. HISTORICAL SETTING. From the days when Galileo first looked through his little brass tube, the more profound changes in the conditions as well as in the ideas of humanity have originated in the laboratory or study. It continued to be so in the twentieth century. Science was opening up further unexpected visions of reality that not only were shaking the thought foundations on which men had conceived the physical universe but were being translated into forms of power outmoding the mechanical triumphs of the age of steam. The atom was being dissolved into the electron. Matter itself, the solid firmament, was turning into the inconceivable swift dance of impalpable energies. The elements which had been taken for its immutable and eternal forms were shown by Rutherford and Soddy, following the discoveries of Becquerel and the Curies, to arise through a cosmic process of transmutation. Light and electricity were one with the "substance" of the universe.

These speculative triumphs went hand in hand with practical applications. Here too electricity played a dominating part. It submitted to being harnessed without being understood, and it was capable of being utilized in myriad ways. When generated from water power it could never be used up, unlike the resources of coal and oil. It was clean and simple and amazingly convenient. It could annihilate space, for its modes of communication were as swift as light itself. With the aid of gasoline it made possible the automobile and the aeroplane, and it was applicable to every other form of transportation. There seemed no service which it could not provide, no human toil which it could not alleviate. Thus it was performing two functions of peculiar social significance. It was creating a less laborious and yet more complex civilization, and it was bringing the foci of social influence into continuous and immediate contact with one another and with the ends of the earth.

The applications of sciences, progressing in many directions, were the source of new wealth and new economic security. They made practicable the ideal of a minimum standard of living for whole nations, an ideal which until the later nineteenth century had never been more than a vain dream. In Europe a new conception had arisen of the state's duty in this regard. The example set by Germany in the eighties, in the establishment of sickness and accident insurance for its working population, was extensively followed in the years before the Great War. Austria had quickly accepted the German principle. Now, in a series of acts from 1906 to 1911, it was adopted by England, including workmen's compensation, old age pensions, sickness insurance, and the beginning of unemployment insurance. National provision of social insurance was taking form all over western Europe, in France, in Belgium, in Switzerland, in the Scandinavian countries and in Italy.

Internally the state was adapting itself to the new conditions. Externally it was bound by traditions which refused to yield to the new demands upon it. In the early twentieth century the most flagrant revelation of the "lag" of tradition was found in the obstinacy with which the nationalistic policies of sovereign states refused to recognize the necessities of an international civilization. An international economic system had come into being, and in spite of national trade restrictions was growing always greater. The consciousness of the unity of the modern world was finding cultural expression and was being reenforced by the cooperative quest of science. But the political guarantees of this institutional system were utterly insecure, and the various attempts to found a world order broke vainly against the enthroned dogma of the nation state. There were of course international agreements regulating trade and commerce, telegraph, telephone and wireless communications, patent and copyright, and so forth, but as regards the relations of states themselves to one another no satisfactory advance was made.

The close of the nineteenth century had witnessed the first great gesture of modern states towards the reduction of armaments and the establishment of a "real and lasting peace." By this date the problem of armaments had become acute, owing to the greatly enhanced

burdens of competitive expenditure which the changing technique of warfare imposed in answer to the ambitions and the growing fears of the nations. The First Hague Conference, summoned by Czar Nicholas for the year 1899, disappointed the hopes of those who looked for a resultant reduction of the burden and peril of armaments; and the consolation offered by the establishment of the Permanent Court of Arbitration proved in the event to be a tragic mockery. Moreover the conferees busied themselves, with the vain sedulity which jurists and statesmen have so often displayed in this regard, in enunciating "rules" of warfare. Nevertheless the gesture was significant and the fact that a Second Hague Conference was called in 1907 encouraged the more sober aspirations of those who expected a slower but eventually successful accord towards the peaceful organization of the world. In fact the second conference, which did not include the subject of armament limitation in its program and would not have discussed it at all but for the insistence of the American delegation, was entirely abortive. It is true that it gave further attention to the "rules" of war and the rights of neutrals, by-products whose worthlessness the Great War was inevitably to prove. Nor were more limited overtures, such as the proposal in 1912 of a "naval holiday" between England and Germany, of any avail.

Perhaps it was a mistake to assume that in the complicated jealousies and fears of Europe the reduction of armaments could precede the firm establishment of a true international system. The rudiments of such a system may be found in the arbitration treaties which were in considerable numbers concluded during our period. Many of these, such as the Anglo-French Treaty of 1903, were agreements to refer "justiciable" differences to the Hague Court. In the furtherance of arbitration treaties the United States, which stood happily apart from the European system of alliances, led the way. Roosevelt in 1904 and 1905 was active in negotiating arbitration treaties with the states of the world, though these were abandoned by him on account of senate amendments. But no fewer than twenty-five such treaties were negotiated later by Secretary Root. A notable effort was then made by President Taft to extend the scope of arbitration treaties to include issues affecting "national honor," the previous exception of which revealed the gulf still lying between the code of individuals and the code of nations. But, like Roosevelt, he met with opposition from the Senate and dropped negotiations. In 1913 a new series of conciliation treaties was negotiated by Bryan, and twenty-one of these were finally ratified.

Meanwhile the European system of alliances remained the controlling factor of international politics. The "balance of power" maintained a precarious equilibrium. The Dual Alliance stood over against the Triple Alliance. The failure of Russia in the Russo-Japanese War diminished the confidence of France, but, on the other hand, the *entente* with England greatly strengthened her position, while at the same time the adherence of Italy to the Triple Alliance was growing doubtful. So the struggle for power went on without abatement until the event of Sarajevo. It took the World War to settle an obscure issue between Serbia and Austria, and long before it ended the issue was lost to sight in the incalculable and unprecedented conflict. Thus in the common disaster of the western world was the interdependence of all nations revealed, and with it the catastrophic futility of those unlimited claims of national sovereignty which refused to recognize the political necessities of the new civilization.

II. DEVELOPMENTS IN THE SOCIAL SCIENCES. The social sciences come so close to the interests and everyday affairs of men that they are peculiarly apt to reflect the prevailing tendencies of the times. At the beginning of the twentieth century the need for social interpretations and investigations was growing more obvious and perhaps more imperative, and in response to it the social sciences were greatly expanding. But they were expanding in the directions and according to modes which the spirit of the age dictated. One great determinant was the triumph of the physical sciences. It was increasingly felt that the social sciences must follow the methods of exact measurement which distinguished the sciences of nature. True, the data of the social scientist were not so amenable to this treatment as were those of the physicist, but this was the misfortune of the former, to be overcome as far as possible by such substitutes for exact measurement as the devices of the statistical method. Social researches accordingly tended to deal with those aspects of the social structure which could be subjected to a quantitative analysis. Economics, being in a favored position in this respect, represented the model which the rest endeavored to follow.

This attitude expressed a healthy reaction

from the confident generalization of the early days of the new sciences. But it was also one with which the age was in sympathy on other grounds. It was an age of experiment, seeking practical utility. It was interested in truth for the sake of results rather than from intellectual curiosity. Truth was a tree that like any other must be judged by its fruits. The Platonic idea that it was a beautiful thing to contemplate for its own sake found little favor. The pragmatic principle found characteristic expression in the philosophy of the age. Philosophy itself became practical. Thus alone could it be saved from contempt as the product of an idle imagination. The teachings of Schiller, of James and of Dewey were all directed against the aloofness of philosophy from the everyday world. And they had close affiliations with the anti-intellectualism which expressed itself, for example, in the *Creative Evolution* of Bergson.

This anti-intellectualism found great support in the tendencies manifested by the young and popular science of psychology. Conduct was discovered to have an emotional and instinctive, rather than a rational, basis. Above all, social phenomena had to be interpreted as the expression of habits and instincts rather than of an abstract principle called reason. This attitude was first emphasized by the psychologists who studied the crowd, like Le Bon or Sighele, or the folkways, like Sumner or Wundt. It was now applied to all aspects of conduct, particularly to ethics and politics and economics. It was made the basis of educational doctrine, eminently by Dewey. McDougall's *Social Psychology*, which first appeared in 1908, was essentially a study of the human "instincts," and had a remarkable vogue. At the close of our period the new psychological interpretation took the more extreme form of behaviorism, proclaimed by Thorndike in his *Educational Psychology* and by Watson in his book which gave the name to this movement.

The working out of these tendencies will be shown as we pass in review the contributions of the various social sciences.

III. ECONOMICS. At the close of the nineteenth century the marginalist doctrine, though subject to revision, still held the academic field. In the hands of men like Marshall it had seemed capable of meeting the complexities of the price system and even of interpreting the non-competitive aspects of the economic order. Accordingly, during our period, many economists continued to rely mainly on the "marginal method," but the forces of criticism were gaining strength and at its close were already in the ascendant. This trend was encouraged by the increasing devotion of economists to factual research in specific fields, such as population, business enterprise, economic cycles, wage determinations and so forth, in which the assumptions of the marginal approach seemed to be unnecessary or irrelevant. Thus in Germany it was this tendency, rather than any alternative general theory, which weakened the domination alike of the historical and the marginal schools, creating groups of scholars attached to particular problems of research rather than to particular theories. We may cite by way of illustration the work of Harms and his associates in the establishment of the Kiel Institute, devoted primarily to the study of the specific problems of international economic relationships. Again in France, although economists like Aftalion ably upheld the value doctrine of the marginal school, the same tendency was manifested toward more detailed analyses of economic situations rather than synthetic constructions. But in fact the change of emphasis may be said to characterize the age rather than a particular country.

Consequently the theoretical interest tended to center around questions of method and of goal rather than of constructive interpretation. Was the inductive method adequate or was there still a place for general principles? Was the mathematical approach consistent with realistic economics? Was there a field of economic statics where exact principles of the Ricardian or Austrian type could be utilized as distinct from the field of dynamic actualities with its unstable equilibria and changing pressures? These were the questions which the clash of older and newer viewpoints invoked. It obviously precipitated new forms of the eternal methodological problem in the social sciences. In further illustration we may cite the question whether the idea of value itself, the core of older doctrine, should be abandoned, as Cassel was beginning to assert, in favor of the more specific idea of price. And the question which aroused much debate in Germany and elsewhere, whether economics as a science had room for a normative as well as a descriptive aspect, had also to be reckoned with.

The hold of the marginal principle had grown particularly strong in America, under the leadership of J. B. Clark. But here too by the end of our period the critical reaction was dominant.

Certain economists, while adhering in other respects to the marginal school, were influenced by the attacks directed at its psychological basis and refused to accept some part of its doctrine. Thus Davenport rejected the analysis in accordance with which the business entrepreneur evaluates the precise productivity of the various elements united in the process of production, while Fetter denied the hedonistic assumption and contented himself with the simple fact of choice or preference as a determinant of value. But other economists demanded a new orientation of economic theory altogether, joining hands with the critics of European countries who, seeking a new doctrine, remained meanwhile skeptical of the old. The marginalist theory seemed to those critics to be abstract and unrealistic. It appeared to them relevant only to static conditions, in spite of the attempt to adapt it to a "dynamic" society. Marginalism, it was felt, was a timeless theory, as true, if true at all, of the domestic age of production as of the capitalistic; but economic theory must explain the transition from the one to the other. In other words, it must be evolutionary. Critics like J. A. Hobson pointed out that the marginal analysis was least applicable to the most distinctive characteristics of the present economic order. The principle which computed the efficiency of isolable marginal units of capital or labor seemed to them quite unsatisfactory as applied to the "organic" system of large scale production, with its interdependence of units and advanced division of labor. To other critics its principle of subjective valuation appeared wholly inadequate in the light of a more realistic psychology which questioned the hedonistic calculus.

Thus the period became increasingly one of criticism. At its close there remained no dominant theoretical interpretation such as still reigned at its beginning. The field of economic research had widened and offered new opportunities which turned the great majority of the younger economists into specialists in particular branches of the study—in finance, taxation, labor, population, marketing, agriculture, transportation, corporation economics and so on. The practical problems of these branches involved the application of quantitative methods which seemed to many to have little need for the support of a general economic theory. There developed in fact a widespread skepticism regarding the possibility of the kind of economic law which had found its latest exemplar in the doctrine of the marginalist school.

Another tendency of the times antagonistic to clear cut classical principles was the growing recognition that the economic factor was inextricably inwoven in the whole social life, that therefore there was no autonomous sphere of purely economic phenomena obeying purely economic laws. This recognition was widening the range of economic investigation, but it was also making synthesis more difficult. Long before, it had entered the consciousness of J. S. Mill and disturbed the system of thought which he had inherited. The socialists, following Marx, had found a relatively simple way out of the difficulty by giving priority to the economic factor. Loria, for example, sought to establish "the economic basis of the social constitution." But the exploration of these interrelationships tended to show also how the social facts reacted on the economic. Whenever the economist, pursuing these interactions, became thereby a sociologist, as did Sombart or Max Weber, it was perilous to the simplicity of economic doctrine. And certainly it was rare to find a thinker who, like Tugan-Baranovsky, could accept the socialist position regarding the relation of labor to capital and still remain a marginalist.

But if the older type of theory lost influence, new points of view were emerging. What, after all, the critics had shown was that the structure was too complicated to be interpretable under a simple formula, that human motives were too involved for a simple calculus, that the simple assumptions of competition and mobility were in part defeated by the ignorance, prejudice, inertia of the economic individual, by his social involvements and by the growth of anti-competitive organizations. The marginal and classical theories were not so much superseded as modified. If the complexity of human motives and of changing institutions called for a more comprehensive theory, the answer could not be the rejection of theory altogether. Meanwhile the results of descriptive analysis and of quantitative research would provide a surer and broader foundation of facts on which the new synthesis must be built.

It is important to observe at this point that the quantitative analysis which was gaining ground in the early twentieth century was something entirely distinct from the mathematical analysis of "pure" economics. The mathematical economics represented by Pareto and Pantaleoni in Italy, by Moore in the United States, and in part by Edgeworth in England, depended upon hypotheses as clear cut as, and in fact generally

identical with, those of the marginal school. The quantitative economists, on the other hand, tended to abjure all general hypotheses, and where they employed mathematical formulae it was to achieve order and coherence in the presentation and interpretation of statistical data. There is in this respect a striking contrast between, for example, the work of Pareto and that of Mitchell. In Mitchell's work there is an emphasis on the manifold aspects of an inductive process which makes it at once one of the most characteristic and one of the most successful contributions to the economic theory of our period. It is significant alike for what it does and for what it fails to do, as showing not only the fruits but also the limits of the quantitative method. If one feels that there are aspects of the situation which remain uninterpreted, one feels also that this is because statistics, even in the hands of a master, cannot fully reveal the human conduct and human institutions in the study of which it is an indispensable aid.

If we set Mitchell's *Business Cycles* side by side with a contemporary study involving the deductive use of the marginal principle, such as Pigou's *Wealth and Welfare*, the contrast is again illuminating. Pigou thinks in terms of a national "dividend," and the problem is set in terms of the diminishing utility of wealth and of the effects on marginal productivity and marginal utility of a more equal distribution of this "dividend." The social tendencies of early twentieth century England are seen in his treatment of governmental intervention as a mode of reducing marginal inequalities and thereby of increasing the net utility of the total dividend or the total "economic welfare" of the community. The effects of monopoly are treated from a similar standpoint. The whole of his elaborate analysis is dictated by his initial hypothesis, and it alone makes possible the mathematical calculus which he introduces.

In the development of quantitative economics we may find two seemingly opposed tendencies. To some it seemed to involve the abandonment of those considerations of subjective valuation and of social utility which are not susceptible themselves of quantitative statement. The attempts to measure satisfactions, as in the doctrine of "consumers' surplus" put forward by Marshall and elaborated by writers like Wicksteed, were far from convincing. The quantitative analyst generally felt on surer ground when he was dealing with the objective phenomena of the price system, and various writers limited their range of investigation to this sphere of calculable facts. On the other hand the census, the reports of governmental departments and commissions, and numerous social surveys were providing an increasing mass of statistical data regarding population, wealth and poverty, standards of living, the relation of productivity to hours of labor, the relation of health to occupation and income, and so forth. These data were indices of social welfare and demanded interpretations in terms of their social significance. Here the quantitative analysis was itself preliminary to a different type of analysis. Beyond the curve-fitting and the correlating there lay in wait the insistent questions of the social and economic motives, of the institutional changes and of the modes of living, which are reflected in the statistical facts. A qualitative analysis was needed to supplement the quantitative analysis. For it could not be at all assumed that the changes in the economic index, say of wealth or efficiency, measured corresponding changes in the achievement of social values or even of economic utilities.

Here in fact were involved assumptions of orthodox marginalism against which the advocates of an "economics of welfare" strongly protested. Marginalism had sought to prove that the worker, at least the marginal worker, received what he was economically "worth." Again it had seemingly demonstrated that the utilities derived from different consumers purchasing the same goods and from the single consumer in his disbursements on a variety of goods, were equalized at that terminus of all happy conjunctures, the margin. Moreover the attribution to the wage earner of a "specific product" which coincided in exchange value with the wages of the marginal worker was held by many to offer an interpretation too favorable to the established order of things. Perhaps nowhere were these assumptions more directly attacked than in the writings of J. A. Hobson. In his *Work and Wealth* he claimed that orthodox economics was animated by a too narrow and materialistic interest in the productive process. Against economic utilities must be set social costs, and against economic disutilities there may be social profits. From the standpoint of social economy the values of capitalistic production must be revalued. From this standpoint the fact that the marginal laborer receives his economic due, if it is a fact, is no final argument against an intervention which would raise his reward to a level of decent maintenance.

The intrusion of social considerations was effective also in the broadening out of the scope of economic inquiry. It gave a new interest to a subject like taxation which had hitherto received rather summary treatment. The change of viewpoint and the enrichment of the study are well illustrated by Seligman's works. The same trend is illustrated by the intensive studies of economic institutions and organizations such as were undertaken by the Webbs; by the investigations into social concomitants of industrial change such as those of Sombart, Tawney, Hobson and the Hammonds; and by the researches on the interdependence of economic and cultural phenomena such as the analysis which Max Weber was preparing on the relation of religion and economics.

Of all the economists who revealed this new sociological trend none was more outstanding than Thorstein Veblen. His incisiveness, his irony, his critical reversal of accepted premises, and above all his consistent interpretation of economic and social institutions in terms of technological change, gave his work a peculiar significance. While seemingly aloof from contemporary schools of thought, he formulated, perhaps more profoundly on that account, certain dominant tendencies of the age, and in particular its preoccupation with the mechanical and materialistic aspects of existence. He criticized the prevalent theories in the light of the *Zeitgeist*, and built up a positive doctrine that was certainly, in spirit if not in manner, in harmony with the deterministic evolutionary science of the time. The fact that Veblen influenced so profoundly many of the younger economists and sociologists shows how fully his teaching incorporated, not the traditions, but the working hypotheses, of the period.

To understand Veblen's position in economics, it is necessary to recall his sociological doctrine. To him the great agencies of social change are those which establish new modes of habituation, of "use and wont." These agencies in the last resort are the techniques imposed by the devices which men discover in their efforts to satisfy their primary needs. When the technique changes, the society gradually changes in conformity. In the feudal age the system of production was one of "trained man-power organized on a plan of subordination of man to man." This system expressed itself in the highly personal character of government, in the authoritative and hierarchical character of religion, in the estimation of craftsmanship and personal dexterity, and so forth. But the industrial age brought new techniques, those demanded by the machine, and again society is transformed, not only in its economic aspects, but in its political institutions and its cultural standards. The new technology destroys the old ideals as well as the old customs. In those spheres which are most remote from the new influences, the old traditions, as of militarism and nationalism, are hardest to dislodge, but they fight a losing battle. The ancient virtues of "patriotic animosity and national jealousy" are close beset by the influences emanating from international dependence and the mechanization of warfare, not to speak of the generally skeptical frame of mind which the machine age induces. Veblen in his numerous works cited instance after instance to illustrate his thesis that the peculiar habits of thought of each age, those which give social relationships their form and character, can be traced back to the peculiar discipline of life which depends upon its technique.

Such a theory was assuredly in consonance with the conditions of the early twentieth century. Its distinguishing feature was not the growth of capitalism but that great advance of mechanization which included capitalism as one of its aspects. That advance had been peculiarly rapid on the North American continent and it was appropriate that the thinker who most emphatically proclaimed its sociological significance should have done so in the United States. The viewpoint of Veblen was in any event clearly related to the pragmatic philosophy becoming dominant in the country.

The application to economics took the form of a general analysis of institutions, critical of the older theories, and descriptive, in a curious style of hard realism, of the working of the economic order in terms of the doctrine just outlined. In its critical aspect it was a challenge that effectively disturbed the older norms of interpretation while it offered a new illumination of the nature of capitalism, of the distinction between pecuniary and industrial motives, of the character of business enterprise, of the significance of a leisure class and of vested interests. Doubtless the economics of Veblen is exposed to criticism on the ground that it is entirely the *exposé* of a point of view lacking in catholicity and narrowed by the ironical temper of a scientifically disguised opponent of the status quo. But no one can deny either the power of the challenge or the keenness of the analysis.

Veblen had given a new meaning to the

"materialistic interpretation of history." The special Marxian formula, which found the root of social change in the relationship between the owner and the producer, had proved too narrow, too dogmatic. The simplicity of the strict Marxian determinism was being abandoned, on historical and psychological grounds alike, although, as Seligman's study showed, the importance of the economic factor as a determinant was being more fully admitted and realized.

A final word may be said regarding the cleavage of individualist and socialist economics during the period. In Europe the number of economists who might be classified as socialists had been increasing, but that term covered an ever wider variety of attitudes. The left wing parties were interested largely in economic ideology, and while the adherents of the Marxist doctrine, orthodox or revised, still held their ground, elsewhere there was a search for a new ideology, of which the chief result was the syndicalist "myth" as expounded by Sorel and Labriola. On the other hand the right wing socialists were less concerned with general theories, and their intellectual leaders were more successful in stimulating the advance of those researches into poverty, unemployment, trade unionism and allied subjects with which the name of the Webbs was already so notably associated. At this end the line between socialists and individualists was losing its sharpness. In England, for example, some of the Fabians, such as Graham Wallas, were socialists under one interpretation of the term and individualists under another. In France the doctrine of cooperative solidarity advocated by Gide, looking toward control over production by associated consumers, was quite distinct from the socialism of the Catholic school, and the latter was far apart from the tenets of the Marxists or of the syndicalists. In truth socialism—and individualism too—had grown protean, a fact which happily was making it more possible to separate the business of scientific interpretation of facts from the no less legitimate but entirely different business of ethical evaluation.

IV. POLITICAL SCIENCE. Toward the close of the nineteenth century there were signs of a very significant change in political science. There was a beginning of that most fruitful experience without which the really great advances in any science never take place, the reexamination of first principles. It may, in a longer retrospect than we possess, seem curious that the absolutist doctrine of sovereignty, one, indivisible, omnicompetent, should have endured so long in the face of the separation of church and state, of the triumph of federalism in North America, of the obvious limitations of parliamentary control, and of the confusion and even terror which the practical assertion of that doctrine caused within a civilization inexorably bound by commerce and by culture. As the century closed, various lines of attack on that doctrine were converging, and the twentieth century witnessed the united assault which could not stay the catastrophic fulfilment of the menace inherent in the unlimited state.

Among the considerations which were leading to a reinterpretation of the doctrine of sovereignty none was more potent than the recognition of the role played by great non-political associations, associations which the state claimed to regulate but which it could no longer claim to be merely its creations. The meaning of the separation of church and state was interpreted anew by writers like Figgis, who in his *Churches in the Modern State* distinguished the autonomy of the church in its own sphere from that of the state. But it was the contemplation of the great associations of the economic order which more generally inspired the attack on absolutist sovereignty. "If we look at the facts," wrote A. D. Lindsay in 1914, "it is clear enough that the theory of the sovereign state has broken down." The facts in question included the loyalties evoked and the powers exercised by the corporate groups or voluntary associations within the community, associations that, like those of capital and labor, entered into conflicts on which the state seemed unable to impose its will, while at the same time they united their members in unions that extended beyond the confines of any state. Above all, economic power refused to be the mere subject of political power, and there were salient occasions when it openly or tacitly defied the sovereignty of the state.

These facts found an extreme interpretation in the political theory of syndicalism. Extreme as it was, nevertheless it remains significant of a new attitude toward the state. Conditions had indeed changed when in the early twentieth century the French exponents of this doctrine, Sorel, Louis, Pataud, Pouget and the rest, could regard the state, with whatever exaggeration, as an outworn and rather needless organ, to be supplanted by economic syndicates. It was the farthest reach of the movement of protest against sovereign claims that seemed no longer

realistic. It made the rising doctrines of the guild socialists seem moderate. The latter, like Penty and S. G. Hobson, would merely limit the state's sphere on the ground that the business of economic production was already controlled by other forces and could be far more satisfactorily administered by functional or occupational organizations, the reconstructed guilds or "parliaments" of producers.

The alleged economic impotence of the state was also made the basis for assaults on its sovereign independence in international affairs. It was effectively expounded by Norman Angell in his *Great Illusion*, which showed the economic futility of the last resort of sovereign power—war. It was brilliantly illustrated by H. N. Brailsford, who in his *War of Steel and Gold* exposed the powers of world finance moving behind the curtain of diplomacy. The same argument was naturally adopted by the socialists everywhere, Oppenheimer and Loria being important exponents of it. The Marxists, it should be observed, made it the ground for a reconstituted state rather than for a limitation of state powers.

A more conservative reenforcement of the attack on the older sovereignty came from the jurists who were revolting from the standard of Austin. Jellinek brought out some of the limitations to which state power was subject because of its legal (*rechtlich*) character, though he still thought of constitutional guarantees as the self-imposed limitations of the state. The Dutch writer Krabbe went further. He set the old idea of the state as a power system, with sovereignty inherent in it, over against what he regards as the modern idea, according to which government is conceived as an organ of society for lawmaking. This latter conception makes government an agent only, subject to the law which it enacts or administers, the real sovereignty being that which is inherent in law itself, which derives from the loyalty to the code. To Krabbe it is not in the last resort the will of government or the will of the majority which has authority. It is law itself, an impersonal spiritual (*geistig*) power whose regulations express the social valuations of the community, in so far as these can be formulated and confirmed through legislation. The basis of sovereignty broadens as the state moves towards democracy, but the limits of sovereignty become more apparent, since in major concerns the law can regulate only in so far as a definite social valuation, capable of legal statement, is expressed.

The followers of Maitland and Gierke applied the juristic doctrine in another direction. To them the state was a corporate "personality" distinguished from others as the organ of law-making and law enforcing, deriving its character from the juridical principles of which it is the author and interpreter. This doctrine admits two facts essential to any realistic theory of the modern state, the first being that the state is not identical with the community of which it is an organ, and the second that the other corporate groups in the community have likewise a function and a sphere which in some ways limit the function and the sphere of the state. Just what is, no less than what should be, the relation between them, became the crucial problem of modern political science. While some authors like Dicey admitted limitations on sovereignty in practise without really abandoning the older theory, others made these practical limits the basis of more radical interpretations. The principle that the state was a source and sanction of social order was called in question. Some, like Duguit, sought another ground of unity altogether, finding it in the "social solidarity" of men, a diffused sense of interdependence which supported the various forms of rights and obligations accepted in a community. Others, extending the federalist idea from territorial to associational groups, sought for a working equilibrium of powers in which no one could be called supreme in all things over the rest. To others the very postulate of unity, of which the state had been hitherto regarded as the main bulwark, was no longer admissible, and thus the way was prepared for those pluralistic theories which, in keeping with the anti-intellectualistic trend of the age, were making headway as our period approached its close.

Reviewing the period as a whole, we recognize the vitality of political thinking, critical and constructive, which pervaded it. It was characterized by significant and fruitful efforts to break away from traditional interpretations of the state and to formulate in theory the results of the accumulated political changes of an era. It is true that political science was undergoing the general changes characteristic of social science throughout the period. The realistic study of political phenomena, aided by the new interest in psychology, gave us works like Michels' *Political Parties* and Ostrogorsky's *Democracy and the Organization of Political Parties*. The development of social legislation, anti-trust legislation and so forth, led to numerous researches,

practical and speculative, on the economic activities of the state. The comparative and historical study of political institutions was advanced. But besides the industry of research there was the questioning of old hypotheses, the endeavor to see the state itself in the light of a new time. This more speculative aspect was far less in evidence in America than in Europe. But it was the aspect which gave its historical character and its profounder interest to the political science of the period. And if in an age of practical concerns, looking askance on speculation, some justification was needed for this engrossment in first principles, it came with a vengeance when the World War revealed to those who had eyes to see the scarcely imaginable consequences of the enthronement of doctrines which only the blindness of tradition could have imposed on an alien age.

V. JURISPRUDENCE. Perhaps no division of the social sciences retained so tenaciously a formalistic attitude toward its subject matter as did jurisprudence. Not only did it stand relatively aloof from the developments in the other social sciences; it seemed also to be little influenced by the ferment of thought concerning the state, even though it was itself an essential part of any *Staatslehre*. It is true that in the later part of the nineteenth century the philosophical bases of legal formalism were undermined by those jurists who, like Maine and the writers of the continental historical schools, drew attention to the preconditions and origins of modern codes or, like Ihering, sought to interpret law in terms of social aims and social adjustments. It is true also that the significance for law of the new multiplicity of associations, of "corporate persons," was brilliantly expounded by Gierke and his followers. But these interpretations scarcely penetrated the law schools or the law texts, nor were they effectively applied to the actual problems of substantial law. In England and America the analytical school of Austin, enclosed within the rigid walls of an absolutist doctrine of sovereignty, still dominated legal thought.

The early years of the twentieth century mark a fairly definite change. It became more apparent that analytical formulae were inadequate to explain the judicial process; that, for example, the decisions of courts were not conclusions drawn with inevitable logic from the major premise of the law and the minor premise of the case "subsumed" under it; that the law was not a rubric the interpretation of which remained clear and unshaken by the currents of the age and the social valuations of the judge; that in fact its most important categories, like "freedom of contract" and "due process," were highly elastic and uncertain, not to be defined *in abstracto* but only in their concrete application to perplexing social situations wherein other legal categories might also claim to direct the decision of the court. It became apparent that the categories themselves were not so self-sufficient as they had seemed to the lawyer who regarded them as the explicit "commands" of the sovereign, and that the code as interpreted by the courts was a far more subtle and accomodating reality than the code as enacted by the government. It became apparent that even so the law of the court lagged behind the march of social requirements. And if this were true of municipal law it was true in a more tragic manner of that body of rules, not properly to be dignified with the name of law, which stretched over the no-man's-land between national frontiers.

In the consciousness of these defects, alike in the theory and in the form of law, new schools of jurisprudence took their rise. It was inevitable that in their efforts to reform the science of the law they should at length have felt the impact of the other social sciences, the recognition of which was already producing results in other fields.

The new attitude was well expressed by Ehrlich in his conception of the "living law." The law lived as it worked on the purposes of men, as it affected their social relations, as it concretely operated within the frontiers of a people. It lived as it revealed itself in judicial interpretation, in the outlook of the judge, which, perhaps, as Wurzel and Bozi endeavored to show, could be made to reveal the very spirit of jurisprudence. Obviously this tendency brought jurisprudence under the influence of the disturbing relativity of psychological inquiry.

Nor did the new schools content themselves with a broader, more humanized interpretation of the juristic facts, including the juristic "mind"; attacking the absoluteness of the legal formula they attacked also the absoluteness of that conception of "right" or of "justice" or of "natural law" or of "equity" which jurists of all times had postulated as the ethical foundation of law. The end or object of law came to be viewed as relative to the social needs, interests

or demands of the age. Stammler and Kohler prepared the way by emphasizing the idea that law was the product of social conditions in the past, laggingly adjusted to the social ideals of the present. This adjustment was achieved in part by changes in the code but in great part by judicial reinterpretation, in the light of the civilization of the present, of the major principles of the existing code. It was not enough, in applying the law, to go back to the conditions of its original formulation and to the motives of past legislators and constitution makers, still less to rest judicial determination on a logical analysis of the ancient letter of the code.

Here obviously was an outlook which, while open to critical attack on the ground that it weakened the necessary fabric of the law by making it depend on the variable and perhaps arbitrary conception of social trends and interests entertained by individual judges, nevertheless gave to law a more realistic function and a greater social responsibility. It brought into clearer light what the courts were actually, often in a fumbling, semi-conscious manner, attempting to do. It created a demand for a more explicit statement of the principle underlying this practise, and various theories were born as to the manner in which the law seeks to envisage the conflict of claims and interests, responsibilities and rights, which arise out of the changing social circumstances of the age. Above all it gave an impetus to the study of legal reform as a proper concern of the jurist. A new interest arose in the potentialities of law as a social agency; in the juridical tasks of governmental boards, seemingly executive in character; in the application of law to meet the always divergent situations of individual conduct; and at length in the problems of preventive justice.

In this development certain American jurists took an important part. The leader of the movement was Roscoe Pound, who in 1911 had proclaimed "the need for a sociological jurisprudence," and had already begun that series of eminent contributions which found the reality of law in its expression of the conditions, modes of thought and moral attitudes of the age. Within the range of these the law was "alive," within these limits it won the authority and obedience which in fact alone entitled it to the name of law. Nowhere has the pragmatic tendency of American thinking been applied more effectively than by Pound in the interpretation, and by Mr. Justice Holmes in the direct application, of a "living law."

VI. SOCIOLOGY. The period of early and rapid growth already past, sociology in the United States was encountering at the beginning of the twentieth century some new and serious problems. It was feeling strongly the impact of other expanding social sciences, particularly psychology and anthropology. The dominance of the "psychological approach" was manifested in the writings of various sociologists, such as Ellwood and Ross. Attention was directed to the study of the social attitudes, social responses, social "patterns" of the individual, and this study, while it enriched the materials on which sociologists were at work, introduced also a degree of hesitation and even of confusion respecting the actual sphere of sociology. It was curiously easy to pass from the standpoint of the sociologist, with his interest in social relationships, to that of the psychologist, whose interest lay rather in the individuals so related. The psychological phenomena, the attitudes and reactions of individuals, their social relationships, are the conditions of the sociological phenomena and as such of vital significance to the sociologist, but they are not themselves the peculiar phenomena which constitute this field. There still remains the study of social relationships themselves, the institutions and organizations of society.

The impact of anthropology had also a disturbing as well as an enriching effect. Anthropology had developed the concept of the culture stage and the culture area. It included in the concept of culture the whole array of practises, techniques, habits, arts and crafts, beliefs, ideas characteristic of the group under consideration. Sociologists tended to regard sociology as equally comprehensive and thus were in danger of losing the focus of their proper study, that of the social system within which and through which these cultural phenomena were manifested. The admirable work of Sumner in his *Folkways* was nevertheless more valuable as descriptive anthropological material than as a systematic contribution to the "science of society." The work of W. I. Thomas, another distinctive pioneer in his own field, was chiefly concerned with the psychological reactions of individuals of particular types within particular social situations.

In America comparatively little attention was devoted during this period to the fundamental problems of general sociology. The pragmatic tendency which was now characterizing American thought, nourished in this field by a grow-

ing revulsion from the too easy generalizations of the period of Ward, was not propitious to the formulations of first principles. Apart from Veblen, who stood by himself and whose signal contribution has already been indicated, the most noticeable workers in this field were Baldwin and Cooley. They both revealed, though from different angles, the profundity of the relation between the personality of the individual and the social milieu. Cooley in addition brought out the significance of the small group, the face-to-face group, as a socializing agency. His two books, *Human Nature and the Social Order* (1902) and *Social Organization* (1909), retained, more than those of any other writer who appeared within this period, the distinctive quality of sociological investigation. For Cooley the group with its institutions was a primary datum, not to be resolved into the attitudes of the individuals who compose it. Its structure as a group, its influence on its members, the way in which the group itself changed or developed as its members changed or developed—these phenomena, the essential sociological phenomena, were to him of primary importance.

In England during our period the specific study of sociology was almost confined to a small group associated with the University of London. At this center a sociological society was formed, with the *Sociological Review* as its organ. The leading members of the group were Hobhouse, Wallas and Westermarck, although the work of the last mentioned belonged more nearly to anthropology. Hobhouse was the most prolific writer of the group, but many of his contributions belonged rather to the fields of ethics and politics and nearly all of them might be classed under the rubric of social philosophy. He was particularly interested in applying the evolutionary principle to society, tending to regard the process of social evolution as revealing the gradual realization of those liberalistic ideals of which he was a persuasive and broad-minded advocate. He was apt in consequence to identify social evolution with social progress. The more "evolved" society was that in which there was greater "mutuality of service," a wider cooperative harmony, greater control of mind over environment, and a greater liberation of human purposes within the order of society itself. To him sociology was a "vitalizing principle" of synthetic social interpretation. Hobhouse employed this principle with much insight, although his treatment remained exposed to the criticism that it rested on certain assumptions regarding the rationality of human nature and that it selected from the conflicting variety of social phenomena those which were in accord with his initial hypothesis. The only way to meet this criticism was by a comprehensive analysis of the social characteristics exhibited by groups representing, according to some objective criteria, "higher" and "lower" stages of social evolution. Realizing the significance of this alternative method of approach, Hobhouse cooperated at the close of our period with Wheeler and Ginsberg in a descriptive and statistical survey, the results of which were published in the volume entitled *The Material Culture and Social Institutions of the Simpler Peoples*. The contrast between the two modes of approach is illuminating. The descriptive analysis of the latter work brought out the lack of any simple correlation between the "higher" social stage and the nearer realization of those ideals which were summed up for Hobhouse in the concept of social progress. It showed the necessity for distinguishing what Hobhouse did not always adequately distinguish, two equally legitimate but by no means identical objects of social research, that which is concerned with the factual direction of social change and that which seeks to trace the mode and the degree in which changing social forms reveal or embody some type of social ideal.

The work of his colleague Graham Wallas followed in some respects an opposite trend from that of Hobhouse. Wallas was no system-builder. A sympathetic and keen observer, he was always seeking for principles on which to build a science of society, but his success lay rather in his suggestive interpretations of this or that aspect of the changing scene. He was much influenced by the psychological theories of the age, and his first important work, *Human Nature in Politics*, had for its theme the non-rational motivation of human conduct in the working of democratic institutions. It was significant that his work was contemporaneous with McDougall's *Social Psychology*, a very influential volume which presented in systematic fashion psychological premises for the most part in harmony with Wallas' conclusions. But Wallas did not rest satisfied with his earlier exposition, and in his next work, *The Great Society*, he dealt with the organization of a complex modern society as a problem set for the human intelligence in its quest for social welfare. This more constructive study was signifi-

cant, apart from its shrewd appreciations of particular social situations, chiefly as presenting in a convincing and felicitous manner the problem of the adjustment of the social system to the primary needs of human nature.

Sociology in France had been following distinctive lines. While the influence of Comte may still be traced in the Durkheim school, an opposite tendency, that expressed in the regional studies of the Le Play school, had gained ground. This tendency continued into the twentieth century. One outgrowth from it was the branch of study known as "human geography," of which the chief exponents were Brunhes and Vidal de la Blache. These writers envisaged larger areas than did Demolins and the school of *la science sociale*, and were especially concerned with the interaction between geography and social activity. From this point of view they may be classed as sociologists rather than geographers, since geography provided rather the mode of approach than the object of interest. It was chiefly another method of grouping and studying the complicated array of social phenomena whose wealth of forms and interactions is at once the incentive and the despair of the sociologist.

The interaction of psychology and sociology, so characteristic everywhere of this age, took a peculiar form in France. There a group of writers associated with the periodical *L'Année sociologique* carried to its logical conclusions the old notion of a "group consciousness" or "group mind" which in some way has a reality other than that of the individual mind. In order to establish this notion they resorted to the phenomena of primitive society. Primitive religion, for example, is a set of "collective representations"—which means that it expresses the ideas that spring from the emotionally charged contacts of the members of a group. Its character, in other words, is not to be understood from the standpoint of the psychology of the individual. It reveals the mentality which social beings possess because they are socialized, because they participate in common situations. We begin with collective ideas—they are the stuff of primitive thought—and at length attain individual ideas, as in the thinking of civilized man. The exponents of this principle, Durkheim, Lévy-Bruhl, Hubert and Mauss, differed in one important respect from such advocates of the "group mind" as the Hegelian mystics, for example, Bosanquet, or the nationalistic psychologists of the McDougall school. For Durkheim and his followers regarded the group consciousness as a primitive mode of thinking which civilized man had in part outgrown, whereas the latter made the "group mind" the higher, more enduring reality. But in either form the doctrine of the "group mind" has been vigorously challenged.

It would unduly extend this survey to include the sociological movements in other countries, such as Russia and Italy, where nevertheless considerable activity was shown. But in conclusion something must be said of the highly significant developments which were taking place in Germany. Here the question of fundamental method, as distinct from exploratory technique, was specially prominent. Was sociology, for example, a special science dealing with an aspect of social life or was it a general science of society corresponding to biology in the organic sphere? Simmel had sought to delimit its field to the abstract forms of interaction or relationship, though his own remarkable *Soziologie* transcended his theoretical limits. He had held that social forms, such as subordination and superiority, could be studied apart from the different media, economic, political, religious and so forth, through which they were manifested. Against this view there arose a considerable volume of protest, expressed by Spann, Wundt, Oppenheimer and others. On the other hand there were various thinkers who were stimulated by Simmel and recognized the cogency of the contention underlying his exposition. They felt that society as such was a challenging object of study but that in order to advance the study it was necessary to distinguish the essential or peculiar or universal attributes involved in social relationships and conduct. In this respect German sociologists as a whole presented an interesting contrast to American sociologists. The latter were inclined to invade the vast new territory without much concern over strategy, trusting to the tactics of the behavioristic and the statistical technique, whereas the former premeditated much and long over the best method of occupying the land.

The resulting *Methodenstreit* was no mere logomachy. If sociology was a real science, it was important to discover its sphere. Many representatives of the special social sciences, like Troeltsch and Vierkandt and Oppenheimer, were crossing these accepted boundaries and becoming sociologists as well. It seemed incumbent upon them to define their new posi-

tion. This task made a special appeal to the speculative scholarship of Germany. Besides, if, as writers like Heinrich Rickert asserted, there was a great distinction between the sciences of nature and the sciences of "the spirit" (*Geisteswissenschaften*), that might certainly involve differences in their respective approach and method which were well worth looking into. The various doctrines which resulted were often no doubt too extreme in opposite directions. But the respective claims of the "scientific" and the "historical" schools certainly made the problem clear, and the challenge which each gave to the other was productive of genuine results. These results, however, were scarcely manifest until a later period, when the main works of Vierkandt, von Wiese, Oppenheimer and Max Weber appeared.

VII. ANTHROPOLOGY. Anthropology, like sociology, has been faced with the task of finding its place in the realm of sciences. From the first it straddled the fences distinguishing the "natural" from the social sciences. In its biometric and ethnological researches it entered into the regions of physiology and anatomy and the wider spaces of biology; in its cultural researches it included all the phenomena expressive of human mentality, such as art, language, religion, social organization, technique. In fact its subject matter was marked out for it not as a definite content but as the whole complex of human phenomena wherever this complex was not too elaborate and diversified to admit of some unity of treatment. If civilized man with all his multifarious works resisted such treatment, at least primitive man seemed to present a more manageable problem. Besides, the principle of evolution offered a key which was eagerly grasped by the pioneers, such as Spencer and Tylor. Social groups by its aid could be classified according to cultural stages, and all the variety of phenomena they displayed could thus be reduced to some kind of order.

What the anthropology of the early twentieth century did was to overthrow the simplicity of these categories, to show the disturbing heterogeneity of primitive society and the difficulty of applying any universal stage-formula that would fit the facts, to seek for new concepts in terms of which complexes of human phenomena could be grouped, and to essay new methods which would express the relation of one complex to another. The richer materials of anthropological investigation provided by the scientific observations of many more or less primitive peoples, from the Australians to the Eskimos, from the Melanesians to the American Indians, undermined certain of the evolutionary assumptions of earlier anthropologists. Wundt had already, in his *Folk-Psychology*, laid stress on the accidental, irrational, seemingly arbitrary origins of the endlessly variant customs and myths of primitive peoples. He had discovered in the emotionally charged atmosphere of group association the primary conditions of cultural expression. The anti-intellectualist reaction now found a peculiarly congenial field in anthropology, partly because the attitudes and beliefs of the "savage" presented an array of contradictory and apparently irrational fantasies which the civilized investigator could regard with critical objectivity, partly also because the confidence displayed by the anthropological pioneers in simple schematic constructions of human evolution was confounded by the amazing variety of anthropological fact.

An extreme development of the new tendency was exhibited by the French school of Durkheim and Lévy-Bruhl. The former in his work on *The Elementary Forms of the Religious Life* and the latter in his two books on primitive mentality insisted on the "pre-logical" character of every man. Primitive ideas and social observances arose, according to them, out of the mystical uncriticized impression which the forces of nature made upon primitive man. Above all, these ideas were the results not of individual reflection but of the contagious influence of the group as it worked upon suggestible minds that cared nothing for the laws of logic. The savage, according to Lévy-Bruhl, construed experience in accordance with an illogical "law of participation," while the civilized man accepted the logical "law of contradiction." Durkheim and Lévy-Bruhl were criticized as drawing too sharp a distinction between primitive and civilized thought. But much of the criticism was based on the argument that the irrationality imputed by them to the savage is also characteristic of mankind even in the heyday of science. What men took for reasoning was more often "rationalization," and the illustrations of it which Boas, for example, presented in his *Mind of Primitive Man* seemed near enough akin to the ways of civilization even before the Great War afforded its profoundly impressive object lessons.

Some anthropologists, denying the existence of sheer distinctions of mentality between the

primitive and the civilized, went so far as to deride the principle of evolution altogether. Thus Goldenweiser, in his *Early Civilization*, spoke as if evolutionism in anthropology were entirely discounted, although it was Darwinism that first gave anthropology its inspiration and almost its *raison d'être*. Others attacked the evolutionist hypothesis at particular points. Westermarck criticized the evolutionary schema which represented man as passing from promiscuity to monogamy by maintaining that monogamy was primordial in the human race, though his evidences, as Briffault showed much later, were themselves far from satisfactory. But in this period the outstanding critic of the whole principle of cultural evolution was Graebner. He substituted for it the theory of "diffusionism," of which he was the unrestrained advocate.

To Graebner cultural resemblances were mainly the results of contact and adoption. He sought to trace the lines or waves of diffusion by an elaborate study of the material items of culture. (It is worth while noting that it was also in terms of the material culture that contemporary writers who retained the evolutionary hypothesis, like Müller-Lyer, built up their system of culture stages.) Graebner discovered a vast network of diffusion transcending the limits of island and continent, and worked out, with supreme faith in the universality of his principle, great circles and layers of culture. This doctrine was accepted by the English anthropologists Elliot Smith and Perry, who regarded culture as radiating from one center and were not deterred by the paucity of evidence from the sweeping conjectures as to the mode and character of this suppositious process.

Rivers, an anthropologist of great promise, adopted the diffusionist principle with more caution, particularly in his remarkable *History of Melanesian Society*. He was acutely aware of the difficulties of interpretation and of the complexity of the conditions under which culture accumulates and changes. He realized, as Graebner failed to do, the psychological preparation requisite before an item of culture, especially a non-material item such as social organization, can be successfully "borrowed." He recognized also that "borrowing" may change the character of the adopted item. But he came nevertheless to the conclusion that contact is the spring of the human progress in which he definitely believed. In his application of this principle he showed great ingenuity, and he certainly exposed himself less than the other members of his school to the general criticism which was brought against them, namely that, apart from their too easy acceptance of conjectural adoptions and borrowings, they conceived of culture too much as a series of discrete items, and failed to appreciate the integrity of a culture which, resultant as it is of many factors, yet expresses the psychological solidarity of the group.

While the controversy over diffusionism raged, the study of anthropology was being advanced by numerous specific researches. For this work the United States offered unusually favorable conditions because of the presence within it of Indian tribes whose primitive character was not yet wholly submerged by the advance of civilization. It was therefore appropriate that a leader in anthropology should have arisen and founded a school in America. That leader was Franz Boas. It is significant also that his school should be characterized by a principle of method rather than by one of interpretation. In effect Boas took the following position: Let us make no postulate of evolutionism or of diffusionism or of environmentalism, but let us use any one of those concepts wherever it best fits the facts. Let us begin with definite geographical areas within which a type of culture predominates, such as that of the Kwakiutl. Let us intimately investigate the totality of cultural factors within it, seeking the historical processes of which they are the resultant, seeking also the psychological unity on which they no less depend. The different factors will be variously exhibited, variously related, from tribe to tribe, and thus will lead to a comparative study of cultural aspects, of the mode of assimilation of common features and of the significance of differences. We thus discover the conditions and limits of the culture area, and give concreteness to the idea of a culture pattern in each case, which incorporates and modifies to its own likeness the accretions, introductions and novelties accepted from without or rising from within. The culture area will then be seen as a whole in its geographical setting and in its relation to other areas.

This was the working principle which guided the series of notable researches conducted by Boas and by the representatives of his school, such as Wissler, Goldenweiser and Lowie. It stimulated the exploration of many aspects of primitive custom, ceremonial and myth among the Indian tribes. It encouraged the study alike of single items and of complexes of culture, with

the aid of linguistic and other direct modes of approach. As a historical school no doubt it revealed the limitations of the "historical method," as these were revealed also in economics and other sciences. For a science is never content with working principles; it seeks also synthetic principles interpretative of the phenomena which it examines. From the latter the historical school shrinks, and therefore it can never hold the field alone. If old generalizations prove inadequate, nothing is more assured than that the synthetic spirit of science will seek for new ones.

VIII. HISTORY. It was an old established convention that when an author set down the record of change in the economic order he was accounted an economist, when he traced changes in religious or philosophical thought he was a theologian or philosopher, but when his main theme was the record of political change he was *par excellence* a historian. Certain assumptions underlay this distinction which, long before attacked by writers like Voltaire, began to be vigorously challenged in the later nineteenth century. Why should the record of dynasties and of constitutions be regarded as supremely historical? Did not such an attribution assume an unwarranted causal priority of the political event, if indeed history was the study of those changes which most affected the life of man and ushered in the present order of things? Did not these political changes depend upon social and economic changes in such wise that, abstracted from these, their origin and significance were misinterpreted? The machine age was teaching its lessons. It was defeating not only the "great man" theory of history, not only the individualistic interpretation of political transformations, but the whole doctrine of the preeminence of politician and diplomat and military general and constitution maker in determining the destinies of mankind. "History," said the scientist Fabre, "celebrates the battlefields whereon we meet our death, but scorns to speak of the plowed fields whereby we thrive. It knows the names of the king's bastards, but cannot tell us the origin of wheat. That is the way of human folly."

All the social sciences, as well as those natural sciences whose applications most directly affected human life, were pressing home the lesson. Geology and archaeology were vastly extending the time span of history. Anthropology was revealing the significance of culture changes. Geography was showing the dependence of civilization on the territorial environment. Psychology was demanding that historical interest be directed to the process of collective thought, the mass movements of opinion as revealed in custom and tradition. Economics and technology were claiming that behind the changes of social usage and institution lay as prime movers changes in mode of production and in control over nature. Under the manifold impact of these influences the traditional conception of history seemed no longer tenable. It was no longer enough, for those who claimed to tell some portion of the story of mankind, to add to an overwhelmingly political account a perfunctory chapter or two on scientific or economic developments. If for no other reason, the idea of the economic interpretation of history had bitten too deeply into the consciousness of those who had witnessed the social transformations of the industrial revolution.

The resulting controversy on the nature of history was carried over into the twentieth century. It raged particularly in Germany where Lamprecht was the protagonist of the view that in proper perspective history was culture history, that the essential changes were not those which occurred in the political structure or were engineered "from above" by governments, but those which occurred in the ideas and modes of living of the people. In this position Lamprecht found able supporters such as Gothein; but his own *German History* was sharply criticized both by the state historians who disputed his theory and by the specialists who challenged his competence. Lamprecht's best known answer was that offered in his series of lectures delivered in 1904 in the United States and published under the title *What is History?* In this volume his insistence on the new historical point of view was more important than his own exhibition of its results, for in seeking to show the necessity for the comprehensive study of all aspects of life he was led to make doubtful generalizations regarding the psychical manifestations of successive periods. Nevertheless the work of Lamprecht was both fruitful and influential. He insisted that history be more than a description of events, that it must be an explanation of change. He insisted that history is a unity and that the unity of history derives from the unity of society, responding through its institutions and varied modes of expression to the manifold interdependent conditions under which it lives in every age.

The work of Lamprecht was very timely. The

defects of his own work showed how difficult was the task which he imposed on the historian. It involved him in the consideration of problems of social interactions which were beyond the generally accepted limits of historical study. It is true that Marx had already flung a challenge to the writer of history; but Marx had also formulated a simple dogmatic solution which the orthodox historian had generally rejected. Lamprecht offered no such "key" to history. He raised a problem rather than solved it. How should the historian achieve this unified picture of civilization which Lamprecht proclaimed the great desideratum? And how should he deal with the problems of social causality when he limited himself to his old task of political historiography or to any of the special histories which he might seek to present? Was description—*wie es eigentlich gewesen sei*—the allotted task of the special historian, and explanation—*wie es eigentlich geworden sei*—the business of the comprehensive historian of culture?

The problem of historiography brought forth the comprehensive survey by Gooch entitled *History and Historians of the Nineteenth Century*. While this volume offered no definite program it showed the trend toward a more comprehensive view of the content of history. It showed also the necessity for the cooperation, in the production of a true picture of the course of civilization, of the specialists of various nations in the various departments of historical study. Finally it suggested that in the search for historical truth there was involved a profounder quest than that which arrived at new or more accurate facts, namely the quest for laws expressive of the direction which, beyond the multiplicity of events, the drama of human affairs might be shown to reveal.

Gooch had complained that the philosophy of history was not keeping step with the advance of historical research. While Lamprecht was insisting on the principle of *Kulturgeschichte* he had not adequately realized the problem of appraisal and of method which it involved. Of the few writers who tackled this problem none did so with more insight than F. J. Teggart, who was particularly conscious of the historical process through which our modes of interpretation themselves develop.

The broader concept of history found a number of strong advocates and exponents, among whom may be mentioned specially Seignobos, Pollard and Shotwell. It was popularized by Robinson and Barnes in the United States and by Marvin in England. Other writers, such as Beard, contributed to the new synthesis by emphasizing neglected factors. No author was more influential in this regard than Robinson, who in *The New History* and other works dealt freshly and vigorously with the older traditions of history writing, insisting that history must seek to interpret all that we know or can learn about the past of mankind and that beyond events there lie causes which the historian cannot neglect without peril to his claim as scholar or scientist. Such claims were fortified by the numerous studies of various aspects of the human record which were appearing in many lands. It is not possible in this brief survey to mention these fruitful contributions. Suffice it to say that they ranged from Eduard Meyer's great *History of Antiquity* to Merz's *History of European Thought in the Nineteenth Century*.

In conclusion it may be observed that all these movements were bringing history into new relations of interdependence with the other social sciences. The historian no longer had a field of knowledge fenced off as his own. He was dealing with the materials provided by anthropology and economics and geography and all the rest. What remained distinctive in his task was the mode of approach, the aspect from which he treated them, and the form of the synthesis into which he brought them. The historian was discovering the same lesson which the psychologist and the economist and the sociologist were also learning, that in the closely interwoven texture of social life social science has its province demarcated not by frontiers set up by nature but only by the special objective with which it enters the common field. If from its own angle it contributes to the understanding of the life of man, that, and perhaps that alone, is its title to existence.

IX. CONCLUSION. The period which we have just passed under review differs in the retrospect from almost all other periods of intellectual activity because of its abrupt and epochal termination. The sudden diversion of energies to warfare on a gigantic scale inevitably made a profound impression. The optimistic regarded it as an apocalypse whence might arise a new heaven and a new earth, the pessimistic as the downfall of a civilization. Nevertheless its permanent influence on the intellectual life of the nations may well be exaggerated. Apart from its momentous though contradictory political results, as exhibited particularly in Russia, in

Germany and in Italy, it is doubtful whether it did more than temporarily interrupt the deeper processes of social change. Thus the same influences which before its onset were making for the fall of the birth rate, for the decline of dogmatic religion, for the dominance of finance over industry, for the spread of economic consolidations, for the growth of urbanization and the development of the mechanical basis of civilization, continued to act in full vigor in the post-war epoch. The conclusions of those who found the conditions of social change, not in violent convulsions, but in the gradual processes which give man new controls over nature, seemed to be justified by the event.

What had been most obviously changing during the epoch in which our period falls was the material basis of civilization. It was these changes which underlay the trend of the age toward internationalism. It was the contemplation of these changes and their immediate results which inspired its social philosophies, and fostered its mechanistic interpretations in biology and psychology. Here was the source alike of its optimism and of its occasional pessimism. It gave support to the idea of continuous social progress moving together with the growth of control over nature. And it was from this that those thinkers reacted who saw in mechanism a tyrant and not a servant, who denounced the times as materialistic and unspiritual. *Man versank rettungslos im Stoffe*, said those who, like Lamprecht or Tagore or Tolstoy or Inge, sought for ideals in the past or deplored their absence in the present. Nevertheless it was no accident that the belief in the reality of progress was itself a characteristic of the age.

R. M. MacIver

XII

War and Reorientation

I. INSTITUTIONAL AND INTELLECTUAL BACKGROUND. The war years were for the social sciences singularly barren in systematic ideas. There was neither time nor energy during the years of fighting for the continuance of the academic theorizing of the prewar period. When every existing structure had been disrupted it seemed unavailing to continue the process of system building. The overwhelming nature of the disaster that had befallen civilization imposed a sense of futility upon the professional scholar. Only here and there one might be found who proceeded insouciantly with his demonstrations, like Archimedes drawing his circles in the sand during the sack of Syracuse.

The paralysis of effort in the direction of theory was balanced by a mighty energy diverted to the immediate purposes of the war. This "intellectual mobilization," however, with its regimentation of effort, smothered the individual expression which is necessary for creative thinking. There was, in effect, a widespread renunciation of intellectual independence. Since each party to the conflict set up as two contrasting political systems its own scheme of ideas and that of its opponents, the field of possible variation in individual opinion on any question was narrowed down to the right view and the wrong, and to take the latter was to be traitorous. Historians therefore became official propagandists and focused on the prevailing struggle their interpretation of the past; sociologists and philosophers adapted their theories to the compulsions of the moment; religious leaders rationalized their teachings; writers and painters harnessed their imaginations to the uses of persuasion.

This intellectual mobilization also conscripted social scientists into the administrative techniques of government, and here their efforts were at once more effective and eventually more significant for scholarship. Statisticians and economists were drawn freely into the fiscal and industrial services; political scientists were called on in administrative organization; psychologists, sociologists and social workers were set to administer the problems of morale; jurists were assigned to smoothing out industrial friction. The administrative techniques which had been developed in the large business corporation, where effective action had to be combined with the representation of conflicting interests, were taken over in the business of war. Even in a country like the United States, where the rhetoric of democratic government was so compelling, the elected representatives of the people made way for the dollar-a-year businessmen and the corps of technical experts. In these activities social scientists had a chance to put whatever notions they had to the test of strenuous experience. There was scarcely a scholar who passed through these services who did not emerge, though a bit saddened perhaps, with an unaccustomed richness of realism added to his thinking.

He had been compelled in the course of his work to resolve ancient theoretical disputes in terms of imminent governmental policy, and to formulate techniques for transforming that policy into action. Which was a better method of financing war—loans or taxes? Should industry be confined to supplying the necessities of war and of the productive civil population or should business go on as usual? Should men in the essential industries be permitted to volunteer for military service or should they be required to remain at their civil posts? What measure of regulation was required to check the advance of war prices? The men making these decisions lived in a strikingly non-individualistic world, one where the crucial dichotomy was between the "essential" and the "non-essential," where everything superfluous was whittled away in the face of the primary needs and "priority" was accorded in terms of function rather than profit yield. In such a psychological setting it was not surprising that the theory and technique of the regulation of prices and qualities, of production and consumption, should undergo an unprecedented development. At the close of the war the public character of production in time of military emergency was universally recognized, but nowhere so clearly as

in the United States, supposedly the great stronghold of economic individualism.

The revolution in economic policy was only one of the adaptations made by the state to the unremitting demands of the military struggle. With both the Allies and the Central Powers the requirements of diplomatic strategy were to be found overriding established political traditions. Theories of political conduct were evolved which were sometimes deliberate posturings for effect and as often rationalizations of the position into which a nation had been hurried by the logic of events. Racial or linguistic nationalism, which had served the German Empire well in its formative period and which later fomented anarchy and war among the mixed peoples of the Balkans, had in Germany yielded ground long before the war to the doctrine of economic nationalism or rather supernationalism. The discarded theory was picked up by the Allies, in spite of the incongruities of their political structures, and under the propagandistic form of "the self-determination of peoples" served not only to animate the military or revolutionary efforts of Poland, Czechoslovakia, Jugoslavia, Rumania, but also to create unrest in Egypt, India and China. Again, the Allies, forced to contrive a bond of union and a plea for support, found it in resistance to the aggression of Germany. Military aggression, hitherto a policy within the permitted range of national initiative, became thereby a crime against the whole family of nations. To support this another premise was necessary—that of a collective international conscience. This rested necessarily on the postulate of international interdependence. There can be no doubt, however, that there was a reality in this conception. It was implicit in the war itself, which had drawn half the world directly into its prosecution and involved the rest of the world none the less fatally. The time honored distinction between neutral and belligerent was stripped of significance. War had become a world condition, and therewith the interdependence of nations an established fact.

The regimenting of the civil population to the necessities of warfare was a governmental problem of as pressing consequence as the revolutions in economic and political policy. Warfare on a world scale was not merely a matching of strictly military strengths; it was a confronting of every resource on both sides. Thus the long-standing distinction between the army and the civil population was blurred, since the latter was now conceived as directly or indirectly an integral part of the general military organization. In consequence a host of military terms and adumbrating ideas were introduced into civil use. Of these by far the most important was "morale." In its original meaning the term had covered the unanalyzed complex of psychological factors that braced the rank and file of an army to the punishment of battle or the labors of prolonged marches or the miseries of a siege. In the World War it was extended first to munitions workers, then to industrial workers at large, and ultimately to the entire population. As in the army it had long been recognized that morale depends to a large extent on material conditions, such as abundant rations, suitable clothing, rainproof tents, so it was promptly recognized that the morale of the worker depends on similar conditions; the meeting of these requirements, either through direct government action, as in the housing programs of the several governments, or through regulation of wages and the prices of necessities, became an essential part of national military policy. So also care of the wives and children of soldiers at the front, felt to be required by military morale, led to increasing attention to the situation of the families of workers injured or invalided, as a requirement of civil morale.

These governmental techniques and policies, though not in themselves systematic ideas, represented the principal contribution made during the years of the war to the history of social scientific thought. Where the genius of a period is primarily administrative, as among the Romans, or in periods of stress when the necessity is for the effective execution of a program, the idea in action is the one that pushes forward ideological advance. The operations of the War Industries Board, the joint control of Allied shipping, the collective agreements entered into by labor, the manipulation of public opinion by publicity and propaganda, the studied maintenance of morale, the emergence of an international conscience—these were idea-movements of the first importance. Instead of having been evolved and systematically presented by individual thinkers they were the sum of the intellectual behavior of the community at a critical time. Actually of course they were rooted in the period preceding the war; when the emergency came, all the ideas and techniques which had been developed in business, politics and publicity were pooled, and the usual barriers which might have ob-

structed their acceptance, or their passage from one sphere of activity to another, were broken down.

As the conflict went on, its import for the life of society became clearer. The first burst of militant enthusiasm gave way to a disenchantment with the aims of both sides and a consciousness of the plight of the generation. The war exposed all the tensions and frictions attendant upon the operation of the prevailing economic and social scheme, and pointed the contrast between the degree of development of natural science and the haphazard control over social arrangements achieved by social science. The events and news of every successive day revealed a group of nation states competing for territory, colonies and markets, using all the resources of alliance making, secret diplomacy and armament races, each entrenched in its position by a traditional theory of sovereignty and impelled by an industrial system which made insistent demands for expansion. Men realized with dismay the racial animosities slumbering within the political entity, the aspirations of suppressed groups for autonomy, the jealousies and professional pride of military bureaucracies, the emotional hysteria which an idea or ideal could evoke in an entire population. The blundering and stupidity of officials, familiar enough in the diplomacy which had brought on the war, became overwhelming when they resulted in huge losses of life. Chemical, submarine and airplane warfare suggested the sinister possibilities of the application of science to the art of destruction. And meanwhile the waste of human and physical resources continued, carrying with it an increasing psychological tension of sacrifice and repression. Efforts at peace making met ludicrous failure; governments on both sides had gone too far into the conflict to be able to save face through any arrangement short of victory.

With the signing of the Armistice came a momentary outburst of optimism. It produced in America President Wilson's liberal basis for world reconstruction, and in England such notably creative expression as the program of the British Labour Party. But the disappointing character of a peace treaty which apparently opened a score of doors to new international disputes put an end to this mood. There followed a "war after the war" of indemnities, military occupation, diplomatic intrigue and commercial discriminations. Outside the Versailles scene elements were not lacking to add to the confusion: the crash of falling monarchies, the proletarian struggles everywhere, the hardening of militant communism in Russia, the violence of reactionary dictatorships in Italy, Hungary and Spain, the hysterias of radical-hunting, the rise of organizations like the Ku Klux in America and the secret military societies in Germany.

The economic confusion paralleled the political. Expansion and impoverishment in Europe gave finality to a process which had for some time been gathering force— a shift in the balance of economic power from Europe to America, with perhaps an accompanying shift of cultural influence as indicated in the phrase "the Americanization of Europe." Attempts to apportion Germany's indemnity and to adjust the payment of the inter-Allied debts involved the Powers in a sequence of bickering and bargaining which, while it cast an acrid doubt upon professions of altruism, was chiefly significant in revealing the financial instability of powerful states and their dependence on a delicate network of international economic relationships. Even the prosperity of the United States, proceeding from its amazingly developed industrialism, had certain disintegrating effects. It produced a heightened pace of economic activity which antiquated the approved economic virtues of industry, thrift and reliability, and conditioned a new set of virtues clustering chiefly around the rapid acquisition of wealth through speculation. In Europe, particularly on the continent, currency inflation had far reaching consequences for economic confusion. A radical redistribution of wealth put the bourgeois property holders in a helpless position; the rise of prices bore most heavily on the salaried and professional classes whose incomes remained fixed. With the value of money dropping further each day spending became the beginning of wisdom, and a general upheaval of values resulted from the erratic course of prices.

The mood of discouragement which followed the war was due in equal degree, however, to general psychological readjustments, based on factors less tangible than those responsible for the political and economic disturbances but no less compelling in their effect on the popular imagination. The cupidities displayed at the peace conferences, the publication of hitherto secret documents, the "now-it-can-be-told" attitude, revealed the actual motives of self-interest operating beneath the pretensions

of diplomacy. Millions of returning soldiers brought with them the memory of a struggle without rules and without chivalry, a Gehenna of misery and despair dealing death in a thousand inglorious shapes and leaving the survivors with their bodies mutilated and shattered—a contrast to the glowing adventure pictured by the civilian enthusiasts for the "healing war." Although regulation and war taxes had curbed more or less effectively the cupidity of the profiteers, the close of the war nevertheless found in every country fortunes that had mushroomed up while the soldiers were perishing in the field and the industrial workers were straining with overtime and excessive speeding up. The accounting of war losses, hitherto glossed over in the interest of morale or borne stoically in the excitement of a successful offensive, now fell with crushing weight upon the spirit of the masses.

Revaluations so far reaching as these, when combined with the inevitable reaction from the tensions of the war period, could not fail to bring in their wake a general destruction of those traditional ties and sanctions upon which social organization depends. The widespread redistribution of wealth effected a social mobility which played havoc with caste. There was everywhere an increased restlessness, expressed in the exploitation of every means of travel, the preoccupation with amusements and the prevailing nervous distraction, especially of a neurotic post-war generation which found it impossible to unlearn its need for excitement. The mechanization of life, which had long been perceived by social observers, was extended even to the outlying populations of Europe, and in the industrial centers of America it reached a new perfection. There came with it a change in the institutional character of the home and the family. The increasing resort to divorce, the emergence of the companionate, the weakening of the tabus against birth control, the winning of suffrage, the approach of economic equality, combined to produce a new position for women in society. The rapidity of this change, which carried with it new conceptions of the conduct within the range of woman's dignity, was for many persons one of the most obvious manifestations of what was considered a relaxation of morality, a decay of religious faith, a broadening of the distance between the younger generation and its predecessors. As happens in all periods of transition, the impression of disorganization was probably intensified by the censorious commentary from the adherents of the old order who were insensible to the reorientation toward new social standards and arrangements.

This disorganization confronted social science with its characteristic problems. Surrounding institutions and attitudes, however, are only the material with which it works; the color of its thinking and its philosophical cast are determined by the prevailing mood of the period.

In the face of the revelations which followed the Armistice the exalted mood of sacrifice and spirituality was not able to survive and a stern withdrawal from the benefit-of-the-doubt attitude was inevitable. The veil was lifted from the pretenses of the previous age of innocence. The generation after the war, in its unmitigated repudiation of idealism, found for a time no stopping place short of a derisive cynicism.

This disillusionment and its expression in a studied resolve not to be fooled came upon the community with so much force that it quickly colored all attitudes and captured all sections of society. Even the least sophisticated evidenced its influence in their suspicion of all "theories," their trust in science and the certitude with which they placed their faith in "facts" and stressed the uniqueness of experience as the test of truth. Among the intellectuals themselves the most esteemed attitude was an anti-intellectualism which took particular delight in pillorying the academies. Wilson's idealism, as a possible new regime in politics, began to seem somewhat ludicrous, partly, perhaps, because it had been unsuccessful. Success was esteemed as the proof of merit, for tangible results were more highly valued than altruisms which depended on faith. Even in the pulpit religion came to be represented less as a worship and more as an adjustment to the conditions of modern life. A book representing the founder of the Christian religion as a business man and the contagion of his faith as the triumph of salesmanship received a popularity which proved its ideals eminently compatible with the public taste. The history which the layman preferred to read was that in which the force of ideals was discounted, and a book giving a basically economic interpretation of the growth of American civilization had an unprecedented sale in the United States. In fiction the mood was evidenced equally by the "hard-boiled" dialogue of Hemingway, which seemed to express so adequately the unyielding surface of

experience, and by the accumulation of a literature of escape in schools so far removed from each other as those of James Branch Cabell and the writers of mystery stories. Nowhere, however, was the complete capitulation to this mood shown so clearly as in the bludgeon strokes of the "debunking" school of biography, and in the enthusiasm with which the concept of bunk was received and applied to every possible situation. "Bunk" was the answer of the post-war generation to the inculcated "morale" of the war years.

An important result of this trend toward greater interest in actualities was the shifted emphasis in educational method. This realism was responsible in no small degree for the noticeable inclination to discard the old methods of inculcating formalized knowledge and to stimulate the pupil instead to make his own investigation, analysis and deduction. Other influences also had much to do with the change, such as a fear of the "goose-step" standardization effected by uniform educational methods and centralized control, and the formulae of the newer psychologies and philosophies. The result was to give educational theory a flexibility and experimental temper for which a parallel can be found only in the great age of educational advance—the eighteenth century. There was also a greatly increased interest in adult education, not only in organized classes, but in its other aspects as lectures, clubs, discussion groups. Attempts at the humanization of knowledge found a ready audience, and popular studies for the lay reader appeared in all branches of learning. An important factor in this desire for "culture" was the greater leisure and new social position of women, which gave them an increasingly important position in the intellectual life. Women came more and more to constitute the major portion of the public consuming literary and artistic productions.

The most insistent of the newer educational interests was psychology. As an elective in institutions of learning, as a subject at popular lectures and commercially managed schools, as a therapeutic technique in social case work as well as in one's own individual adjustments, and even as a topic of conversation it overshadowed every other "cultural" interest. This popularity derived somewhat from the war, with its exposition of abnormalities and its problems of shell shock; it was certainly the result also of the strenuous character of modern life which made necessary a technique of adjustment. Inseparable from the reliance on psychology as a method was the interest in personality in the application of that method. This was in part merely an application toward one's self, one's neighbor and one's hero of that desire for ultimates which informed so completely the temper of the time. It was undoubtedly one of the factors in the biography boom, in which the gloriously dead, who had been formerly the concern only of the historians, were now subjected to a psychoanalytical scrutiny for the curious. The same influence was to be found in the novel, not alone in the absorption with sex but also in the emergence of the "stream of consciousness" method, which found its way even into historical narrative, as in Carl Becker's *Eve of the Revolution*.

This self-examination extended itself to an unprecedented interest in the character of the modern world and the immediate social environment. Spengler subjected western civilization to a pessimistic analysis in his *Untergang des Abendlandes*, and Keyserling in a more nostalgic vein expressed a lyrical admiration for the highly contrasting oriental way of life. This increased awareness of contemporary culture found particular expression in a widespread interest in the new industrialism and in the potentialities of science and the machine for effecting far reaching transformations in our culture. America and Germany especially—the first a new culture inviting definition, the other a defeated group seeking a new orientation—experienced an outburst of national introspection which yielded revealing analyses of their respective civilizations. In America H. L. Mencken and Sinclair Lewis found a wide audience for an unsparing and unflattering summary of American life which Robert and Helen Lynd in an inductive study of a typical community (*Middletown*) found to be not very wide of the mark. Another group, represented by Van Wyck Brooks, Lewis Mumford and Waldo Frank, sought to isolate the American essence with an eye to its enduring contribution to the cultural stream. This heroic and concerted effort to understand contemporary culture carried with it a conviction that scholarship must concern itself with immediate problems, and an enduring and vital art must do its work in the context of contemporary culture and draw its material from it.

The principal character of the abstract thought of this period was a growing sophisti-

cation, which represented an inclination toward skepticism of apparent conclusions and with it an increased subtlety and self-consciousness of approach. There had been a tendency in this direction for a good many years, as evidenced by the work of Poincaré and the non-Euclidian geometricians, but in the years after the war it received an impetus which was due in no small degree to the congeniality of the prevalent intellectual disposition. Scholars showed their discontent with abstractions and *a priori* generalizations by their efforts toward a substantial realism in thinking, toward a greater immediacy between theory and the substance of theory. There was in all branches of science an increasing distrust of absolutism in thought, which found expression in a growing wariness of the "self-evidence" of axioms. The study of structural logic gave way to an experimental logic in which as much attention was paid to the authenticity of the premises as to the validity of the processes of reasoning. The researches of Einstein in physics made explicit the principle of the relativity of phenomena which was at the same time being evolved in analogous forms in other departments of thought. This theory, when applied to social science, threw the emphasis on the individual or the single event as the term of reference and effected a sense of the complexity of a problem and of social relationships which made William James' concept of a "multiverse" conform admirably to the intellectual temper of this period. The war had done much to prepare the way for such a conception by impressing upon people's minds the breadth of the horizon and the complexity and divergence of world politics, attitudes, institutions. In art particularly this had the effect of adding to the schools of realism an antithetical group which was doubtful as to whether the most effective statement of reality cannot be attained more accurately by indirection and suggestion rather than by naturalistic representation. Simplicity and unity were everywhere regarded with a suspicion that arose from a belief that if one pushed back far enough one found always the simple disintegrating into the complex. This sense of complexity was dangerous for many in that it often defeated impulses toward constructive effort.

A further issue of the widespread convictions of complexity was more limited in its reception but affords what may possibly be an indication of the trend of scholarly thought in the future. There was explicit recognition by many scientists that any one of a series of divergent conceptions of the universe might be equally tenable, and the realization of this led certain thinkers to a skepticism of the value of the scientific method as it had been developed and crystallized. There were some who even expressed a discouraged sense of the futility of science. This attitude was distinctly contrary to popular faith in science as a panacea, but it was nevertheless a result to be expected as scientific thinking developed to such an extent that it defeated its own purposes.

In their attempt to escape the simplicity of unitary answers and yet avoid metaphysics, philosophers and social scientists were driven to a set of beliefs and techniques which were at once less demanding and more satisfying. They had resort to a quantitative objectivity which left little to judgment except the measurability of the phenomena and little to speculation except the interpretation of the results. Wherever theories had already been advanced and become tenacious they were subjected to a verification proceeding inductively and quantitatively. The dominant philosophy of the period was a pragmatism which ignored innate values and concerned itself with the attainable good, and the dominant psychology an experimental behaviorism which took nothing for granted except the primary significance of overt behavior. The extent of these attitudes may be measured by the impact of behaviorism upon method in the social sciences and upon education, and the ramifications of pragmatism in case law, pluralistic political theory, labor policy and social work, in institutional economics and social history.

All of these philosophical and scientific attitudes were merely the more recent accretions to an intellectual heritage as old as western civilization. Many of the older attitudes maintained considerable vitality and constituted the corpus upon which new elements were grafted. This confronting of the inertia of philosophic systems with the mobile and various currents of mood, belief and conduct in the general disorganization of the post-war period offers an approach to the understanding of the chaotic nature of the period. Every thinker carried the past in his brain; but he wrote at a time when a succession of new attitudes strove for survival, false starts and tentatives played themselves out or were deflected from their intention, bursts of feeling and eddies of belief made something of a stir before they were lost in the more

permanent currents of thought. Attitudes based entirely on the tensions of the war lost after a time their identity. Temporary flurries of extreme idealism and extreme disillusionment were equally fruitless of permanent results. Intellectually the period was one of startling contrasts and juxtapositions, one in which nothing from the past was abandoned, much was started in the heightened atmosphere of intellectual excitement and social transition, and very little was brought to completion. This gives the period a richness and variety which are at once a warrant of its fertility and vigor and a warning against summary analysis, for in its complexity can be found substantiation for almost any formulation of trends.

II. PSYCHOLOGY. The social sciences were probably more profoundly affected by the development and diffusion of psychological doctrine than by any other single influence that touched them. Psychology's penetration of social studies was already in progress in the late decades before the war. Wundt, the dominant figure in late nineteenth century physiological psychology, had crowned his work with an impressive contribution to sociology, and if his influence on the sociological system builders remained negligible it did at least operate to encourage the trend toward social interpretations among the psychologists.

From the opposite pole of mechanistic economic theory sporadic flashes of psychological insight began to appear. From the time of Jevons orthodox economic theory had been increasingly dominated by the impulse to translate the whole problem of value into "subjective" terms. Values were derived from wants, desires, and these psychological phenomena were generalized to homogeneity with no relevant differences that could not be manipulated by quantitative measurement. This subjective psychology had been vigorously challenged by the heterodox theorists of the time: Sombart, who found it necessary to draw upon a whole complex of psychological motives to account even for the thirst for indefinite enrichment; Veblen, who sought not only to break up the rigidities of subjective theory by an appeal to the motives and instincts of contemporary scientific psychology, but even more to establish a psychological basis for the Marxian theory of class consciousness. Veblen and his followers, Hoxie and Stuart, levied most heavily upon the theory of instinct presented by McDougall in his *Social Psychology*, published in 1908. The same work exerted a marked influence upon sociological thought, operating toward the weakening of ambitious systems of sociology and the concentration upon problems of individual motivation.

Within the field of psychology itself several new leads having a significant bearing on the social sciences were opening up. The most important of these were the new approach to abnormal psychology under the leadership of Freud, the study of the "conditioned reflex" initiated by Pavlov, the studies of differences in intelligence inaugurated by Binet, and the study of organic groupings of perceptions, which received its impetus from the work of Stumpf and Husserl and was developed into a definite theory of Gestalt or configurationism at the hands of Köhler and Koffka. In each case the immediate application was limited at first to a narrow range of problems: psychoanalysis to psychotherapy; the study of the conditioned reflex to the interpretation of certain anomalies of behavior; the Binet tests to the detection of feeble-mindedness.

Setting out with a study of neuroses and other psychological abnormalities, psychoanalysis had effectively established the existence of a range of motives not appearing in the consciousness of the patient, but nevertheless determining his behavior. Not only was the "unconscious" capable of motivating action that otherwise would have to be explained as purely capricious; it was also capable of controlling the conscious motives. The old distinction between "real" and "professed" motives, with its implications as to good and bad faith, gave way in the psychoanalytic psychology to a distinction between unconscious and conscious motives, with implications of personal irresponsibility.

Within the psychoanalytic group itself grave schisms arose over the anatomy of the "unconscious." Of these one of the earliest was headed by Alfred Adler, who broke away from a loose alliance with Freud and set about developing the implications for psychotherapy and education of an assumed universal striving for superiority. A later schism was led by Jung, in whose system congenital differences in type count heavily alongside of the submerged data originating in conscious experience. A third important schism was that of Rank, with its emphasis upon traumatic influences on behavior. These differences have had no significant repercussions in the social sciences. The social scientist, and the psychiatrist as well, have drawn eclectically

from the several schools, following the pragmatic principle that any psychoanalytic tool is good as long as it works.

Prior to the war the application of psychoanalysis to psychopathology was extremely restricted. The intolerable terrors and hardships of the fighting revealed the prevalence of psychological abnormalities in the rank and file drawn to the front. "Shell shock," a phenomenon not unknown in earlier wars but disposed of naïvely as "cowardice," became so common as to demand hospitalization and treatment like any physical wound. The services of psychotherapists were requisitioned by all the warring nations, and the methods of psychoanalysis were found useful. Naturally the war-time recognition of the wide distribution of psychical abnormalities was carried over into the reconstruction period. A host of behavior abnormalities formerly treated as vices or crimes came to be regarded as manifestations of psychopathology, demanding treatment rather than repression, prophylaxis rather than exemplary punishment. Psychoanalytic methods consequently gained wide currency not only in social work and in penology but in education, where they formed a main constituent in the increasingly popular courses on "mental hygiene."

Far subtler, but probably more potent, was the influence of psychoanalytic study upon the intellectual temper of the post-war period. The enthroning of the "unconscious" as the dominant factor in behavior was eagerly applauded by a generation in revolt against "bunk." It became possible to set up the concept of unconscious propaganda alongside of the less convinced and hence less effective conscious propaganda, as a resistance to every kind of social compulsion. Noble sentiments operating oppressively might be explained, not as formerly in terms of hypocrisy, but in terms of unconscious self-seeking motives. Thus the unconscious became a potent means of personal "liberation," to the horror of the conservative, who was becoming aware only gradually that the emphasis of psychoanalysis upon the "libido" was the least revolutionary aspect of the tendency.

The hold that psychoanalysis had achieved for itself was obviously reflected in the literature of the period, as for example in the fiction of Joyce and Lawrence, in the dramas of O'Neill and above all in biography. Freud himself had set the pace in his interpretation of Leonardo. A host of biographers followed after, scrutinizing the records of great men of all the ages for indications of their "real" motives, that is, their unconscious, often their meaner, more selfish motives. The economic interpretations of the pre-war generation had made a mere figurehead of the "great man." The post-war spirit infused into the great man a superior reality, a more representative quality, but more representative of the unconscious egoistic strivings of his time.

For almost a decade the discoveries of Pavlov led a half animate existence in the laboratories of the animal psychologists. Among the other psychologists, even in Europe, they never exerted more than a mediocre influence. In America they were taken over by Watson, supplied with an effective name, behaviorism, and launched with the modest claims of a new, completely objective method of studying psychological phenomena. By the close of the war Watson had already trained a considerable number of able disciples who were rapidly building up a behavioristic literature. With the publication in 1919 of *Psychology, from the Standpoint of a Behaviorist* Watson undertook to maintain the omnicompetence of the behavioristic method in the handling of all psychological problems of a strictly scientific character.

For the social sciences the importance of behaviorism was partly methodological, since it was seized upon by many social scientists as a justification for their preference for concrete studies and their aversion to the large generalizations of the preceding generation. Its chief bearings, however, were upon education and family relations. In maintaining that personal character and ability are the products of "conditioning," Watson was led to concentrate his attention upon the earliest years of life. The preschool child became the most important object of educational effort. And since the preschool child is mainly subject to conditionings originating in his immediate family environment, a first task of educational policy was an attempted revision of family institutions, in order to create a more rational milieu for the development of character.

Like psychoanalysis, behaviorism operated to dissolve the sense of personal responsibility. A forger, a perjurer, a thief had been improperly "conditioned" in childhood. Their cases demanded "reconditioning," and the brute repression effected by criminal law should eventually give way to a rational technique of reconditioning. The doctrine fitted admirably into the temper of the times and attained a temporary currency far beyond the academic world

Both psychoanalysis and behaviorism, while releasing the individual from the burden of personal responsibility, left an open way for social perfectionism. Both have inherent leanings toward social action. This is not true of the psychological implications of endocrinology, which for a brief space appeared over the intellectual horizon only to sink back into pure physiology. What one really was, according to this doctrine, was determined by the constitution and functioning of his endocrine glands. Glandular unbalance, most often irremediable, was responsible for grave aberrations from normal standards; a happy constitution of the glands laid the true basis for achievement. Endocrinological psychology attained a modest place in psychiatry, criminology and in social work. Beyond these technical fields its influence promptly disappeared.

Far greater importance for the social sciences must be assigned to Binet and the "intelligence tests" that have grown out of his work. While the theory and practise of intelligence testing were already well developed before the war, they received in America an enormous access of popular interest from their wholesale application to the examination of recruits, with a view to the selection of those fitted by character for promotion. After the war they played an increasingly important part in American educational administration and were also applied sporadically in the selection of industrial personnel. Their underlying assumption of congenital differences in intelligence gained almost universal currency in America and exerted an influence by no means negligible upon political policy—notably in immigration legislation and the so-called "eugenics laws" of the states.

For social science the most important bearing of the intelligence tests has to do with democratic theory. That theory reached its highest point in the period of environmentalism of the late eighteenth and early nineteenth centuries. Those who accept as valid the theories of the Binet school must inevitably conclude that the traditional democratic theory is unworkable. A large—and according to the eugenists, increasing—fraction of the population is congenitally unfitted for political responsibility; and only a minute fraction is actually capable of a high order of political activity. It is worth noting that the theory of the intelligence tests, while widely accepted by educators, administrators and the conservative intelligentsia, was indignantly repudiated by the restless and disillusioned "younger generation." By them it was considered reactionary, an "unconscious" defense of the old order of inequality and oppression.

One final tendency in psychology needs to be noted, that of the Gestalt or configurationist school. Its fundamental conception, that organic groups of facts are perceived as unities, not pieced together in the mind fact by fact, has been pressed into a bearing on social theory as a truer statement of the position of the individual in the group. It has also begun to penetrate educational theory. But as a late comer its influence upon the social sciences in the period under review is modest.

No summary of the definable influences of psychology can give an adequate account of its real importance for the social sciences in the post-war period. Especially in the later part of the period psychology was "in the air." No social scientist not altogether impervious to the general movement of thought could fail to pay it tribute in the laying out of his problem, in his critical judgment of his own methods. No scheme of social reform could be launched without close survey from the "psychological approach."

III. GEOGRAPHY. In so far as geography is allied with the social studies it was until the twentieth century scarcely more than a subsidiary interest and a point of view on the part of historians or social theorists. In the early decades of the new century, however, there was an extension in the scope of geography and also an increase in its effect on the methodology of the other sciences. The shifted emphasis among geographers and the increased interest on the part of other scholars were stimulated by factors from many different directions: the increased interdependence between one part of the world and another; the development of anthropology and the awakened interest in the hypothesis of races; the general trend in all branches of study away from arid description and in the direction of an analysis of genesis, causes, interrelations, results. The World War brought a new necessity for knowledge concerning remote places and quickened the perennial curiosity about them; it upset old notions of national arrangements and brought to the focus of attention regions hitherto disregarded. It forced a universal recognition of the bearing of topography upon military strategy; the diplomacy of the war period, with its anticipations of the redrawing of bound-

aries in terms of military defense, nationality, economic resources, accessibility to trade routes, elevated the map to the rank of a first principle of higher politics. At the peace conference every delegation had its corps of trained geographers to bolster up its territorial claims. An improved art of cartography offered a technique for managing new materials and made possible a more analytic as well as a more concrete development of the science.

It was in the development of human geography, however, that the science began to achieve a directed interest in cultural problems. Geography had always contained something of ecology. In fact environmental determinism, which had flashed as a bright bubble to a good many social theorists, at times claimed the energies of this science too. Environmentalism involved the study of all of human culture in relation to physical phenomena. When the belief was discarded that the physical world directly determined cultural forms, the realization remained that there was nevertheless a relation which geography could claim as its basis of study. The study of human geography was the result, inaugurated by Ratzel with the publication of his *Anthropogeographie* (1882–91) and carried on by Ellen Semple, Elisée Reclus, Vidal de la Blache, Jean Brunhes. In the process of its development certain aspects of man's activity became particularly emphasized and were separated as distinct divisions within the science—commercial, political, economic geography. From this extension of interest the other social sciences derived less of actual consequence than did geography itself. This very impetus in its own domain, however, resulted in bringing the subject closer to the foreground in social study. History, in particular, began to pay greater attention to the background of climate, soil and physical environment.

As the content of the science increased, geographers came to feel the necessity for a specific basis of study before their results could become anything more than mere preliminaries to future collation. Their method of dealing with new materials had remained for the most part undirected and inchoate and left the science in a position of indecision as to its purpose, and confusion as to its achievements. It was largely because of this need for a unity of approach, similar to the method of experimentation in the natural sciences, that the concept of regionalism was adopted. The content of geography remained the same but its method of study was adapted to an intellectual milieu which produced the case method, institutional economics, behaviorism, political pluralism and stream of consciousness.

The thesis of regional geography is that a more provocative means of studying man in relation to his environment is to concentrate attention not on the reciprocity between them, in terms of either physical or cultural phenomena, but on a specified area in which the works of man and the works of nature, of the past as well as the future, will be studied with as great a degree of thoroughness as possible, letting the conclusions shape themselves. The ideal of objectivity of course is blurred by human conditioning, but regional geography stands for a method of investigation which is likely to prove of value in the orientation of the science. It resulted, particularly in France, in a host of localized studies which integrated the culture of a community with unaccustomed clarity and suggested provocative possibilities for social control.

The tendency of geography to turn toward regional studies raises afresh the question of its province and its unity. As the study of geography moves from the general to the specific in its development from physiography to an analysis of culture areas, it deals with increasingly complicated problems in which the influence of physical factors alone is a less and less sufficient explanation. The location of industries, the character of social organization and institutions, may be influenced by natural conditions, but there are so many further considerations that must be taken into account in reducing to terms the culture of an area that physical facts alone can serve the geographer only as a point of departure. In fact as he ceases to be a physiographer he comes closer and closer to the craft of the anthropologist, the historian, the sociologist, the political scientist, the economist. In this regard geography represents a close analogy to history, which is also necessarily eclectic. History describes its material in time with some regard to place; geography works on the basis of place with some regard to time. They must both consider the entire cultural structure. This complexity, which increases as geography becomes more critical of its purposes and methods, renders it, like anthropology, an exercise in synthesis. In so far as geography is in itself a social science it must be an analysis of the relationship between the life of the community and the natural and the cultural landscape; in so far

as it affects the work of the other social sciences its influence must still be confined to its method of approach and its emphasis on the possible effect of physical surroundings.

IV. ANTHROPOLOGY. In the early decades of the twentieth century anthropology passed through its novitiate and attained a considerable maturity. At the beginning of the century the German folk psychologists, the French prehistorians and sociologists, the American field investigators attached to museums and government departments, the British school whose halcyon grace of writing has made it classical, were quarrying rich veins of material and erecting theoretical structures which had to be critically overhauled. The scattered ethnographic literature, much of it as haphazard in method as the group of travelers' tales whose tradition reaches back to Herodotus, gave way to arduous field studies whose objectives and methods were mapped out at the very start. The divergent tendencies and pioneer tentatives of the formative years began to be integrated into a more unified sweep of research and interpretation which made anthropology the study par excellence of culture.

No study suffers so decisive a development in the course of a few decades unless the explanation is deeply rooted in the complex of relevant influences that constitutes its setting. Methodologically the study was an outgrowth of the desire of social scientists in the latter nineteenth century for some sort of comparative or historical method which would afford relief from their self-contained systems. Scholars impatient at being restricted to the study of occidental communities as revealed in written records sought replenishment by breaking into alien and uncharted reaches of intellectual experience. Early interests in prehistory linked anthropologists with archaeology, and the physical anthropologists were absorbed with biology and statistics. But the principal impetus came when occidentals were brought into contact with the primitive cultures of Africa and Asia as a result of imperialist expansion and missionary zeal. The arts of life "in darkest Africa" seemed to offer fresh and luminous comparisons with our own culture. On such subjects as religion, sex and race, which received emphasis in the writings of Tylor, Frazer, Robertson Smith and the other early writers, hope ran high that anthropology would provide the final word. It was a not impossible surmise that if bedrock was to be found anywhere in the search for the essential in social behavior one might think to find it in the uncontaminated impulses of the "savage" and the "primitive." A "great society" bewildered by its own mechanisms and weighted down by its accretions was fertile soil for the cult of primitivism. Moreover to scholars seeking to study human society not piecemeal but as a totality the small primitive community offered the entire range of cultural activities in a compass small enough to be envisaged by a single investigator; and it had the additional merit of being so alien to him that he could hope to approach it with the detachment which stamps the exact science. Field studies undertaken in such a spirit accumulated so rapidly as to be increasingly unmanageable by the conceptual apparatus of an earlier order.

In this context anthropology broadened, lost some of its crotchets, became subtilized, reached for maturity. It did not, however, in the process of becoming a cultural study, abandon its earlier interest in archaeology and physical anthropology, but rather attempted to fit them to the purposes of the newer interests. Archaeology, always of service in uncovering skeletal remains and artifacts and thus piecing out the broad outlines of man's history, received added meaning as an instrument in plotting the geographical distribution and time sequence of culture traits which the diffusionist controversy made important. Kidder and Nelson in the southwestern United States, Uhle in Peru, Joyce and Spinden in Mexico and Central America, archaeologists in Egypt and Mesopotamia, with the aid of elaborate and scientific equipment and considerable financial support, utilizing the developments in the art of photography and even in aeronautics, applied themselves with substantial success to the task of discovery and historical reconstruction.

Physical anthropology, which concerned itself chiefly with the development and distribution of racial types, achieved a more stable if greatly moderated position in the new alignment of anthropological interests. Its early dominance in the science was due in no small degree to the fact that its data lent themselves most readily to metrical and statistical study and presented thereby an appearance of objectivity. The investigation of the racial history of man in its sequence from the anthropoid apes through the Heidelberg and Neanderthal specimens to the contemporary distribution of racial types required for adequate study a rigorous technique

of exact measurement; by 1914, as a glance through Rudolf Martin's *Lehrbuch der Anthropologie* will show, this technique had attained a high degree of complexity. At times it tended to lose sight of its instrumental character; at times it was deflected from its primary intention into arid excursions and unscientific uses. But in general the later work in this field shed increasing light on the origin of contemporary racial types, the determination of their ancient habitats and the course of their migrations, the intensification of their hereditary traits in isolation and their modification under new conditions of physical and social environment.

The postulates of such a study being those mainly deriving from Darwinism—evolution through heredity, environment, selection and mutation—its fortunes varied with the refinement of these postulates and the fluctuations in their scholarly acceptance. The emphasis on the purely biological influences, deriving from Galton and Pearson, had to be qualified; scholars came to recognize that "man in the very fact of culture transcends his biological equipment" and became aware of the difficulty of separating the somatic from the social. There was throughout an extension of the base on which the study rests. A discipline which began with the primary intention of ascertaining the antiquity of man and tracing his natural history broadened into a study of the biological factors underlying human phenomena.

Outside the field of scholarship a set of events occurred to heighten the tension of the surrounding emotional atmosphere within which scholarship is compelled to work. The growing consciousness of nationality before the war, the hatreds arising from the war, the problems raised by immigration and by diverse racial groups contained within political boundaries, released a poisonous cloud of invidious racial claims, accusations and refutations which found expression in a pseudo-anthropological literature as well as in popular acceptance. The controversy precipitated the demand for a trial-balance of the conclusions of anthropological science. The crucial question was of course the correlation of physical race characteristics with different degrees of cultural achievement. The answer of the earlier race theorists would have contained much more certitude than did the prevailing critical attitude of this period. Although some students did not abandon the hope of finding physical criteria for races, there was an increasing volume of scholarly opinion which held that the concept of race is elusive, that any so-called race may contain many subdivisions and a wide range of variation, that it is difficult to define the physical criteria of a race, and finally that differences in the civilization of two racial groups can be explained historically without introducing any assumptions of biological superiority.

Closely related to this episode, in its bearing on the existence of a "talented race" on whom mankind is presumed to draw heavily for cultural advance, was the controversy over the diffusion as against the independent origin of cultural traits. Drawing into its orbit every important school of thought this became the moot question of modern anthropology; its insistent claims for attention gave this period a highly methodological color and tended to divert scholarly effort from more fertile channels.

The chief impulse to the controversy came from the reaction of modern critical anthropologists against the classical school of Morgan, Tylor and Frazer, whose concern had been to trace the history of culture in an evolutionary unilinear progression, as if by some preconstructed escalator mankind had mounted to its present level of Christianity, monogamy and occidental science. Deeply under the influence of Darwin and Spencer they mapped out a succession of stages through which each culture was likely to pass in its institutional development. Modern critics of this theory, taking as a typical example the evolution of marriage, pointed out the fallacy of premising a sequence of promiscuity, group marriage, polygyny and monogamy. But the chief controversy raged over a corollary of evolutionism. If, as Tylor held, institutions develop "in a series substantially uniform over the globe," this would be possible only on the assumption of the psychic unity of mankind. And this in turn leads to the position that cultural advances need never be borrowed by one community from another, but are evolved independently.

In the full swing of the reaction against this position German and English theorists attempted to explain the building of cultures by the concept of diffusion from one or several centers. Graebner, followed by Schmidt and Koppers, set up a scheme of three primary *Kulturkreise* corresponding to divergent types of economic organization. G. Elliot Smith and W. J. Perry went even further and contended for a monistic pan-Egyptian origin of culture. Both of these diffusionist schools denied the

possibility of independent invention in explaining cultural parallelisms. The simplicity of the antithesis and the sensational character of the pan-Egyptian hypothesis undoubtedly counted for much in the attractiveness of the dispute, but the controversy itself is an earnest of the genuine intent in modern anthropology to penetrate to the origin of culture and the nature of the cultural process.

The prevailing tone of anthropological theory after the war was critical. The early formative period had produced hypotheses which suffered considerably from the exuberance attendant on the launching of a new science, but whose vitality was evidenced to some degree by the later concern to disprove and qualify them. One has only to mention such concepts as animism, mana, tabu, totem, folkway, matriarchate, exogamy, domestication, pre-logical mentality, and each of the terms, in addition to whatever specific meaning it has for us, carries along a penumbra of polemic discussion and intellectual possibilities that betokens the creative idea. With so rich a start the next stage was inevitably one of critical concentration. Tylor's concept of animism, Durkheim's theories of primitive religion and the role of the group, the whole conception of the kinship scheme, the force of tabu, the rigidity and compulsion of custom, the nature of primitive mentality and the stages of primitive economic life—all of these concepts were unsparingly subjected to reconsideration. Marett, Malinowski, Radcliffe-Brown, Thurnwald, Vierkandt, Boas, Lowie, Kroeber, Goldenweiser, Sapir, Radin, Benedict and Wissler, while varying widely in the character of their emphases and the nature of their conclusions, were all animated by an essentially similar critical intent.

This theoretical sobriety was nourished largely on the exacting influences of the new mass of descriptive literature. There had been in the earlier period an ample number of missionary reports, of which the seventy-three volumes of the *Jesuit Relations* in the field of the American Indian will serve as an instance, and chance descriptions by travelers. These were followed by monographs from scholars who came to their task with more zeal and literary flourish than purposive equipment. It was largely researches such as these that formed the basis of works of synthesis like Frazer's *Golden Bough*, and the validity of the resultant theory derived rather from the cumulative impressiveness of a monumental mass of material than from the authenticity of the individual sources. The closer grappling with realities that was the dominant note of the critical period finally sent the theoretical scholars themselves into the field. There followed an output of excellent monographs in the best of which industry and scientific equipment were united with a vivid insight into the community studied. Seligman's *The Melanesians of British New Guinea* and *The Veddas*, Rivers' *The History of Melanesian Society*, Westermarck's *Marriage Ceremonies in Morocco*, Spencer and Gillin's work on the Central Australians, all appeared between 1910 and the outbreak of the war. The Jesup Expedition to Alaska organized by Franz Boas and the Cambridge Expedition to Australia organized by A. C. Haddon were outstanding large scale cooperative attempts at field work. The work of Boas' students among the American Indians and in other regions and Malinowski's series of monographs on the Trobriand Islands (especially his *Argonauts of the Western Pacific*, 1922, and *The Sexual Life of Savages in Northwestern Melanesia*, 1929) show that the new and more regimented methods for conducting a field trip had not destroyed the ethnographer's gift of imaginative sympathy.

These local studies and the accumulated geographical-historical material which had to be put in order after the diffusionist controversy and plotted for the distribution of anatomical and culture traits tended to make the anthropologist map-conscious. He charted the world for purposes of intensive study, so that to be a specialist meant to know everything about a part of the map. The rapid disappearance of primitive races through conquest, disease, labor exploitation and cultural contacts made the immediate accomplishment of this task imperative.

A belief prevalent among anthropologists regarded the field trip as the mainstay of anthropological method and credited the body of literature deriving from it as being the indispensable basis of all induction and inductive verification. To establish a basis for comparison of data a roughly uniform conceptual technique was worked out which divided the cultural life of the community into certain principal activities and studies each in relation to the others. The language, the social organization, the religion, the knowledge, the technology, the economic life, the law and government, the sexual and aesthetic life of the community, as well as the anatomical and physiological aspects of the

natives, were subjected to a curious and detached scrutiny by a kindly, bespectacled white man, heavily swathed in mosquito netting and dosed with quinine. Elaborate and voluminous notebooks and photographic and moving picture cameras helped to make permanent and accurate the impressions of the moment. The field study in its present highly developed form is confederate with the critical method, since its principal use is to subject the hypothetical flights of expansive theorists to verification and lay the basis for a new theoretical synthesis.

When such a synthesis comes it will in all probability attempt to encompass the origin and history of culture. The principal positive theoretical position of the early decades of the twentieth century was the glorification of culture. The word loomed more important than any other in the literature and in the consciousness of anthropologists. Culture traits, culture complexes, culture types, culture centers, culture areas, culture circles, culture patterns, culture migrations, cultural convergence, cultural diffusion—these segments and variants point to an attempt to grapple rigorously with an elusive and fluid concept and suggest incidentally the richness of such a concept. Concern was rife over the birth of culture, its growth and wanderings and contacts, its matings and fertilizations, its maturity and decay. In direct proportion to their impatience with the classical tradition anthropologists became the anatomists and biographers of culture. Taking its point of departure from the diffusionist controversy, nourished by the schools of geographical distribution and historical reconstruction but not limited to them, the idea became pervasive that the proper study of the cultural anthropologist is culture. As a broadening influence and as an integrative force it did more than any other single fact to give anthropology its recent character. Whatever the differences in specific doctrines and techniques between the science in this and in the previous period, the principal change was this period's complete absorption with culture.

This common concern with culture has made the question of the division of anthropologists into schools of no supreme importance. The principal line of cleavage into schools has already been discussed—that centering around the issue of diffusionism. But the more formal and recognized division into schools runs rather in terms of the method and interest which the particular anthropologist used in approaching his data. Thus a psychological school can be traced, dating from Wundt and the other German folk psychologists. This approach had fortunes varying of course with the stability of the developments within the field of psychology, but the latter soon demonstrated how indispensable it is in the study of the contact of cultures and the transmission of culture traits. Vierkandt, Thurnwald, Van Gennep, Goldenweiser, Sapir and Lowie were deeply influenced by such an approach and made some strides toward a psychological approach in the wide sense of seeking an insight into the spirit of other cultures. Earlier anthropology had made out the individual as completely submerged by the group. Schmidt, Marett, Malinowski, Boas and Radin used the psychology of individual differences effectively in restoring the balance between the compulsion of the group on the individual and the influence of the talented individual on the process of culture. A crude individual psychology was used by Lévy-Bruhl in describing the primitive mind as pre-logical (*Les fonctions mentales dans les sociétés inférieures*, 1910). Even the psychoanalytic approach was used, first by Rivers in his work on dreams and then by Seligman in his recording of primitive dreams. Malinowski's work on the psychological basis of sexual beliefs and kinship systems afforded considerable insight into the rationale of social organization. The sociological approach dates from Robertson Smith, Durkheim and such of the latter's followers as Mauss, Hubert and the *Année sociologique* group. In British anthropology Malinowski and Radcliffe-Brown inaugurated a functional school which, whatever its future stability, will be of service in calling attention to the necessity of studying an institution in relation to the essential role it plays in the community. Such an approach, if it could be made persuasive for colonial administrators, imperial statesmen and missionaries, might retard the ruthless process of the destruction of those native institutions which, in an occidental context, seem purposeless. The school which had the weightiest influence during the later years of this period was the historical school —mainly American—under the leadership of Boas. It was in the forefront of the new critical attitude in anthropological theory with its emphasis on meticulous monographic study, unyielding critical austerity and an instrumentalist use of historical and geographical material.

Such a classification of schools is of little

value except to indicate that in the contacts with the other social sciences that have attended its development anthropology has been affected by their viewpoints. Through one approach or another the positive theoretical work of cultural anthropology went on—the study of the nature of primitive institutional life. Rivers (*Social Organization*, 1924), Lowie (*Primitive Society*, 1920), Malinowski, Thurnwald and Radcliffe-Brown in the intricate yet central problem of social organization, with sanity and insight dealt with kinship systems and group units; Lowie (*The Origin of the State*, 1927) penetratingly demonstrated the existence of territorial political organization even in those primitive units which seem most amorphous and anarchic; Malinowski (*Crime and Custom in Savage Society*, 1926) showed that among the primitives as among us law and custom are disobeyed as well as obeyed, and that the intricate pattern of individual impulses and group compulsions can in no society be reduced to a formula; Radin (*Primitive Man as Philosopher*, 1927) and Boas (*Primitive Art*, 1927) portrayed in the aesthetic realm too a process of the creative imagination that differs in no essentials from our own; the trend in religion (Lowie, Marett, Benedict) was to attenuate our traditional condescension toward the superstitions and irrationalities of the savage; Sapir (*Language*, 1921) traced the historical and psychological factors underlying language forms; Malinowski ("The Primitive Economics of the Trobriand Islands" in *Economic Journal*, 1921, vol. xxxi, 1–16) and Firth (*Primitive Economics of the New Zealand Maori*, 1928) showed that the economic activities of a primitive community, though they appear in the light of our own standards to be whimsically motivated and erratically directed, are dynamically linked with the social organization of the community and the psychological heritage of the natives.

More than in any positive dissemination of anthropological concepts, methods and literature, the outstanding significance of anthropology for the social studies in the period under review lies in what one student has called "the anthropological attitude." To be sure, the creation by anthropology of the concept of culture and its decisive influence on the other social studies, notably history and sociology, is of first rate importance. So also is the light that anthropology has cast on the problems of social organization. But more enduring than a theory is a way of thinking. And the anthropologist's way of thinking has reached beyond his formal contacts with the other social studies and, like psychoanalysis and relativity, has entered into the main stream of twentieth century thought.

What this way of thinking is needs a roundabout explanation and even then can only be adumbrated. Our own modern institutions are encumbered and entangled with their historic accretions and so self-evident to us that the clear outlines of their nature and purport are blurred. So we seek the primitive instance and think to find there the answer to our queries concerning the nature of institutional life. We expect with a certain naïveté to find there the essential disentangled from the accidental, whether it be the nature of law, the origin of the state, the psychology of sex, the essence of religion, the destiny of the individual life. Our unconscious premise is that the primitive community is a sort of laboratory or a vacuum test tube in which we can reduce all extraneous elements to a minimum and keep our eye on the main intent of the chemical reaction.

We may of course be defeated in our expectation. We may find that primitive life, though in a different way, is as complex as ours, and that what we thought to be the essence of an institution is only the result of the historical accidents of the primitive community itself. Imbedded in its own context the institution may still elude us. Thus after a half century of the anthropological approach to religion inaugurated by Robertson Smith we are possibly as far as we were from an understanding of the nature of religious experience. But such an approach always heightens the metabolism of our minds and breaks down our parochialisms.

In this dislocatory effect lies the chief intellectual value of the anthropological attitude. It views culture with a detachment that comes, not as the scientist seeks to attain it, through a heroic asceticism and effort at concentration, but with a certain slyness and indirection. The strangeness of the contrast between our way of life and the savages' surprises the student into a state of detachment. We always tend to view an eccentricity as from the outside. And in the reflex we are surprised into a similarly detached view of our own culture, seeing it not as endowed with an unyielding and inherent place in the scheme of things, but as mutable and merely a variant. The principal application therefore of anthropology to modern life has so far come not through the attack direct, but by way of a devious and unexpected illumination.

V. SOCIOLOGY AND SOCIAL WORK. The grandiose projects for a unified science of society launched by the system builders of the late nineteenth and the early twentieth centuries had already begun to lose credit in the last decade before the war. On the one hand invading formulations from other disciplines occupied successfully much of the ground of sociological theory: anthropological formulations (Vierkandt, Durkheim); philosophical (Max Scheler, Jerusalem); economic (Weber, Sombart); historical (Troeltsch, Salomon); geographic (Le Play, Patrick Geddes). On the other hand the professed sociologists themselves turned away from central problems to special studies in social policy such as criminology, problems of education, population, race. An important colony of the older sociology, "charities" and the allied problems of poverty, had declared its independence and set up a system and techniques of its own under the rubric of social work. The effect of the intellectual disorganization attending the war and reconstruction was to accelerate these tendencies toward dispersal of sociological interests while at the same time giving a powerful impetus to sociological study as a whole, especially in Germany and in America.

The energies of the sociologists in America were mainly devoted to practical problems and the closely related problems of method. Disillusionment with the sweeping generalizations whose susceptibility to propagandist uses had been made all too manifest during the war emphasized the importance of objective, quantitative methods. While it was in the United States that the quantitative method was most ardently promoted, it was also applied extensively in Europe, notably by Leopold von Wiese, who would restrict sociology to the listing and characterization of all discoverable human interrelationships. American sociologists, particularly the Chicago school, developed an indigenous variant of the quantitative method, an elaborate technique of map making, in which various types of group and area configuration and change could be charted. The method is cumbersome and expensive but makes possible a fruitful cooperation of geographers, anthropologists and sociologists. Before the war the favorite method of practical sociological research was the social survey, which usually centered attention on such matters as housing, poverty or prostitution. The social survey was still employed after the war by the Geddes school in England but was being replaced in the United States by more intensive studies of functional groups or areas and by the case method. The latter was given sociological standing by Thomas and Znaniecki's *The Polish Peasant in Europe and America* (1918–20) and it came to be widely used by sociologists seeking to emphasize the importance of the individual in the complex of social forces. Later certain anthropological sociologists who emphasized the uniqueness of every concrete situation attempted to apply the case method to the study of groups or institutions.

Such methodological changes, significant as they may be for the direction of sociological development, excited remarkably little interest in the nature of sociology as a science. A few scattering discussions of sociology as a humanistic or a natural science (Znaniecki); a faint repetition of the arguments for the study of the socialized individual (Floyd Allport) as against the study of collective behavior (R. Park); and scattering attempts at comprehensive classifications of social processes, made up the chief part of American post-war theoretical sociology. It was only the multiplication of textbooks that gave American sociology what appearance it had of definiteness of content.

In striking contrast was the richness of the discussion of purpose and method among German sociologists. It was animated partly by the desire to justify a new discipline and solidify its academic position, for sociology there had never attained important academic standing. A group of remarkable theoretical tendencies found expression in the post-war period. In 1921 a sociological journal was launched, the *Kölner Vierteljahrshefte für Sozialwissenschaften*, edited by Christian Eckert, Hugo Lindemann, Max Scheler and Leopold von Wiese. A number of research institutes were established, of which the best known is the one founded at the University of Cologne by von Wiese.

But the German interest in theory had a more positive quality as well; it was part of a general philosophical and methodological movement or group of movements which infused themselves into all German social scientific work. The central idea of this philosophy was the distinction between natural and cultural science, the first of which uses the method of description and analysis, the latter that of interpretation (*Erklärung*). The distinction was of course not new. In its modern form it was most clearly expressed in the work of Wilhelm Dilthey, E. Husserl and Max Scheler. Dilthey (1833–1911) stressed the

inadequacy of description and analysis in the social sciences. The method which he proposed involved the assumption that there is in a single experience a complexity of structure which forms the basis for an analysis of the essential elements of that experience and leads to the construction of ideal types of situation or character which serve as terms of reference for all future study. The influence of this conception was seen before the war in the psychopathology of Karl Jaspers; it was one factor in Max Weber's use of the type concept; and it found definite psychological exemplification in Edward Spranger's *Lebensformen* (1927) and *Psychologie des Jugendalters* (1926). The implications of the method were more profoundly developed by the logician and philosopher, E. Husserl, founder of what came to be known as the phenomenological school of thought. Husserl's work was essentially epistemology, but there was hardly a social scientist in Germany who did not feel the influence of his theories. The outstanding later representative of the school, Max Scheler, was philosopher, psychologist and sociologist. It was even more largely through Scheler's work that Max Weber was drawn within the influence of the school; the anthropology of Vierkandt, the history of Troeltsch, the Gestalt school of psychology all found inspiration in his methods. The more specific bearing of the method on sociology was summed up in Scheler's introduction to the *Versuche zu einer Soziologie des Wissens* (1924), a symposium of which he was editor. The book is composed of discussions of general and special forms and limitations of the cognitive structure. Scheler himself attempted to outline a sociology of knowledge. Sociology, according to the phenomenological school, should be the science of social relationships, but not merely of existential relationships. It is essentially the science of ideal types and categories of types. Scheler applied the method in an analysis of sympathy, or the phenomenology of love and hatred (*Wesen und Formen der Sympathie*, 1913, 3rd ed., revised, 1926).

Scheler's influence is an indication of the strength of the German reaction against positivism. Two other specifically sociological influences have to be taken into account in a survey of the German interest in theory: the work of Simmel in the delimitation of social categories and that of Tönnies in emphasizing the role of habit in social life and in distinguishing between society and community. Alfred Vierkandt and Leopold von Wiese made notable attempts to link the ideas of these two scholars into one system. Vierkandt made use of the community-society distinction but was chiefly concerned with the universal motives that bring about social relationships. He regarded McDougall's theory of instincts as the most important contribution to the understanding of human nature in recent times. Von Wiese, the best known of the German sociologists of this period, sets out to classify the whole field of human relationships. The influence of the phenomenological school is seen in his insistence that neither *Beziehung* nor *Gebilde* can be defined directly but must be understood and defined indirectly. Von Wiese, however, differed from most of the followers of Simmel in his belief in the behavioristic and quantitative approach. He attempted to state his analytical hypothesis in quasi-mathematical terms; he used statistics and expressed an interest in behaviorism.

In Italy as in Germany sociology had no academic standing and its students came from other fields. Pareto in his economic studies developed an interest in a mathematical statement of social laws and his *Traité de sociologie générale* (1917–19) was an attempt to apply the method to sociology. Pareto insisted on the relativity of all laws. He set out with the assumption that the bulk of social actions are non-logical. Analysis reveals that the elements of social action are "residues" (habits of action), "derivations" (rationalizations) and utilities (maxima values, apparently a normative concept). There is no one explanation of social evolution; rather social equilibrium involves a mutual determining of all social forces. All social evolution, he concluded, is cyclical. His theory of the circulation of the *élite*, which explains social conflict as a struggle between the present aristocracy and the coming aristocracy, was credited with responsibility for the Fascist scheme of political and social ideas and action.

The dominant interest of American sociologists was psychological, and all their energies of classification went into attempts to work out acceptable groups of concepts which would explain the psychological basis of society and of the individual's actions in society. To this extent post-war sociology in the United States represented simply a refinement and elaboration of old aims.

The earliest concept, and the one which had the most enduring importance for sociology, was that of social forces. Small credited Ratzenhofer with originating it but Small made it over

and Ward popularized it. And the whole discussion of social forces was essentially an American preoccupation. In itself the concept of social forces is colorless but it was elaborated in a number of distinct and vivid forms. The most active controversy of the period centered in the doctrine of instincts. The fact that most sociologists, notably Giddings and Graham Wallas, used the doctrine of instinct so unquestioningly for a number of years after its introduction by McDougall in his *Social Psychology* (1908) indicates that it was regarded less as a startling theoretical innovation than as an effective formulation of accepted concepts. That McDougall should have reached this particular interpretation of the nature of social forces was a result of the increasing interest in biological explanations, and the reaction against the theory was in large part a phase of the environmentalist reaction against all extreme forms of biological determinism. It was in England that the first sign of opposition to the instinct doctrine appeared, in Morris Ginsberg's *The Psychology of Society* (1921). As the use of the hypothesis had been distinctly American it was natural that the attack upon the instinct doctrine should have been carried to a conclusion by American sociologists and social psychologists. Two adequate summaries of the controversy, C. C. Josey's *The Social Philosophy of Instincts* (1922) and L. L. Bernard's *Instinct, A Study in Social Psychology* (1926), both by opponents of the theory, brought to a conclusion the period of preoccupation with the instinct hypothesis and sociologists turned to other formulations of the nature of social forces.

Even before McDougall's enunciation of the instinct hypothesis, another group of concepts, that of social attitudes, wishes and habits, had already been used by a few sociologists and ultimately overshadowed the concept of instinct. Here the influence of William James with his emphasis on habits was of importance. As early as 1904, W. I. Thomas, at the St. Louis Congress of Arts and Sciences, stated that the important concepts of social psychology are those of attention, habit, sympathy, suggestion, attitudes, emotions; and in his *Source Book of Social Origins* (1909) he elaborated this idea. Cooley's discussion of the primary group and of the importance of communication for social development strengthened this general trend, while the influence of Freud's concept of the "wish" is easily discernible in the work of Thomas and Znaniecki in *The Polish Peasant*. The book became so much of a classic that no American sociologist could afford to ignore its concepts, whether or not he used them. In an attempt to explain the process of social interaction represented by the Polish immigrants the authors developed the view that there are four fundamental wishes at the basis of all individual and social experience: the desire for new experience, for recognition, for mastery (later changed to response) and for security. In his own later works Thomas used the concept of attitude rather than wish. Park and Burgess also elaborated the attitude concept, and a large part of the activity of the whole Chicago school of sociologists was devoted to the discussion and classification of wishes and attitudes. A slightly different emphasis was given by Dewey to what is essentially the same concept. His various illustrations of the importance of mental activity rather than of mental structure played a part in leading many sociologists to a realization of the significance of attitudes rather than of hereditary impulses to action. In *Human Nature and Conduct* (1922) he attempted to elaborate a social psychology of habit and attitude. Analogous developments appeared in other countries, notably in the work of Hobhouse and the later work of Graham Wallas and von Wiese.

Another concept which had an increasing effect on the thought of all psychologists and sociologists was that of personality. James' work was here too of basic importance in the introduction of this concept, and Cooley was particularly influential in its dissemination. Among scholars of a wide variety of interests the idea of personality became the focus of study. In Germany there was the "critical personalism" of the philosopher-psychologist William Stern, who did a good deal of work in elaboration of his definition of the person as "unitas multiplex." The whole group of German phenomenalists was also interested in the concept, as was the psychoanalytic group of sociologists.

As the concept of personality developed it came dangerously near to the old group mind controversy, which in fact was not entirely closed. Floyd Allport contended that social psychology should discard the attempt to discuss groups or crowds and should use as a principle of explanation the concept of the individual in a social situation. He stood almost alone, however, not only in the United States but in most other countries, in his extreme opposition to the study of group behavior. Most other sociologists attempted to deal with the psychic aspects

of social groups, i.e. with leadership, tradition, fashion, imitation. This was perhaps a midway ground between the believers in a group mind theory and its extreme opponents. The work of Mary Follett exhibited a new realism in the handling of social forms, combined with a vivid appreciation of the importance of the group in determining an individual's thoughts. Her work was the best example of the theoretical foundation of the interest in functional groups.

In Germany there was still a certain interest in collective psychology. Theodor Geiger in *Die Masse und ihre Aktion* (1926) reviewed critically all the literature dealing with crowds and with collective action, especially Le Bon's theories, and Friedrich von Wieser in *Das Gesetz der Macht* (1926) analyzed leadership and collective action. It was in France, however, where the influence of Durkheim was still important, that the study of social psychology from the point of view of groups was most fully developed. While a number even of the followers of Durkheim questioned his emphasis on social factors, the majority of French sociologists were engaged in elaborating and further developing his idea of "collective representation." Publication of *L'Année sociologique* was renewed in February, 1925, under the direction of Marcel Mauss, a son-in-law as well as disciple and successor of Durkheim. The chief work of Mauss was in the field of primitive social organization. The clearest outcome of Durkheim's concept of "collective representation" was Maurice Halbwachs' *Les cadres sociaux de la mémoire* (1925) in which the main thesis was the contention that there exists a social framework of memory, a kind of collective memory, and that the individual consciousness is capable of recalling the past to the extent that it is placed in that framework and participates in that memory. René Hubert was influenced by a somewhat similar conception and Lucien Lévy-Bruhl developed in an extreme form the theory of the existence of a collective mentality.

A variety of specific interests emerged in sociological literature, such as the economic interest of Simiand and later of Bourgin and the anthropological interest of Lévy-Bruhl. In France the interest in religion was also important. Hubert and Mauss, for instance, made elaborate studies of the nature of sacrifice and Mauss developed a theory of magic. The work of Troeltsch in Germany on the social aspects of Christian dogmas exercised a widespread influence. Interesting sociological studies of art appeared, particularly in France. The sociology of war was much less extensively developed after the war than it was before. On the other hand there were a number of studies of the sociology of revolution. Feminism received attention as a recent sociological force and the family continued to be an important subject of interest. After the appearance of Westermarck's *History of Human Marriage* (1891) emphasis shifted from a study of the instincts underlying the family to a consideration of the family as a social institution. At this point sociology very definitely came into contact with social work and psychiatry.

In the United States the work of Dewey, the spread of psychoanalytic doctrines, the mental testing movement as applied to adults and an interest in curricula for Americanization may be held jointly responsible for a series of books on educational sociology by Kirkpatrick, W. R. Smith, Robbins, Chancellor, Clow and Snedden. The American Sociological Society established a special section on educational sociology, while the faculty of New York University began in 1927 the publication of a *Journal of Educational Sociology*.

A more notable manifestation of the tendency of sociology to split into more or less distinct subdivisions was the appearance of the coordinate disciplines of rural sociology and urban sociology. Rural sociology was the first to develop separately. The movement derived force from agrarianism, particularly in European countries. In Germany von Wiese made important surveys of rural communities. The theoretical bases of rural sociology were the interest in regionalism and the interest in the community. Urban sociology was even more closely linked with regionalism. It was saturated with awareness of the predominantly urban character of western civilization. In the work of Patrick Geddes and Victor Branford urban sociology found definite form. Le Play himself was less interested in the city or the megalopolis than in geographic aspects of social organization. The study of non-territorial areas took its point of departure from Durkheim's study of totemic groups in Australia. The human ecologists combined an interest in territorial and in non-territorial areas.

This interest in regionalism was one of the main phases of the sociological interest in the community. Probably unconsciously the American sociologist took over Tönnies' distinction between community and society and concen-

trated attention on the basis of community life. A number of sociologists were chiefly interested in the economic phase of community life and organization; the rural sociologists were concerned with all kinds of helpful community organizations. This interest was definitely linked to the community organization movement of the social workers and to the whole city planning movement.

Among the special fields assiduously cultivated by sociology, immigration and other problems of population were the most important. The American restrictive immigration laws aroused an interest in the problem not only among American sociologists but among the French, Italian and German as well. For social science the discussions of immigration were important chiefly for the impetus they gave to a revival of interest in the process of assimilation and in the quantitative aspects of population.

The interest in assimilation was predominantly American and closely connected with the Americanization movement. The race hatreds precipitated by the war brought the subject more into the foreground of thought, although scientists were for the most part interested in the racial controversies through the approach to be had from the biology of heredity. This interest in heredity was closely linked with the eugenics movement, but from the point of view of the social sciences eugenics declined in importance after the war. Its literature was extensive but it was in the main a literature of popularization. The birth control movement, however, made important advances in both scientific and popular interest after the war. In 1916 the British National Council of Public Morals set up the National Birth Rate Commission, which has since then made an important series of investigations and reports. Considerable impetus was given to the movement by Marie Stopes in *Contraception, Its Theory, History and Practice* (1923).

This increasing popular interest in eugenics and birth control was added to the question of immigration as a further factor in the recrudescence of interest in the quantitative aspect of the population problem. For a number of years before the war whatever interest there was in population centered around problems of quality, in other words the eugenic interest. It is true that in both France and Germany there was a considerable amount of militaristic and nationalistic large family propaganda; and in the United States Roosevelt made capital of Ross's phrase "race suicide." The populationist views of statesmen and moralists, however, excited little interest in scientific circles, nor was there much scientific interest in the problem of excessive population. But the widespread destruction of natural resources in the war led to new attempts to survey the quantity of resources available for an increasing population. The effect of the discussion was a revival of Malthusian fears of a future clouded by overpopulation and poverty with a consequent restlessness menacing to world peace.

A wealth of books dealing with the problem appeared during the decade, designed primarily for a popular audience. Sir George H. Knibbs, statistician for the Commonwealth of Australia, in his *Mathematical Theory of Population* (1917) made some striking calculations on the result of continuation of present rates of population increase. Keynes' *Economic Consequences of the Peace* (1920) stressed population pressure as one of the three or four greatest factors in world instability. The most striking single contribution to the literature was the formula for population growth of Pearl and Reed. In *The Balance of Births and Deaths* (vol. i, 1928) Robert Kuczynski made an important statistical study of the falling birth rate and his work indicated that western Europe is on the way to depopulation. The concept of the optimum, which emphasized social factors and the relativity of standards of living and possible population increase, was one of the most fruitful techniques introduced into discussions of the population problem. Carr-Saunders made use of the idea and A. B. Wolfe was one of its most enthusiastic proponents in America.

Criminology was one of the early collateral interests of the sociologist, but so long as it was dominated by the biological conceptions of Lombroso and his school the sociologists' interest was a derivative one, entering by way of penology. In 1913, however, Charles Goring wrote *The English Convict*, a work based on extensive statistical studies. This book operated to dispel faith in the thesis of a hereditary criminal type and prepared the way for a new interest in the mentality of the criminal. After the war criminology took on new life and new forms and was drawn closer to the other social studies. The rapprochement was achieved largely through psychiatry and abnormal psychology. The wide dissemination of psychoanalytic methods after the war exerted a pro-

found influence upon the tendency to explain the criminal in terms of psychiatry.

As a result of this changed emphasis criminology became more and more concerned with the understanding of the individual offender. Case study methods were borrowed from social work and psychiatry and an immense volume of psychiatric-criminological material accumulated. The pioneer work was that of William Healy in his *The Individual Delinquent* (1915). The study of the individual delinquent was closely linked to social work and to child welfare activities. It led to numerous studies of the juvenile courts, of which the best known was the work by Jane Addams and others, *The Child, the Clinic and the Court* (1925). The movement drew much material also from studies of family disorganization, as evidenced in Joanna Colcord's *Broken Homes* (1919) and Ernest R. Mowrer's *Family Disorganization* (1927).

While the prevailing tendencies in criminology were social and psychological, the biological tendency received new impetus from the study of mental tests and from endocrinology. The hereditary defective or the victim of glandular unbalance are types hardly less definite than the atavistic types of Lombroso. An excellent American example of this tendency was *The New Criminology* (1928) by Max G. Schlapp and E. H. Smith. The tendency was much stronger in Europe, however, than in the United States. In Spain *La criminalidad y las secreciones internas* (1927) by Mariano Ruiz-Funes was a formidable work which set forth all the biological explanations of criminal behavior, with chief emphasis on endocrine theories. Criminology after the war in Germany was largely criminobiology. The Austrian, Adolf Lenz, in his *Grundriss der Kriminalbiologie* (1927), attempted to create a whole biology of personality in terms which are reminiscent of Lombroso.

One of the most notable developments in the war and post-war periods was the progress toward professional standing of the group of workers attached to the administration of practical social services. "Applied sociology" had covered in a fashion the broad field formerly known as charities and corrections. It had operated on the principles of scientific inquiry uncovering, so far as it could, general rules which might arrive at practical application through legislation or through the administration of public or private charitable services. The charity organization societies of the nineteenth and early twentieth centuries represented a half-conscious reaction against the impersonal functioning of applied sociology and an impulse toward direct and continuous participation in the government and administration of social service. At the close of the pre-war period the professionalization of this form of activity was well under way and a systematic technique was developing. The traditional term "charities" gave way to "social work" which, however, covered a much wider field. The methods of social work penetrated into the fields of criminology, public health, education, labor administration, the administration of social insurance.

Social work addresses itself to the concrete case. It is no part of its province to map out the road for social legislation, to determine the direction of social progress. These general issues are committed to political science, sociology, economics. Social work seeks to translate the general social intent into rational application to the concrete case. Accordingly the central point in the social workers' system is occupied by the technique of social case work. It is a technique which must naturally exhibit great flexibility, since it serves such widely divergent interests as those of the broken family, the convalescent, the psychiatric patient. Such a technique had gradually evolved in the decade preceding the war. The publication in 1917 of Mary Richmond's *Social Diagnosis* supplied the social worker with a practical manual which remained the dominating work in the field, although a number of other excellent works appeared.

The immediate effect of the war on social work was vastly to increase the demand for trained social workers in connection with hospitals and convalescent camps, the relief of soldier's dependents and the administration of vast social programs such as Belgian relief during the war, and after the war Near East, Central European and Russian relief. There were, however, more subtle and profound forces affecting the position of the social worker in his relation both to social science and to public administration. The war had broken down the conception of an essentially laissez-faire state, standing aloof from the normal independent citizen and intervening only in the special instance by way of charities or correction. The stresses of the war years had broken down much of the social economic structure on which the fortunes of the normal independent citizen were based. It had become a primary obligation of the state to hold the tottering citizen on his feet—

not a charitable obligation, but one of sane public policy. The services of the social worker were required to determine where and in what form support should be extended. He ceased to be an exponent of the griefs of the needy, pleading for relief in semi-religious accents, and became instead the expert investigator or administrator attached to a rational public service. In European countries, where the destruction of traditional forms of thought had been most severe, this change in the relation of government to the handicapped was tacitly accepted, and social work, with all the technique of social case methods, was maintained by the state. In America the charitable tradition persisted and social work was maintained chiefly by private funds. Nevertheless, the collection of these funds was undertaken in many cities through community chests and was levied with almost the finality of taxation upon those who were able to pay.

While the advancement of social science is no avowed objective of social work, the immense volume of concrete data investigated by the social workers provided a sound basis for studies of purely scientific intent. The methods of social work were freely drawn upon not only by sociology and its dependent disciplines, but also by students of industrial and agrarian problems. The place of the social worker in the circle was one of steadily increasing importance.

VI. ECONOMICS. The key to the interpretation of economic thought during the war and the post-war decade is to be sought not in the prevailing intellectual mood but in the revolutionary changes in the economic situation and the inevitable if lagging readjustment of economic ideas. For earlier periods the interpretation of movements of economic thought in terms of economic institutions often appears somewhat strained. The world of scholarship is always in some measure autonomous, and when external conditions are virtually static, scholarship may yet exhibit remarkable advances, governed by forces evolving from within. For the period here under consideration the relation between institutional change and changes in the direction of thought is compelling, direct and obvious.

More than any other war in history the World War was predominantly economic in character. The application to military use of all the resources of modern science increased tremendously the voracity of the battle line. From month to month the requirements of armaments, munitions and supplies increased at an accelerating rate, until severe strains began to appear at innumerable points in the industrial system. Before the war was over every country engaged had come to a full realization of the dependence of its armies upon the functioning of its industry. The "industrial front" was no longer a mere metaphor. Battles were being won or lost in the factories hundreds or thousands of miles away from the sound of the guns.

In consequence government and private industry were forced to work out a new relation, not easily definable in terms of the traditional political and economic theory. The government no longer stood apart from industry, practising paternalism or laissez-faire according to its established habits. Government and industry joined in close cooperation to advance the common national interest. There were indeed disputes as to prices, profits, taxes; these were resolved, however, not in terms of the rights of the individual as against the state, but in terms of the efficient functioning of the whole organism.

American experience in the cooperation of industry and government is perhaps more illuminating than any other, since America entered the war with a full realization of the new developments. As soon as war was seen to be inevitable the representatives of every important industry flocked to Washington to volunteer their services as "dollar-a-year-men." For its machinery of industrial control the government had the choice of the ablest key men in industry, men possessed of an amount of vital information on the functioning of industry such as government had never before had at its command.

Government and industrialists working in the closest harmony set about organizing and applying to war uses every available resource—labor, materials, credits, power. Questions of the distribution of rewards were in abeyance: if wages were advanced it was solely with a view to increasing productive efficiency; prices were fixed at levels calculated to bring out the fullest supplies; credits were distributed on the basis of national uses rather than relative profitableness.

The first impulse upon the close of the war was fully to "demobilize" industry; to return to the private scramble for profits with the government keeping the ring. Gradually it came to be realized that the pre-war economic order could not be reestablished integrally. The problems of war debts, indemnities, markets, supplies of raw materials, employment, the distribution of credit, transcended the competence of the old

formulae. Government and business had to cooperate formally or informally in working out their solution.

Even in the United States, where the disintegrating effects of the war were least in evidence, the tendency of government to cooperate with industry appeared in the official interest in standardization and the elimination of waste; in the sympathetic attitude toward consolidations that would have been highly suspect in the era of "trust busting"; in the repeated attempts to apply the resources of the Federal Reserve system to promote sound business development and to discourage waste and immoderate speculation. Even in Russia, where the old economic order had apparently been entirely destroyed, it was necessary for the communistic government to devise a "new economic policy," with a view to securing the cooperation of private interests at home and concessionary interests from abroad. Between these two extremes Germany, Czechoslovakia, Italy, and in a less degree England and France exhibited unmistakable tendencies toward a new integration of government and private business.

In the new institutional situation a host of practical problems emerged, requiring the services of the economist as expert. During the war economists and statisticians in every country were drawn into the services of the government to assist in the elaboration of fiscal policies, the administration of credit, transportation and power, the control of raw materials and the production process, the adjustment of industrial relations. Even before the war the employment of the economist as expert in industry had become common in Germany and not infrequent in America. The experience of the war enhanced the general estimation of expert economic services and greatly widened the scope of their practical application. In consequence the outlook of economists became semi-professional, with an emphasis upon practical solutions of concrete problems rather than the large generalizations of pure scholarship.

Hardly less significant in determining the development of economic thought was the special character of the problems of economic policy which loomed largest in popular interest. Inflation, the burden of taxation resulting from the colossal increase in public debts, indemnities, debts owed by one nation to another—all familiar problems in every respect but magnitude and therefore with an extensive traditional literature to draw upon—were discussed with great acumen but as a rule without new insights of far reaching importance. Hardly any part of the voluminous literature on the economic consequences of the peace, Germany's capacity to pay, the possibility of the payment of inter-Allied debts, the incidence of taxation, the effects of inflation, took into serious consideration the change in the relation of government to industry or the emergent internationalism of the economic system. Although this literature was characterized by abundant information and sound sense, as an intellectual phenomenon it was reactionary, harking back to the epoch of John Stuart Mill and Cairnes.

The diversion of economic attention in the direction, on the one hand, of problems of practical economic administration and, on the other hand, of problems of public policy capable of a traditional solution left the science without the concentrated energy requisite for significant systematic formulations. No great treatise of economics appeared in this period. Criticism of the older theories was carried on persistently, but with no intense conviction as to the importance of the issues. Whereas the earlier criticism had derived most of its animus from serious concern over the justice or injustice of the economic system (Clark, Böhm-Bawerk, Hobson, Sombart, Veblen), the newer criticism was animated chiefly by concern over pure scientific canons and the felt need of bringing theoretical conclusions into line with the results of empirical inquiry. Thus the demand and supply curves constructed on rational principles by Marshall were confronted with altogether dissimilar curves that had been derived from actual market data by empirical methods; the concept of the "representative firm" was subjected to empirical tests and found wanting; the classifications of industries by the rate of return were proclaimed "empty economic boxes." Attempts were made to reforge the weapons provided by the older theory: moving equilibrium was proposed as an elaboration of and substitute for the concept of stable equilibrium, and the law of balanced returns was proposed as a substitute for that of increasing and diminishing returns. A great deal of work was done in various fields in an attempt to complicate and refine those theoretical categories which promised to be useful in dealing with descriptive and quantitative material. The results were hardly satisfactory. Eventually demands were made for a complete reformulation of theory so as to transform it into a true

organon for dealing with statistical generalizations.

The new trends in theory pointed in the direction of the institutional factors in economic life and to those types of schematization which assigned more importance to the effectiveness of these factors. In textbooks the historical relativity of the present order and the interplay of economic with other factors were emphasized at the expense of the refinements of marginalism; descriptive material was more abundant and occupied a more independent place than its merely illustrative uses would permit. Although attempts were made in some texts to dispense completely with the older theory—of these the most notable is the *Grundriss der Sozialökonomik*, the modern substitute for Schönberg's *Handbuch*—they by no means provided a substitute for old fashioned *Principles*; the best of them remained on the level of a sketchy delineation of the present system and of a compact historical and statistical description of its several parts.

In Germany there was a revival of theoretical interests best represented by the realistically tempered marginalism of Schumpeter. The vogue enjoyed by Cassel was at least partly due to his dispensing with the metaphysics of utility and value. Spann's universalism—a revival of the organismic romanticism of the early nineteenth century—abolished the individual and the concept of causality altogether. In France solidarism acquired a more respectable academic standing and a wider following. There was more emphasis in England, even among the older theorists, on the irrational character of human behavior and more interest in the way economic phenomena change as against the search for the causes of their existence. In the United States, in addition to a proposed displacement of the older theory by a system of empirically ascertained relations between economic variables, there was a great deal of discussion, most of it on the methodological level, of the application of modern psychology to economics, of the value of the institutional concept and of the functional as against the structural approach.

A distinct line of theoretical work, in the United States, grew out of the preoccupation with problems of public regulation of monopolies. The issues of monopoly charges and valuation had of course been vigorously discussed throughout the generation preceding the war, and a voluminous literature had been accumulated. The newer analysis emphasized the fact that natural or legal monopolies possess features which increasingly characterize the rest of the economic system. Overhead costs attracted attention because they make regulation on the basis of the older theory impossible. The discovery of the ubiquitousness of this phenomenon led to conclusions which undermined the price theory based on assumptions of automatic adjustment of production to demand and of price to cost. It made essential a new theory not only for the uses of rate regulation but also for the intelligent comprehension of the realities of price determination in a market with an inelastic demand and a still less elastic supply. In this connection John R. Commons proposed a new approach not only to the question of monopoly but to the general economic problem. Economic life was to be viewed as a series of transactions entered into by going concerns guided in their activity by working rules, rather than as the movement of commodities according to a principle of scarcity effectuated by mechanistically conceived entrepreneurship.

The post-war period was unusually rich in experience in the field of currency, and the impetus to theoretical analysis was strong. Irving Fisher's symbolical formulation devised before the war seemed to make the quantity theory available for dealing with concrete situations involving a rapid increase in circulating medium and a rapid rise in prices. The equation of exchange was refashioned in a number of ways largely for the purpose of bringing to the fore the factors of importance in determining changes in the general price level. Of these bank credit occupied the center of interest. This led to a deliberate departure from the commodity theory of money and deprived the quantity theory of its causative, explanatory character. With the general recognition of the ability of organized banking to extend or contract the volume of circulating credit, the advocates of control and stabilization turned their attention to banking policy rather than to monetary policy; proponents of social reform began to inquire whether a rationalized distribution of credit, not only among producers but between producers and consumers, might not serve toward the rational development of industry and the elimination of overproduction and underconsumption and toward the regularization of employment.

Allied to the quantity theory was the purchasing power parity theory in foreign exchange.

This century old doctrine underwent in this period a series of modifications which endowed it with greater logical validity but deprived it of practical effectiveness. The regime of inconvertible paper money, for which this theory attempts to set up a parity, led also to certain adaptations in the theory of international trade. The analysis proceeded, however, almost entirely on the basis of the classical assumptions; it disregarded the important novel factor in the situation, the increased international movement of capital, with consequent deflection of rates of foreign exchange from commodity parity and ultimate revision of reciprocal demands and the comparative cost of commodities.

The developments in the field of economic history were notable. One effect of the violent changes in the whole economic system was to emphasize the need of systematic studies of change, not only in crisis periods but even more in the more manageable periods of gradual development. Painstaking factual studies tended to displace large generalizations, and scholars in increasing numbers turned their attention to the possibility of applying rigorous statistical methods to historical inquiry. Most attention was paid to clearing up the origin of capitalism and to the industrial revolution. Sombart's revision of *Der moderne Kapitalismus* (1921–27) assigned greater importance to commerce in making possible the original accumulation of capital and reflected the influence of the times in putting more emphasis on the role of the state in the creation of the modern order. Tawney's *Religion and the Rise of Capitalism* found the spiritual preparation for the acquisitive order in the teachings of early Puritanism and in the later breakdown of those restraints which made economic virtues work out to the benefit of the community. Monographic research found the dominant forces of early modern capitalism in the commercial expansion of the seventeenth century and led to the conclusion that technological advance assumed its importance in industry only in the second quarter of the nineteenth century. The priority of England in the development of industrialism was challenged and the dark picture of "evils" of the industrial revolution was found to have been considerably overdrawn. The drift of the later monographic literature on American economic history was likewise in the direction of breaking up the rigidities of earlier formulae. It was enriched by compilations on the history of manufactures, agriculture and transportation, by a number of sectional studies and histories of separate industries and railways, and finally by several histories of the labor movement stressing the importance of different factors in conditioning the development of this movement. While the achievements of theory and history during this period are interesting in detail, the more impressive achievements of the economic science of the time were closely connected with practical interests. Here the quantitative method was indispensable; it was applied so widely and with so great an application of intellectual energy as to create in many minds the impression that the future of economics lay wholly in the field of quantitative analysis.

The statistics available to the inquiring economist increased in this period enormously. Enumerations of the census type increased in frequency, in scope and intensity and in the reliability of results obtained. Governmental regulation and industrial reorganization on a national scale required a fairly accurate statistical description of major branches of economic activity, followed up by registration of current changes in the more important factors in the situation. The government and its numerous agencies, associations representing organized industries, the banks and investors' organizations, kept a close watch on economic developments, trying to measure, each for its own purposes, the tempo of economic activity in its multifarious manifestations. There was an extraordinary development of methods for dealing with quantitative material, for bringing it into a manageable shape which would admit of comparisons with the past and with related lines of economic activity. Index numbers, which were in wide use even before the war, were subjected to a theoretical analysis which systematized the various methods of compiling them and brought out their significance for the purposes in hand. Time series analysis was adopted from the natural sciences and employed to distinguish different types of changes in economic series. Although attempts to provide a probability basis for the use of refined mathematical techniques in economic statistics were unsuccessful, the validity of these methods for purposes of statistical description was generally granted.

The accumulation of statistical materials and tools was also stimulated by the study of industrial fluctuations. Even before the war it was fairly clear that the study of the business cycle was not an investigation of the "short run," disregarded by orthodox theory, nor an eco-

nomic dynamics building upon and supplementing the theory of statics, but an entirely different envisagement of the economic order, a scheme in which the normal was not a stable equilibrium achieved in the long run but a certain regularity and uniformity of change. The theories of this period, most of which stressed causes lying in the credit and currency mechanism or in underconsumption, were formulated in such a comprehensive way as to bring about a wider recognition of the fact that the real explanation lay in the disparity in the movement of various economic factors and in the accumulation of the effects of this disparity until a breaking point is reached. Mitchell's presentation of the subject, published in 1913, was increasingly recognized as a framework which permitted a quantitative study of separate elements in the situation, intended at once to ascertain the realities of their functioning and to bring out in increasing detail the part played by these elements in the congeries of strains and stresses which was called the business cycle. Attempts were made to trace out the secular movements and on this basis to construct the "natural history" of industry, in which the forces at work are the growth of population, frequency of inventions, building up of the capital structure. Extension of the investigations to include a longer period of time and the application of a more refined technique resulted in uncovering "major cycles," the rationale of which was traced by various authors to important changes in economic organization or to changing trends in gold production and gold values.

The luxuriant growth of quantitative economics constitutes perhaps the outstanding characteristic of this period. It was first developed in the United States and later widely imitated in other countries. Stimulated by the fundamental changes and by the wide amplitude and universality of cyclical swings in the years immediately following the war, a number of organizations were established which devoted themselves to the digesting of results of current observation and to the intensification in many directions of the study of correlations between economic variables. They were supported by government and business organizations because they offered the possibility of finding ways and means of mitigating the violence of fluctuations and of anticipating developments in the proximate future. The institutionalization of research was not confined to quantitative studies; it developed almost equally in the field of descriptive studies. Such extensive fact gathering and condensation could not be conducted by a single individual, even with the unskilled assistance of seminar students.

The effect of the war and post-war developments on the labor problem was confusing in the extreme. At the outset the traditional assumption of diametrically opposing interests between labor and capital prevailed. In all the warring nations the first demand of government was merely a truce in the industrial struggle. Gradually it came to be recognized that something more than a truce was needed. The labor organization, like the corporation, could be employed as an instrument of national defense. Before America entered the war the labor organizations were already tacitly recognized in England and Germany as important factors in maintaining morale and stimulating production. America profited by European experience and from the outset recognized the official labor organizations on a parity with other directive forces in the economic system. For purposes of efficiency and control the extension of labor organization over parts of the field that had been hitherto non-union was permitted.

To stimulate the efforts of the worker, wages were advanced, sometimes merely as an offset, partial or complete, to the advancing cost of living, sometimes in more generous measure. What is essential is that the worker's standard of living came generally to be regarded as a matter of national concern. This attitude toward wages and employment was carried over into the post-war period in the European countries and the position of labor remained a dominant political concern. In America the first impulse of the smaller business concerns was to "deflate" wages but the great corporations, having become adjusted to the conception of operation in conformity with national interests, hesitated to take part in this deflation. Within a short period industry entered upon a phase of prosperity and the theory gained currency that this prosperity was due to the large spending power of a well paid working class.

In the development of tactics notable innovations were made by both capital and labor. Immediately after the war the employment of "industrial relations" experts was extremely common, and this implied a deliberate attempt on the part of the management to operate on a basis of understanding. Employees were encouraged to form shop committees and company unions for the regularization of industrial rela-

tions—often indeed as a prophylactic against unionization. Labor made numerous attempts to strengthen its position through the assumption of new functions such as banking and cooperative merchandising. In some instances remarkable results were achieved.

In labor theory the period yielded little that was new beyond the remarkable doctrines of the manifesto of the British Labour Party immediately after the war, which envisaged a state accepting as the definitive object of its policy the satisfactory supplying of the requirements of the democratic masses, and the fugitive literature in America occasioned by the launching of the abortive "Plumb Plan" for railway labor. There was, however, a rich monographic literature on various phases of labor legislation history and tactics.

Economic literature in general exhibited a lack of drive and direction. For this the explanation appears obvious. The world of economic fact was profoundly changed by the war. The old general concepts implicitly assumed in economic thinking—the state, private enterprise, the nation, internationalism, credit, capital—had taken on new meanings and time was wanting to weave the changed concepts into a harmonious structure of thought.

VII. POLITICAL SCIENCE. Traditional political science had already begun to exhibit signs of disintegration before the outbreak of the war. The neat concepts of the early twentieth century were subjected to severe criticism from the point of view of political realism. The "politics of power," which manifested itself with increasing frequency in the last decade before the war, had operated to weaken the position of the state as a moral entity. As an incarnation of force the state might be expected to vary in form and function with the resources at its command.

The immediate effect of the war was to dispel political questionings of every sort. In the nations at war the competence of the state became virtually coextensive with the national life. The economic system yielded up its independence in the name of military necessity; partisan differences were smoothed out in the interest of national unity; individual liberty was unceremoniously brushed aside. Professional political scientists, to be sure, maintained a formal consistency with peace time doctrines, but the concepts and formulae of the intellectual world at large were simplified to the last degree of absolutism.

With the progress of the war a host of new problems arose to disturb the absolutistic formulation. Within the nations at war the issues raised by conscientious objectors and by sporadic opposition to drastic labor control reopened the question of the unlimited character of sovereignty. In the neutral world criticism of a more general character awakened. On the widely accepted assumption that the war had been forced by militaristic influences operating within nations otherwise peaceful, a significant discussion arose as to the proper relation between the military and the civil authorities of the state. A striking comparison was drawn by Munroe Smith between German policy as dominated by Bismarck and as dominated, presumptively, by the military group surrounding Wilhelm III. The "imponderables" in policy, upon which Bismarck had laid so much stress, were now erected into an important limitation upon sovereign action. Most important of all, belligerent propaganda and neutral criticism were shaping up conceptions of war guilt which tacitly implied moral limitations upon the sovereign state and its responsibility to the "family of nations" or to mankind. The concept of a "superstate" was forcing itself upon popular political science, in spite of the rigidity of nationalistic preconceptions. In its extreme form this formula of the subordination of state to superstate went so far as to dispute the legitimacy of a government which was assumed to have flouted its responsibility to the family of nations. Woodrow Wilson's distinction between the German government, deserving to be crushed in war, and the German people, against whom the charge of guilt would not lie, was an instance directly in point. The tacit assumption of a superior international political entity appeared repeatedly in Wilson's pronouncements. Even the apparent harking back to a moralized nationalism in the formula "the self-determination of peoples" involved an internationalistic assumption. The right of self-determination rests not on natural rights, but on an assumed moral world order.

Discussion of an international political order became almost a universal preoccupation after the Peace Conference and the launching of the League of Nations. The discussion involved the position of the sovereign state within the new order; the relative weight of large and small nations in a working international organization; the canons of treaty making; questions pertaining to judicial action in international disputes;

the use of military force and economic pressure. Political scientists, philosophers, historians and other scholars participated in the discussion, but the main burden of it was borne by statesmen and political leaders. A wealth of literature appeared, but it would be hazardous to say that any single work stands out as an adequate treatment of this international trend of thought, although it was by far the most important in the political science of the period.

Parallel with the elaboration of the international order into an increasingly realistic entity, the attack upon the doctrine of the omnicompetent state was carried through with great critical energy. The most effective criticism was launched by the pluralists, led by Harold Laski. To the pluralists the state is simply one out of a number of associations to which the individual belongs and as such has no exceptional moral claim to be obeyed. The superiority of the state to other associations rests on its power to use coercion. The controversy over pluralism produced a flood of literature and resulted in a reiteration of the distinctions established before the war between various meanings of the term sovereignty. It led to an ethical defense of the superiority of the state by Elliott, who interpreted sovereignty as the assurance of the community of purpose that is the essence of the state. The same problem was approached historically by MacIver in *The Modern State* (1926). His conclusion was that the proper sphere of activity of the contemporary state is the dictation of such actions necessary for the good life of society as can be enforced, if necessary, by physical forces.

In Germany and Austria the question of state sovereignty was discussed chiefly in connection with the relation between state and law. The most novel development was that of the Kelsen school. As a neo-Kantian, Kelsen distinguished between *sein* and *sollen*, realms of existence and essence. Positive law is a closed system of postulates in the realm of essence and therefore does not recognize phenomena on the existential level. It deals not with acts of physical beings but with legal relations. The state, which is the source of law, is a juridical person, the subject of rights and duties. The *reine Rechtslehre* of Kelsen made it possible to conceive of sovereignty also as a legal relation, as the binding validity of the legal order, its internal coherence. To Fritz Sander, who differed slightly from Kelsen, the state was essentially no more than a particular system of legislative, administrative and other procedures. Somewhat more realistic was Leonard Nelson, who believed that while force cannot make law it is necessary in order to make law effective in society. This is the purpose of the state. The power of the state, which is the supreme power, must, however, be a legal one, that is, must itself be limited by law. Still more realistic was Wolzendorff, to whom the state was a ruling force but a force of order, not of arbitrary compulsion. The state's function is to become the responsible and final guarantor of the law, to intervene only where free individual or associated action becomes insufficient. Finally Carl Schmitt, holding that political philosophy is nothing more than secularized theology, identified sovereignty with arbitrary power and found that it is exercised in the numerous situations which have not been foreseen by legal prescription.

Another development which marks this period was the concerted attack on the democratic form of government. The establishment by psychology of the extreme variation of mental ability led to the questioning of democracy on general grounds. A certain disillusionment with democracy was apparent even in the late works of James Bryce. Democracy was made the subject of a more realistic study in the countries which hitherto had not been under a democratic regime and was vigorously championed in spite of the paraphernalia of democracy in action, such as political machines, manipulated public opinion and lobbying. The influence of economic interests on political activity led to a demand for a substitution, or at least supplementation, of territorial representation by functional representation so that economic interests might have a direct share in the determining of governmental policies. Functional representation, it was asserted by the advocates of the council form of government in Russia and Germany, would provide the nearest approximation to direct democracy possible under modern conditions. In the Anglo-American world the problem of functional representation was a part of the larger controversy centering in pluralism and as such attracted considerable attention both on its own account and in connection with the coordination of organs of functional representation with organs of territorial representation.

Similarly parliamentarism was being seriously discredited. Carl Schmitt, following Smend, defended true parliamentarism on the ground that it offers publicity of discussion of all impor-

tant state measures in advance of decision. He asserted that latter day parliamentarism was degraded because vital decisions were taken not in plenary meetings of representative assemblies, but in small committees sitting secretly. Genuine parliamentarism, involving a nice balance between the legislature and executive, was distinguished by Redslob from monistic parliamentarism of the French type, where the sovereignty actually resides in the Chamber of Deputies and its committees.

The defense of dictatorship represented the obverse of the attack on democracy. Before the war G. Mosca had asserted that the mass of the people is incapable of self-govermnent, that it is always managed by a minority and that a change in the form of government means merely the transfer of power from the hands of one minority to that of another. The defense of dictatorship received a peculiar twist in its application to the Russian situation. Lenin and Trotsky, adopting the syndicalist contention that the parliamentary state, with a venal press and corrupt parties, represents the dictatorship of the bourgeoisie, insisted, in opposition to Kautsky, that dictatorship of the proletariat, a recognized transition stage to the abolition of the state, cannot be achieved by the peaceful means of obtaining a parliamentary majority. Communist theorists assigned to the state a function far superior to any it ever had in socialist discussions. Communism, although still conceived in terms of economic and social organization, was to be brought about through an effective utilization of all the powers at the disposal of the state during the prolonged period of its domination by the vanguard of the class conscious proletariat.

These years after the war exhibited an increased attention to factors which condition international relations and the channels through which these factors become effective. The study of policies which result in the clash of national interests and of the methods by which these clashes can be avoided became a recognized division of political science. Most attention was given to the economic factors: the desire for the control of important sources of raw materials, of markets for goods and capital, of lines of communication, of overpopulation. Recognition of the predominantly economic character of imperialism led to a discussion of its essential relation to the existing economic order. Imperialism was considered by some the inevitable accompaniment of monopolistic, parasitic capitalism; by others the survival of feudalistic militarism grafted upon the modern economic order. Much attention was given to possible methods for abating the causes of disputes between nations and for the replacement of unregulated international competition by cooperation—international regulation of foreign investments, migration and the control of raw materials.

Of the institutions important in foreign policies most attention was paid to diplomacy and the press. It had long been recognized that the control of foreign relations was the weakest point in a democracy. The war produced a revulsion against secret treaties and a demand for "open agreements openly arrived at." The studies in this period, however, made it clear that while the first part of the formula is practicable and would lead to the cessation of leagues and alliances directed against third parties, public negotiation is not always practicable. It was also contended that in a democracy there is about as much control over foreign policy as over any other affairs of state and that the development of genuine control depends upon the creation of an informed and instructed public opinion.

Advances in the study of public administration were conditioned by the increasing dominance of the expert in the administrative machinery. Even before the war the relation between the permanent civil service and the cabinet responsible to parliament had been much debated, and in the post-war period the instability of cabinets and the growing group consciousness of civil servants made the problem more acute. The question of judicial review was also raised in a more compelling way after the war by the increase in administrative rule making; the underlying issue was whether the courts or the administrative commissions are the more flexible and more rational regulatory agencies. Parallel with the interest in the distribution of control was the concern with efficiency of functioning. Methods developed by industrial psychology for testing the fitness of the job holder were adapted to the usage of the civil service and measures were devised for testing the efficiency of performance of various governmental units. New schemes of administrative organization were worked out with an eye to eliminating waste due to duplication and overlapping and the general cumbersomeness of structure. The work of the Institute of Government Research in the United States and of the Institute of

Public Administration in England were of particular interest in this field.

In the United States much attention was given to the continuing tendency toward centralization of authority in the federal government; to the installation of the budget system by the federal and many state governments; to the increase in number and the extension of competence of administrative commissions; to experiments in the field of municipal government and later in rural local government. In the British Empire interest was centered on the devolution of powers resulting from the tendency toward independence of the self-governing dominions. Much was written in Germany in connection with the new constitution. Attention centered especially on the relation between the Reich and the constituent states (*Länder*), on the position of the new advisory economic councils in the general administrative system and finally on the question of judicial review of legislative enactments. In Italy the focus of interest was the reconstruction of the entire state apparatus from the top down. The chief problem occupying Russian political scientists was the regularization of governmental processes as a means of escaping the crude and arbitrary dominance of revolutionary intuition.

Political science was markedly influenced in this period by developments in related disciplines. The substitution of sociological for legalistic conceptions of the state made it imperative to redefine what is specifically political. An easy solution was found by some in reviving the notion that the characteristic attribute of the state is its power of physical coercion. Fundamentally related to this was the view held by others that the state is the resultant of attitudes engendered by the possibility of organized conflict. Political science so defined could still retain its identity even if its scope were extended to include the study not only of governmental agencies but also of the numerous underlying groups of organized interests.

Social psychology contributed to politics perhaps even more than sociology. In the preceding period Graham Wallas had stressed the importance of a human nature approach to political processes and Michels had pointed out the danger of democracy degenerating into an oligarchy because of the unscrupulousness of its party leadership. While work along these lines continued, new leads were uncovered. Mary Follett pointed to the vitalizing and integrating role played by conflict in the social process, analyzed the nature of group organization in terms of a somewhat modified behavioristic psychology and indicated the significance of the group in a democratic state. Walter Lippmann gave an interpretation of political behavior which emphasized the importance of stereotypes in the formation of public opinion. An impetus was thus given to numerous studies of the structure and functioning of political parties, of the formation and manipulation of public opinion, of revolutions and revolutionary movements.

The application of psychology to political science was carried farthest by Floyd Allport. In renouncing the "institutional fallacy," by which institutional attitudes of individuals are abstracted and set up as entities in themselves, he claimed the whole field of the social sciences for the study of behavior attitudes. This behavioristic approach naturally led to attempts to reduce politics to statistical expression, such, for instance, as the correlation of voting with a number of factors which are supposed to influence it. Measurement and precise description were used also in the political survey, which developed first in urban communities in the United States and was later employed in the field of operation of state and federal government; it was also carried on in England on a large scale. The object of the political survey was to describe governmental machinery in operation in relation to a precisely specified social milieu.

Another development on the margin of political science was the increasing interest in political geography. This was inevitable, since the new map of Europe was settled partly with reference to the establishment of natural frontiers and ethnic homogeneity. In 1924 the magazine *Geopolitik* was founded in Germany by Karl Haushofer, and still earlier an attempt was made by Rudolf Kjellén in Sweden to incorporate political geography into descriptive political science.

If it is true that political science begins where public law leaves off, this period was the first, both for Anglo-Saxon countries and the continent, in which the science came into its own. In spite of the multiplication of written constitutions and of regulatory laws and rules, the drift of thought was distinctly away from the study of structure to a consideration of the realities of functioning. Consequently the dicta of the science became less definite and its dependence upon related disciplines much closer; for the

same reason it was also impregnated with a new vitality and a greater responsiveness to practical needs.

VIII. LAW. The transformation of a system of legal thought in which the will of the state was the central fact into one in which the development of the individual was the primary concern, was the chief accomplishment of juristic activity after the war. This transformation, which had been definitely begun in America just before the war and considerably earlier in Germany, is generally abbreviated as the change from an analytical to a sociological jurisprudence. In terms of this change the varied activities after the war in juristic thought, legal education, social legislation, codification and the reorganization of judicial machinery take on a considerable community of meaning. As a sequel to this change there came a new emphasis and a new perspective in the study of law which lifted it out of its former position as an adjunct to political theory and made of it a complex and ramifying social study.

The opening of the war period found analytical jurisprudence yielding ground in every important juristic system to an invading body of thought which, because of peculiar intellectual traditions and legal-political schemes, was of a different composition in each country. In Germany the decisive influence of Stammler and Ehrlich, operating in a code country, emphasized the need for a dynamic jurisprudence which would continue to adapt a rigid system of law to the changing needs of each period. In France, where the metaphysical tradition had been dominant, distinct trends could be traced toward a revival of natural law, the energetic study of comparative law and the extremist movement for "free law." In England, which had since Hobbes been most intimately allied with the analytical strain of thought, the analytical tradition was most tenacious, giving way only in the historical approaches of Maitland and Vinogradoff. In America a derivative analytical jurisprudence held sway until the vigorous writings of Roscoe Pound and the opinions of Mr. Justice Holmes began to make serious inroads upon it, the first in a direction closely allied to Stammler's sociological school, the latter in the broad spirit of a humanized individualism.

The war itself had an appreciable, although not a determining, effect upon subsequent juristic developments. It produced a prolific literature of international law, in which the fundamental concepts of sovereignty, nationality and neutrality were reexamined. Considerable creative activity went into the organization of the judicial machinery and the analysis of the juristic theories that were to govern the outlawry of war and the effective arbitration of disputes. The new constitutions of the post-war European states brought with them the problems of adjusting theories of public law to a conception of powers derived from a written constitution, and stimulated a revival of analytical jurisprudence; an impulse in the same direction came from the quest of stability in an era of rapid change. The unprecedented activity in constitution making also presented an opportunity for a fresh examination by continental jurists of Anglo-American legal institutions, particularly the American doctrine of judicial review of legislative acts, which the Reichsgericht in Germany adopted. In England the war, among other factors, gave an impulse to the process of transforming empire into commonwealth which was accompanied by an attempt to clarify the status and legal relations of the constituent political units.

But these direct results of the war were the incidental rather than the essential lines of advance along which legal theory developed. The principal single force behind this development was the actual character and functioning of legal institutions in this period. Just as the primary concern of law in the Middle Ages was the proper ordering of one's religious life, and in the early modern period the building up of effective legal control by the central government, so it came in this period to be the smooth dispatch of intricate business relations, the maintenance of property rights, the protection of the individual in large and impersonal communities. The refinements of the corporate organization of the business unit, the fluidity of credit transactions, the complexities of financial organization illustrate the demands that business made on legal machinery and concepts. The history of the relations of government and public utilities in the American legal situation is an indication of the concern of American constitutional law with property rights; and the frequency of crime commissions testifies to the importance of the problem of criminal law and administration in a large city. Juristic concepts, legal education and judicial machinery had to be refashioned to meet these compelling demands with some degree of adequacy, and that process subsumed most of juristic attention after the war.

In this transformation the governing intellectual principle was that of pragmatism. This was especially true of legal development in America where Mr. Justice Holmes, in his famous remark that "the life of the law is not logic but experience," not only expressed a personal conviction but caught the increasingly characteristic note of American jurisprudence. This tendency had already shown itself in England before the war in the work of Pollock and Maitland, who had qualified Austin to the extent of defining law as "the sum of the rules administered by courts of justice"; a realistic examination showed that under a common law system the center of gravity was not the single creative act of the legislator but the continuous series of creative interpretations by the judge in the daily stress of court business. But the most insistent application of this pragmatic attitude was found in America, where the moving power behind legal change was the Supreme Court and where not only the interpretation but even the validity under the constitution of certain crucial laws were not known until the Supreme Court had passed on a case involving them. The attitude is illustrated in such varied features of the American legal landscape as the use of the case system in legal education; the conception of law as an entity which does not at any moment exist except in the probability of its application to the specific set of facts involved in the next case and, as a consequence, the opposition to such judicial machinery as advisory opinions on the ground that they postulate the existence of a legal principle abstracted from a particular set of facts; the consciousness of the evasive and indefinable character of legal concepts, such as due process, which was revealed in the writing and teaching of diverse but representative American legal scholars like Cook, Frankfurter, Powell and Hamilton; the increasing practise of adjudicating a case not by the method of abstract logic but in the context of social arrangements that give it significance and, as a result, the transformation of the legal brief and sometimes the judicial opinion into an economic or sociological treatise.

The vigorous and able thinking that characterized the opinions of the American Supreme Court was one of the outstanding juristic achievements of the period. Although the form and purpose of an opinion are completely alien to the deliberate grappling with jural concepts to be found in the treatises of system builders like Austin, Kohler, Stammler or Gény, these opinions may be said to have added to the recognized schools of jurisprudence a characteristically American accession. Their principal ingredients, with some admixture of ethical and historical points of view, were the traditional American stress on individualism and the desire of the sociological jurist to apply law in the context of a changing society. Opinions of this kind were particularly characteristic of Mr. Justice Holmes and Mr. Justice Brandeis, although in strikingly diverse proportions. Two such apparently antithetical attitudes would seem strange partners, and it is true that Mr. Justice Holmes when, at times, he found the two in conflict rendered exclusive fealty to the first and Mr. Justice Brandeis to the second. But in their judicial opinions and also in the main trend of the court's decisions during this period there was evidenced a remarkable attempt to weigh the conflicting demands of social policy and individual values. The central problem of law became that of so controlling the growth of legal institutions as to make for the best development of the individual in society.

To make such an attempt with even a partial degree of success was a heroic procedure. For a body such as the Supreme Court, so situated in the American political scheme that its decisions could affect the future course of social legislation or deflect prosperity from one channel of business or section of the country to another, the process of decision became an adventure in statesmanship. American constitutional law, although in the controversy over prohibition and civil liberties it continued its traditional preoccupation with the Bill of Rights, in dealing with the more vital questions became increasingly absorbed with the legal bases of the economic and social system of the most highly industrialized country in the world. How perilous a responsibility this imposed upon the judiciary was stated with engaging clarity by Mr. Justice Cardozo in *The Nature of the Judicial Process* (1922).

The wide acquaintance with continental law and juristic literature evidenced in this book is representative also of the movement toward what may be termed a "reception" of European legal thought. Pound, in support of his plea for a sociological jurisprudence, and Wigmore, with a primary interest in comparative law, introduced American scholars to the significance and content of the principal trends in European jurisprudence. The *Continental Legal History Series* and the *Modern Legal Philosophy Series* did much to attenuate American legal provin-

cialism. But such an interest cannot with truth be said to have taken deep root in America, and the increased interest in Anglo-American law which scholars on the continent began to evince was sporadic and undetermined. In another direction a controversy which had started with *éclat* and promised to have revolutionary effects burned itself out in an uncongenial atmosphere. The furor with which Wesley Hohfeld's criticism of the existing terminology of jural relations was received, and the degree to which his scheme for clarifying and classifying them dominated for a short period the teaching at the Yale Law School, were perhaps an indication of a current belief that more than of social consciences judges stood in need of sharper wits. After a heated controversy between Walter Wheeler Cook, the principal Hohfeldian exponent, and Albert Kocourek, who while sharing Hohfeld's interest in jural analysis set up a rival scheme, the issue cooled. It was probably less suited to the case law system in America than it might have been to the civil law system on the continent, where the necessity for formulating law constantly on the basis of a written text made an underlying scheme of jural relations desirable. Its principal significance became finally its influence on Cook who, adding to it the findings of the New Physics and the New Logic, broadened it into an investigation of the scientific method in law; and on Commons, who used an adaptation of the Hohfeldian system in his *Legal Foundations of Capitalism* (1924).

Taking issue forcefully with the categorizing of the legal analysts, the sociological school, with adherents in every country and with Stammler and Pound as its principal leaders, established the dominating trend in juristic thought. It spent much of its early force in a frontal attack upon the intrenchments of "mechanical" jurisprudence, in the violence of which it sometimes exposed itself to attack on account of the extreme formulation of its stand. In its more constructive phases it revolutionized the study of law, leaving its most appreciable mark on legal education, research and reform. In America it was connected with every important movement in these fields.

In legal education the case method reached the apogee of its influence in this period, and there were even rumblings of a revolt against it. This revolt did not advocate a reversion to the textbook method but aimed at making the study of a case merely a point of departure for an excursion into the social and philosophical problems of which it formed the end product. This represented, although in an extreme form, a tendency which the innovators in legal education manifested throughout the period—that of paying increasingly less attention to the professional aspects of legal education and of using it to transform law into a social study. The reorganization of the curriculum on a functional basis, which absorbed much of the administrative energies of the principal law schools, was built on a fundamentally sociological conception of the functional role of legal rules and institutions in society. When the disparity between the aims of professional legal education and the social study of law became increasingly clear, the two activities were differentiated and the latter was organized definitely as research, sometimes with a separate staff and predominantly by the method of group collaboration.

Whatever the degree of success with which the fruits of legal research justified its pretensions, there can be little doubt that it was a valuable auxiliary in the movements for clarification of legal rules and overhauling of judicial machinery. The work of the American Law Institute, the revision of the Code of Civil Procedure in Germany, the reform of the judicial organization in France and Ferri's unsuccessful attempt at a thoroughgoing reform of the Penal Code in Italy were inspired and conducted by legal scholars in the light of what they considered the latest research. The early hope of Pound that legal scholarship might prove eventually effective in social engineering found ample realization when the jurist was called in, as the engineer might have been, for a survey of a troublesome problem. With a note of authority the jurist as expert suggested remedies in the case of the breakdown of the machinery of criminal administration (Cleveland Crime Survey); the congestion of the nation's business in the Supreme Court (Frankfurter and Landis, *The Business of the Supreme Court*, 1927); the unnecessary litigation of commercial disagreements (the movement for commercial arbitration); the non-enforcement of the prohibition laws (President Hoover's advisory committee on law enforcement).

The obvious social context of every legal problem and the building up of a system of legal research and study to deal with the problem adequately in this context served as the connecting links between law and what lawyers began to call "the other social sciences." In these

interrelationships lay the claim of law to be considered a social study. In the investigation of the origin and development of legal institutions and concepts only a beginning was made in this period, but enough to show that here the genetic method was successful in revealing "the dead hand of the past" and the devious and amazing carry-over of old ideas to deal with new situations. No more fertile phase of intellectual history was to be found in any of the social sciences. The study of non-political groups and associations, as they had been clarified in sociology, yielded, in the pluralistic theories of Duguit, Krabbe and Laski, a revolutionary change in the political-legal concept of the state, and had correspondingly important consequences for the theory of the nature of law. The studies by lawyers and economists of the legal foundations and the legal scaffolding of the two principal institutions that have emerged into dominance in modern society—property and contract—contained much dynamite for accepted attitudes in both law and economics. Social work carried its activities over into the field of law, and considerable interest was stirred up over the small claims court, legal aid and the juvenile court. Anthropologists (Lowie, *Primitive Society*, 1920; Malinowski, *Crime and Custom in Savage Society*, 1926) grappled with the problem of legal organization in the primitive community and clarified the functional relationship between the legal system and the social organization. Psychology with its revolutionary though somewhat unstable revaluations undermined the substructure on which the elaborate system of legal evidence had been built. All along the frontiers of law there was a good deal of stir. If there was too much faith in the results of group research and in the genuine synthesis that might be effected by the juxtaposition of law with another social study, it was merely a sign that one of the oldest of organized studies was passing through a new youthful phase.

IX. HISTORY. In a group of social studies prolific in innovation the peculiar propriety which seems to stamp the adjective in the phrase "the new history" is of considerable significance. It presents the paradox that the study which has from within itself generated the least of actual novelty offers the appearance of the most radical transformation. And it points in partial explanation to an articulateness and a militancy on the part of the spokesmen for history that transcend the revivalist spirit of the other social sciences.

The movement for a new history, although in the swing of it there was an accelerated swiftness after the first decade of the century, did not come with entire suddenness. Behind it there was in each country an evolution of historical writing in which sporadic beginnings of the later tendencies can be distinctly traced. In Germany, side by side with the efforts toward the crystallization of history into an exact science, there may be discerned a movement for the broadening and humanizing of historical writing. From the *Kulturgeschichte* of the late eighteenth century this tendency can be traced through the nationalistic and idealistic trends of the nineteenth and the methodological clash that centered around Lamprecht. Defeated and deflected until the war, the impulses behind cultural history found renewed expression in the general revulsion against *Machtpolitik* that followed the German war experience. The dominant historical interest therefore became *Geistesgeschichte*, a peculiarly German variant of the new history, a transcendental study of a culture with the intention of finding the spiritual realities underlying political and economic forms. In France an unusual activity during the nineteenth century in the history of ideas and in archaeology and geography was the significant precursor of Henri Berr's declaration of the aims of synthetic history in his *La synthèse en histoire* (1911). The work of Berr and his associates on the *Revue de synthèse historique* was finally productive of a conception of world history which they proceeded to apply in *L'évolution de l'humanité*, a series impressive for the range of human activity it treats and the important contemporary institutions whose history it develops, as well as for its emphasis on what was formerly known as pre-history. In England, where the historical tradition had always been so dominantly one of narrative grace and psychological penetration, unaided by any intimate connection with the social sciences, and where therefore Buckle had been a phenomenon and Green an episode, it was not to be expected that the new history would find fertile soil. The work of F. S. Marvin, with his conception of the "living past" as a dynamic factor in the present, and his conviction of a unity which underlies the varied manifestations of a period, represented, however, a break with the tradition. That it represented also a genuine change in the demands of readers is shown by

the success of H. G. Wells' brilliant and daring survey of world history, *The Outline of History*, which seems largely to have been influenced by Marvin's ideas.

It was in America, however, that the ideals of the new history received their most articulate expression. McMaster's emphasis on the life of the common man, like Green's work in England, had represented a break with the tradition. And when F. J. Turner, in the tradition of Buckle, advanced an anthropogeographical theory of the influence of the frontier, the reception it received proved not alone the fertility of the idea but even more the poverty of American historians in interpretative leads. But the principal stir in the American historical movement did not come until just before the war, and then, somewhat strangely, from scholars in the field of European history. The prime agitator was James Harvey Robinson who at Pennsylvania and later at Columbia effected an atmosphere of vitality such as American historiography had not experienced since the return of American students from the seminars of German scientific history in the eighties. His book, *The New History* (1912), which represented also the credo of the group associated with him, called upon historical writing to encompass the entire breadth of man's activities and to treat the past dynamically as the mold from which the present has been cast. For such an intent the field of European history was especially adapted. It offered rich material for what Robinson was aiming at—intellectual history, the portrayal of the succession of widespread intellectual attitudes in Europe at successive periods and their survival in the contemporary consciousness of the western world. Despite wide divergence of emphasis on other scores, a common interest in this theme gave an essential similarity of temper to the work of Haskins, Schevill, Shepherd, Hayes, Cheyney and Thompson.

The new historical approach, once it had penetrated American scholarship, was applied with the greatest success to the study of the American past. The *Chronicles of America* (1918–21), edited by Allen Johnson in fifty volumes, and containing significant work by Becker, Dodd and Andrews, represented a considerable degree of success in absorbing the interpretative leads deriving from the other social sciences. Schlesinger's *New Viewpoints in American History* (1922) may be taken as a summary of the changes in the historian's horizon which the lapse of a decade since the publication of Robinson's book had produced. In the decade that followed Schlesinger's work this changing outlook found even more prolific expression. James Truslow Adams in a three volume survey of the sectional history of New England dealt in the approved manner of synthetic history with the important phases of New England life and thought. Lewis Mumford in *Sticks and Stones* (1924) and *The Golden Day* (1926) sketched in broad strokes the main outlines of American intellectual history, as revealed through American architecture, literature and philosophy. An impressive survey of the entire range of American thought, in which the standards used in evaluating particular personalities were those of the social theorist rather than the literary critic, was contained in Vernon Parrington's *Main Currents in American Thought* (1927–). Charles and Mary Beard, in their *The Rise of American Civilization* (1927), capped their previous monographs on the economic aspects of American history by sketching deftly and brilliantly the forces that went into the building up of a culture. *A History of American Life*, planned in twelve volumes and edited by A. M. Schlesinger and D. R. Fox, is "social history" in that it places its emphasis on the daily life of the undistinguished masses rather than on the careers of the famous or talented.

This swing of the movement for a new history indicates an inescapable contagion in the idea; varying national traditions and varying academic groups responded to it in their own fashions. An individuality might perhaps be given to each of these different manifestations, but a sharp distinction between them would define them out of recognition. Beneath the variety of forms there was a community of viewpoint which showed them to be merely variants of a central idea. The apparently common element was rebellion against the narrowness of the historical outlook, and the meagerness of the sources from which historians were deriving their ideas. To say that the program of the new history called for an extension of the boundaries that hedged history about is too mild; it was rather a removal of all boundaries. The agitators for a new history refused, like Terence, to admit that anything human was alien to them. Starting with the postulate that history was everything that could be known or found about the past, they were by a relentless logic forced into an unenviable position of omniscience and omnicompetence. Refusing to admit that historiography took its

point of departure from written records, they had to insist that it took all time for its sphere and so were compelled to become amateur archaeologists, anthropologists, cosmologists. Once they denied that political history was the peculiar field of the historian they could find no stopping point until they had added every other sphere of social activity; and they were compelled to become amateur economists, sociologists and literary critics, as they had once been statesmen, generals and theologians. They evolved thus a program which called upon the historian to encompass the whole of life, to portray the moving stream of cultural development.

To support this changed attitude there was an influx of new factual material which, whether it preceded or followed the interpretative leads, was certainly indispensable in establishing the new history on a firm basis. The controversy over war guilt unloosed a flood of memoirs and opened the archives of several governments. The revolutions in Russia and Germany converted the opening of the archives in those countries into gestures for the renunciation of the old autocratic regimes. Diplomatic history and the realities of statecraft behind diplomacy dominated for a time the historical scene. New research techniques, more adequate library facilities for the scholar, the increase of publications in monograph and periodical form, the multiplication of guides and bibliographies, the historical researches carried on in the wake of the development of historical interests in the other social sciences—all of these combined to enrich the materials with which history worked.

But the principal impulse in this direction came from archaeological advance. Troy, Mycenae, Cnossus and Luxor had been for an earlier generation the symbols of an antiquity beyond that of written records which nevertheless was considered within the scope of history; and historians had been stirred by the archaeologist's dream of reconstructing a civilization with the aid of a few shards and urns and deductive logic. But the unearthing of buried cities proceeded at a pace and on a scale that made the old term "classical antiquities" a bit antiquated and, when historians began to show interest in discoveries which did not involve the gleaming columns of temples but flints and iron implements, it was evident that they had ceased to regard archaeology as principally an adjunct to classical studies but valued it for the shift in perspective that it compelled. In the new time perspective antiquity was more closely associated with the early geologic epochs than it was with the invasion of the Dorians or the founding of Rome; and the term pre-history lost any meaning it may originally have had. Similarly the ethnological literature, always ignored by historians because it dealt with peoples who had not entered into the stream of western culture, became something that had to be taken account of. If the western peoples were only an episode in the sweep of world history, then they were also only a section of the geographical span of culture. The Bushman and the Melanesian as well as the Frenchman and the Englishman became part of the historian's subject matter, and the accumulated material on their history became part of the storehouse of facts on which the historian depended.

For historians of the established faith, who believed that the line of historical advance lay in the increasing accumulation of facts, this influx of material from archaeology and anthropology, from archives and business records and population and wage statistics, seemed a sound and sufficient basis for the expansion of history. Some of them were even beguiled by this into a hesitating acceptance of the tenets of the "new history." But to historians possessed of less faith in the unaided sufficiency of "facts" the line of advance lay rather in the possibility of fresh interpretation of such facts as were at any time available. In their view the facts of history—its material—lay all around for potential mining, embedded in the past, waiting only the impulse to explore that particular vein. And—such were the devious ways of historical advance—such an impulse could come only from the awakening of new intellectual curiosities whether arising spontaneously in the mind of the historian or relayed to him from outside, or from the insistence of new problems demanding to be traced back into the past. The amazing consciousness which the generation possessed of its dominant contemporary institutions, ideas and problems sent historians back in the most fruitful of their researches in a quest for the origin and development of these institutions and ideas.

The interpretation of historic facts that the historian of the old accredited faiths recognized as valid was the appraisal of their authenticity. All the energies of the "scientific" school of history were directed toward the building up of a critical body of rules of evidence, much like the rules of evidence in courts of law. Of course

all rules of evidence, legal and historical, since they concern themselves with the ascertainment through the medium of human testimony of the authenticity of certain events, become antiquated when the psychological surmises as to the degree to which a man's statement can be believed become antiquated. The old psychology of historical evidence, like that of legal evidence, was somewhat over-simple in its assumptions and was disintegrating slowly before the recognition of the intricacies of the new psychological viewpoints.

The problem of historical evidence agitated the scientific historian because rigorous rules encased him in an *aes triplex* in his quest for certainty and objectivity. The same problem furnished for some of the new historians the starting point for an interesting revolution in attitude. Finding in their studies what was not entirely apparent before the newer psychological developments—that different men will see exactly the same event and will record quite different versions—they were led to a suspicion of the science of history. It was impressed on them, as it could not have been impressed on any others in the social studies except the psychologists, that men's minds move covertly toward devious and surprising conclusions and that the narrative of two historians of the storming of the Bastille may, like the account of two eyewitnesses, be almost completely antithetical because colored by their preconceptions. The propaganda activities of historians during the World War served to bring out even more clearly the nature of the historiographic process. There arose therefore among some historians a significant awareness of the preconceptions with which they approached the raw material of history.

Such a development was of course fatal to the long established self-sufficiency of historians —their independence of any surrounding social disciplines. The buttress of this self-sufficiency had always been the belief that the facts spoke for themselves. But when the same fact was two different things to two different persons it was obvious that if it spoke for itself it did so in a language that could be variously translated. Everything then broke down. Historians saw that even in the past when history had remained aloof from any alliance with the social sciences, it had used interpretations but had not been conscious of them. The interpretative equipment of a political historian had been mainly an individual psychology involving the ambition, cruelty and effeminacy of emperors, a crude social psychology built around the demagogue and the mob, and a repertory of political ideals such as liberty and religious tolerance. Historians began to feel that if interpretative leads were inevitable it was better to apply them deliberately rather than in haphazard fashion, and to draw them from the entire range of the social sciences rather than merely from political theory.

This connection between the new history and the social sciences is one that was considerably stressed in commentaries on the new history. It found its most explicit and insistent expression in the writings of H. E. Barnes (*The New History and the Social Studies*, 1925; *History and Social Intelligence*, 1926). The connection was a genuine and significant one. The development of the older social sciences—politics, economics, jurisprudence, sociology—to a place where their formulations became well established, and the rise of such new disciplines as cultural anthropology, human geography and social biology had considerable relevance for history; they emphasized the richness of the material to be treated in the non-political aspects of life and they made it impossible for the historian to neglect the interpretative leads they offered. Each of these social sciences, before historians became fully aware of its significance, had built up a historical literature of its own. The assimilation of these historical treatments of whole sections of the life of society which had formerly been somewhat alien to the province of history was in itself an educative process of considerable consequence for the historian.

A summary review of the interpretative leads which history borrowed from the social sciences would show that social biologists, through the Darwinian hypothesis, introduced the concept of evolution, and the race theorists the rather risky interpretation of national development in terms of racial endowment; that the anthropologists thoroughly imbued the historian with the concept of culture and directed him to the study of the totality of the life of the community; that the anthropologists and archaeologists radically changed his perspective in time and space; that the geographers gave him an environmentalist interpretation running in terms of the inexorable elements which constitute the physical landscape and the complex accessions which constitute the cultural landscape; that the psychologists affected his con-

ception of the inner springs of motive and emotion underlying the actions of the "men who made history"; that the collectivist psychologists drew his attention to the fundamental role of the masses and the common man in history; that the economists pointed out the dominance of the maintenance problem in community life; that the political scientists showed the realities behind governmental structures and the propulsive force of such political aspirations as those for nationalism and later for internationalism; that the sociologists worked out a set of conceptions of the realities of group life which enabled the historian to separate the formerly undifferentiated "nation" or "public" into its various racial, economic and interest groups and to trace the entrance and role of each in the life of the community.

When history is thus seen as an omnivorous borrower it becomes clear that the pother about making it keep pace with the social sciences was a matter of primarily educational concern. Although there are other social studies which perform a synthesizing function they do so rather for the social scientist than for the layman. History has always been a common carrier, the accredited vehicle for transmitting to the lay reader as much of the philosophy of society as historical scholarship is able to absorb. Being primarily a narrative of the past it is, from the combination of literary finish and scholarly substance of which it is susceptible, pleasanter to read and easier to teach than the more analytical social sciences such as economics and sociology. There had always been a lag between the contemporary state of the "moral sciences" and their reflection in historical writing, but as long as the connection between the two was not clearly seen no great stir was raised. The consciousness of this connection, when it came, was converted into a considerable *malaise* when the social sciences developed so rapidly as to make the gap between them and history a precipitous chasm. For it seemed disastrous to those historians who were conscious of the educational responsibilities of their craft that these duties should be so grossly shirked. To them the "new history" offered the opportunity of modernization so that their task of interpreting the past of society might be performed in the light of the latest researches on the phases of social organization.

So great a degree of methodological activity could not proceed unscathed by the ultimate questions of a philosophy of history. The moot problem of historical interpretation—that of the great man theory against historical determinism —received a fresh impetus from the subtilizing of the economic interpretation and from the psychoanalytic approach to biography. The cyclical theories of historical development, which in the previous generation had so brilliant a protagonist in Henry Adams, cropped up in a new form in Spengler. Croce gained considerable adherence to an essentially idealistic scheme of interpretation. But the actual writing of history went on, affected much more by the general intellectual character of the age than by this continued system building. It has often been pointed out that each age rewrites its history in accordance with its own preconceptions. Ours would seem to be, in an age dominated by science, an inveterate interest in and reliance upon causality, interrelationship of parts and biological growth and, in the post-war period of psychology and pragmatism, an emphasis on the realities behind the rhetoric of events. From this confusion of trends there emerged the "new historian" who, at his best, whatever the novelty of his jargon and the strangeness of his affiliations, retained the essential historical endowment of narrative power and charm, and a mordancy about human motives.

X. INTERRELATIONS. In a period of such rapid development for each of the social sciences the hegemony over the whole field could not be arrogated by any one of them. Efforts had been made in a previous period to build up a single science which would synthesize and eventually absorb the others. But the failure of this attempt where it had been most hopeful, in sociology, marked what was probably the climax of such efforts. A trend set in toward differentiation rather than synthesis. New sciences emerged, immature ones grew to maturity, studies were organized that acknowledged no sovereignty and knew no boundaries. In place of an ideal of imperialistic unity was substituted one of autonomy combined with the highest degree of intercommunication and fluidity of borrowings.

The group of studies that stood in this relationship came ever more surely to be known as "the social sciences." In the term there was conveyed the notion of a variety of interests bearing a kinship to one another, all of them concerned with the study of society and united by a similarity of interest and a community of methods in treating their common subject

matter. In university administration, learned society organization and popular consciousness there were growing indications of the acceptance of this notion of a unity in the social sciences. Specific incidents in this development were the formation of the Social Science Research Council, the organization of university departments and curricula, of research projects and foundations around the idea of a group of social studies, and the publication of symposia such as *The History and Prospects of the Social Sciences*, edited by H. E. Barnes (1925), *Recent Developments in the Social Sciences*, edited by E. C. Hayes (1927), *The Social Sciences and Their Interrelations*, edited by W. F. Ogburn and A. A. Goldenweiser (1927) and *Research in the Social Sciences*, edited by Wilson Gee (1929). As an item in the same process may be cited the launching of the present undertaking, with its intention of making available the combined viewpoints of all of the social sciences on the important social ideas, institutions or practises of the modern world.

This concept of the "social sciences" was obviously based on an analogy with the group of natural sciences. It met the need for opposing to the studies that dealt with matter a comparable group dealing with man and his activities. Not entirely negligible in this connection was the fact that such a rubric suited the convenience of university administration. But the most persuasive attribute of the phrase was the hint of certainties that it conveyed. It offered a warrant of the progress which these studies had already made toward the ideal of the natural sciences and an earnest of faithful intention to traverse the remainder of the distance. Those who disbelieved in the possibility or the desirability of such a rapprochement sought solace in the reflection that the adjective "social" qualified all harm out of the noun. Others, as they watched the certitude even of the natural sciences disintegrating before the new researches, accepted the term "sciences" as carrying with it no invidious superiorities but signifying only a body of knowledge, as did the German *Wissenschaften*.

The establishment of the group of social sciences as a definite entity made impossible on the part of any one of them an impulse for splendid isolation. The jealous maintenance of boundaries that had characterized the previous period had carried with it the belief that there was a province of fact in which all sciences but one were aliens. In terms of this belief the principal task for that science was to delimit its scope and within that scope to clarify its concepts. But such a procedure, although conducive to precision, did not provide the continuous stimulation that comes from borrowings. The distinctive and fruitful results in the post-war period proceeded rather from the frequent foraging expeditions that crossed the boundaries from one science to another in search of whatever served their curiosities, or from the exploration of tracts which the previous delimitation of scope had left neglected.

Implied in this tendency was the view that each social science dealt rather with a phase of all human activity than with some definable portion of it. What distinguished one science from another in this view was not the possession of an exclusive range of material but the application to the common body of material of the method or "slant" which each had developed and which, it was hoped, would yield significances hitherto unrecognized. The family, for example, was a subject to which no one social science could any longer lay exclusive claim. Studied by the social biologist, anthropologist, psychologist, economist, political theorist, jurist, historian, educationist and social worker, it showed a different facet to the interest and approach of each. No adequate understanding of the nature of the family and no balanced appraisal of its social role could be formed by using the technique of a single science.

The divisions between the sciences, therefore, while retaining their significance as designations of the distinctive interest and approach of each, became irrelevant as actual working rules. If a problem was to be analyzed or an institution studied, its ramifications into every phase of activity defeated the boundaries of the sciences. The dominant trend became one of integration. Through group research an attempt was made to reconcile the apparently conflicting demands of specialism and totality of view. Where versatility lent courage the lone investigator followed his subject in its precarious trajectory through the realms of social science. More often the juxtaposition of intensive studies by several specialists was counted upon, with a blind faith, to result of itself in integration.

The greater interest, characteristic of a period of reconstruction, in the harnessing of research to the solution of immediate problems was only one element in the new situation. Equally important were the movements within each science in reaction to the formalism of the previous

period. The attempt to break old patterns was linked with the introduction of fresh thought from the outside. Often the ideas which were borrowed, as was evidenced when the economics of industrial relations strove to make use of the instinct hypothesis of the new psychology, were those whose viability even in their original habitat had not been tested. But the "borrowing" continued and added considerable richness to the social-scientific thought of the period. Facts, hypotheses, points of view and interpretative leads passed from one science to another.

This borrowing and the considerable influence exercised upon all of the social sciences by the prevailing intellectual mood of the period may account for the community of method that they possessed. The reliance upon the quantitative method characterized all of them and laid its imprint upon the period more deeply than any other approach. At the other extreme a method which became known as "institutionalism" and penetrated into economics, history, sociology, social psychology and law, emphasized the broad consequences of fundamental social structures of idea and practise. "Functionalism" studied the essential role of any activity in its setting of social organization. The idea of the mastery of the social process by society, known variously as "social control" and "social engineering," turned the activity of practically every discipline in the direction of the application of its precepts. "Regionalism" brought with it the emphasis on the geographical unit of study which would yield actualities instead of hypotheses and could in the form of field study be encompassed at first hand by the observer. Configurationism in its varied forms made the task of each science at once more complex and more dynamic.

Throughout their range the social sciences showed evidences of the instability as well as the intellectual stir that accompany the contact and borrowing of ideas. They blurred rather than sharpened the outlines of their conceptions, and they did not capture immediate certainties. But they were storing up a vitality which would tide them over any lean years that might lie ahead.

EDITORIAL STAFF

INTRODUCTION: PART TWO

The Social Sciences as Disciplines

I

Great Britain

The outstanding feature of the development of the social sciences as disciplines in Great Britain is the lateness of their inclusion in the educational system. Despite apparently promising developments in Scotland in the eighteenth century and the foundation of a number of chairs in England and Ireland in the early nineteenth century, a special committee of the British Association for the Advancement of Science reported in 1894 that except at Oxford and Cambridge, where the study was very unsystematic, "it would be difficult to imagine a more complete indifference to the scientific study of economics than that displayed at the present time." Yet economics was then accorded greater academic recognition than any of the other social sciences. Anthropology was not taught in the universities until 1884, and sociology not until 1904. Political science had long been taught with varying effectiveness in connection with philosophy, but no chairs were created until the twentieth century. Modern history was studied very little at the universities until after 1850, and not until the end of the century was much attention paid to its social or economic aspects. Law has until recently been taught entirely as a professional or technical subject; in 1924 the Downing Professor at Cambridge claimed that in seven centuries of law teaching "the last fifteen years stands out in bold relief as a period of notable progress." Even today, except in London, the social sciences occupy the smallest, least popular, and least well-endowed position among all the subjects at the different universities, and they can scarcely be said to have penetrated the pre-university educational system.

I. THE UNIVERSITIES. This late academic development and subordinate position of the social sciences is not easily explained. British scientists made distinguished contributions to the social sciences during the nineteenth century. These sciences were systematically studied in foreign universities, where they had been an integral part of the educational system and attracted many and brilliant students. Even in Great Britain a host of learned societies actively promoted their study outside university walls. Some explanation of the backwardness of universities may be found in the uncertainty as to the scope and content of the social sciences and as to their relation to the already accepted subjects of study, and in the lack of textbooks—explanations of singular relevance in relation to the position of the teaching of anthropology and sociology. The teaching of economics has been hampered, in addition, by allegations as to its identity with political propaganda.

Peculiar historical factors in British educational theory and development yield a more far reaching explanation. Until almost the end of the nineteenth century Oxford, Cambridge and London were the only English universities and, as far as educational policy was concerned, London was insignificant. The overwhelming social and educational prestige of Oxford and Cambridge led other universities, as they developed, in the direction of the educational ideals of the two older universities. Until the reforms of the Commission of 1852 were carried out, the colleges at Oxford and Cambridge were predominant; the universities were concerned only with conferring degrees, and the professors had little place in the university system. The first duty of the student was to attend college lectures and classes and to prepare for examinations over which the professors had little or no control. Attendance at professorial lectures was an indulgence by the student, and departure by the professors from the narrow field of textual commentary, or the introduction of subjects not bearing directly upon examination requirements, was fatal to the maintenance of an audience. The mere appointment of professors in the new sciences therefore availed nothing. The real problem was to embody the subjects in the examination syllabi.

From this point of view it was particularly unfortunate that the earlier chairs in the social sciences were frequently either tenable for a limited period of time, or so poorly endowed that their occupants were unable to concentrate upon securing a place for their subjects in the examination syllabus or even upon developing their science.

They were first of all government officials, lawyers, public men, or judges, and professors only in their spare time. Even in the latter part of the nineteenth century, when full time and adequately endowed chairs became more common, the old tradition, combined with the practical closeness of the connection between the social sciences and political or social life, led many professors to desert the classrooms more or less permanently for public life. This slow development of an academic social science profession has resulted in a relative paucity of good texts written by teachers.

All attempts to embody the new sciences in the university curricula met with great opposition. The older universities had always insisted that it was their function "to train the powers of the mind, not to give much positive or any professional knowledge." Supporters of the social sciences had therefore to demonstrate, first, that their subjects were not professional (as Blackstone's introductory lectures indicate, even English law was suspect) and, second, that as a training for the mind they were equal to the classics or to mathematics. The normal course for honors in most English colleges provides for at least one year of general education, followed by one or two years' specialization in the field in which the candidate has elected to study for honors. The first task of the advocates of the social sciences was thus to secure a place for them among the subjects which might be studied for honors. In the face of great opposition Whewell carried through the institution of a Moral Science Tripos at Cambridge in 1848, in which for the first time it was possible to pursue an honors course in moral philosophy, political economy, modern history, general jurisprudence and the laws of England. Two years later a school of law and modern history was created at Oxford as one of four schools which could be taken for the final honors degree. But the scope of the two new honors groups proved too broad to be popular. Simplifications were introduced at Cambridge after 1860, including the creation of a History Tripos in 1873, while at Oxford both history and jurisprudence were made into separate schools in 1872. Although the new schools attracted increasing numbers of students they paid little attention to the social sciences. Even the Moral Science Tripos at Cambridge, which recognized these sciences more completely, failed to attract more than a handful of students because of its heavy philosophy requirements. Nor were these handicaps in the study of the social sciences eliminated by the creation of the Economics Tripos at Cambridge in 1903 or the Oxford Final Honours School of Philosophy, Politics and Economics in 1922. For, especially at Oxford, the preliminary examinations prior to final specialization involved so much attention to classics and either mathematics or logic that there was a strong temptation to continue in those fields rather than to attack what was virtually a new subject. Even today these disabilities of the social sciences have been but partially overcome.

Similar influences were at work in the other universities in Great Britain. The difficulty of persuading students to take the social sciences as subjects for an honors degree in arts or science, in the face of the usual enforced preliminary study of other subjects, ultimately resulted in the creation of special degrees in economics, commerce or administration in which the student concentrated for three years on various aspects of the social sciences. The creation of special degrees for the social sciences commenced in London in 1899, and most of the other universities, except Oxford and Cambridge, have now followed suit. Occasionally the sciences are not studied during undergraduate years but can be taken for a special diploma or certificate.

But the eventual embodiment of the social sciences in the university curricula and the removal of the requirement of a long preliminary study of the old established disciplines failed to overcome the greatest hindrance to their academic development, namely the tremendous and disproportionate prestige attaching to high honors in classics or mathematics. This extraordinary prestige of the older studies has been strengthened by the fact that university prizes, entrance scholarships and fellowships were long offered in these subjects alone. To study the social sciences was therefore to be doubly penalized: first, by selecting a field which had little academic status and, secondly, by being automatically barred from competing for public prizes. The efforts of enthusiastic benefactors in the last seventy years have failed to overcome the endowment of centuries and, except in London, the social sciences remain but poorly endowed in comparison with other branches of study. Consequently during the nineteenth century brilliant men rarely sacrificed their chances of distinction by embracing the study of the social sciences, and even today the best men, at least at Oxford and Cambridge, tend to specialize in

them only after they have achieved the desired distinction in the subjects that carry prestige.

Even the practical utility of some of the social sciences failed to stimulate their study. That a demand for men trained in the social sciences did not come in Great Britain, as it came elsewhere, from the legal profession and from the civil service, can be explained only by reference to traditional attitudes and historical accidents. Although in the thirteenth century Oxford was an important training center for lawyers, the gradual supersession of civil and canon law by common law in the centuries that followed caused the center of law teaching to shift from the universities to the schools of law attached to the courts in London. By the beginning of the nineteenth century the London schools had relinquished all teaching and the student of law acquired his knowledge empirically as a pupil in the offices of a practising lawyer. Despite the organization of teaching by the Incorporated Law Society (for solicitors) in 1833 and by the Council of Legal Education (for barristers) in 1852, both societies have adopted a narrow view of the training required for the profession. Not only has their own teaching been severely practical as a general rule, but they have also regarded the training given by the universities as altogether too theoretical to form a preparation for professional practise. Except for relatively unimportant and recent exceptions, they have refused to grant exemptions from their own examination and training requirements to holders of university degrees in law. Any development of the study of the wider aspects of law as a social science, rather than as a set of professional rules, has therefore taken place not because, but in spite of, the requirements of those who control entry to the profession. Even in Scotland, where famous schools of law existed in the eighteenth century, the two branches of the legal profession required attendance, if at all, merely at the more technical courses, and the audiences of the classes in Roman law or jurisprudence consisted largely of individual practising lawyers who took a more liberal view of their professional interests.

The British civil service tradition of the adaptable amateur administrator, who can be transferred if necessary from department to department, has created a demand for men with well-trained but not specialized minds. It is thus not a matter for surprise that until after the close of the World War individual social sciences were rated no higher than chemistry in the allocation of maximum marks to the various subjects of examination. Only with difficulty did the view prevail that a training in the social sciences might prove an especially appropriate preparation for much of the work of modern government departments. In 1909 and 1913 the Anthropological Institute urged the government to insist upon anthropological training for candidates for the Indian and colonial civil services, but no formal arrangements have ever been made, and the heavy native language requirements of their year of special training has prevented these officers from taking full advantage of the special courses provided for them at Oxford and Cambridge. The recently formed Institute of Public Administration is endeavoring to foster the conception of administration as a unique profession, requiring a special training in which the social sciences shall play a large part.

From the beginning of the twentieth century a new impetus to the study of the social sciences has come from a recognition on the part of an increasing number of employers of the advantages of working with men trained in these disciplines. Thus the Institute of Bankers requires bank clerks taking its examinations to attend courses in economics and banking. Attention is, however, concentrated upon the practical and legal aspects of the subjects. The examinations in the social science subjects held by the professional associations of accountants, actuaries or municipal officials approach the subjects from a similar standpoint. Of more significance has been the increased emphasis upon training in the social sciences as a preparation for commercial life, which was stimulated by a belief in Germany's success in training business men and by the reality of German competition. These views had as their outcome the establishment of faculties of commerce in a number of universities.

In the majority of the universities the commerce degrees have been educational and liberal rather than narrowly vocational in emphasis, and during the two or three years of specialized study the student covers some considerable part of the fields of economic theory, economic history and geography, public administration and theory of industrial organization, as well as more practical subjects such as statistics, accounting or commercial law. The greater part of the purely professional commercial training is provided by "colleges" operated as private enterprises or by evening institutes organized

by public authorities; these have little or no educational status and offer courses narrowly practical in emphasis. Partly, perhaps, because of the wide educational character of the Commerce degree, business men and bankers are still reluctant to afford graduates professional preference, thus diminishing the inducement to the potential student to undertake training.

Schools of social work, more or less closely connected with the universities, have been developed, since the beginning of the twentieth century, for the training of health workers, charity administrators and other social workers. At these schools, of which those in London, Liverpool, Edinburgh and Manchester are perhaps the most important, the elements of economics, statistics, government and social theory are imparted, while advanced courses are occasionally given.

The combined effect of all these influences—the long absence of a full time and adequately endowed teaching staff, the slowness with which the social sciences were formally incorporated into the normal university educational curricula, and the absence of any stimulus from professional quarters—has been to retard the development of social science teaching in the universities. The impetus to their study has always come from outside the universities—from enthusiastic individuals or from the learned societies. It is therefore to be expected that the largest and most comprehensive center for the study of the social sciences should have developed from a specialized institution which was originally outside the university world. The London School of Economics and Political Science, founded in 1895, is today the most important center in Great Britain for the teaching of the social sciences. With a permanent teaching staff of over seventy, representing specialists in all the social sciences; with about half as many occasional lecturers dealing with matters in which they are experts; with a regular student body of between eight and nine hundred sitting for degree examinations and a total student body of over two thousand, it is a symbol of the new importance that has attached to the social sciences in Great Britain since the war. In accordance with the school's claim that the social sciences are in themselves a liberal education, the three years course provided for the B. SC. (economics) degree is very broad. It is a degree in social science rather than in economics, and the newer chairs emphasize this orientation. Many of the courses at the school can be offered for degrees in arts or law. Influenced in part, no doubt, by its location in the administrative and financial center of the country, and by the practical interest of many of its faculty in concrete social problems, the school has stood for a realistic and more comprehensive treatment of the social sciences and has revolutionized their status as academic disciplines. Elsewhere the organization of social science teaching generally groups around one central degree: the Economics Tripos or the economics special subject in the B.A. at Cambridge, the Honour School of Philosophy, Politics and Economics at Oxford, the degrees in economics or commerce at the other universities. The Cambridge staff includes thirteen economists and seven other members—economic historians, a statistician and a political scientist—and for intellectual distinction ranks high among the universities of Europe.

Methods of teaching are not uniform. At Oxford and Cambridge attendance at lectures is not compulsory and their subject matter represents a compromise between the personal interests of the lecturers and the syllabus for the examination. The inadequacies of the lectures are supplemented by an elaborate tutorial system which affords the student an opportunity for discussion and for obtaining criticism and advice as to reading. In London and in most of the provincial universities students are required to attend a minimum of lectures, which generally cover in outline the field set out in the syllabus, give guidance in reading and supply contemporary material and criticism. The London School of Economics also offers a large number of lectures on special subjects at which attendance is optional. Students at the school are attached in their first year to an adviser of studies who fulfils some of the functions of the tutor at the older universities; while in their second and third year the work of the students is supervised by the professor in charge of the department in which they have elected to specialize.

The line of division between the discussion class and the lecture is in general quite rigidly drawn, and the main emphasis is laid upon the lectures (which are frequently followed or supplemented by discussion classes). At all universities the writing by undergraduates of essays which involve considerable individual research is an integral part of the educational system, although the standards of performance vary widely. The universities usually aim to avoid the

use of texts; they encourage students to read widely and to coordinate their knowledge in class or in personal conference with the teacher. In the smaller colleges, however, where the staffs are small in relation to the number of students and to the subjects to be taught, the use of texts is more common, although the number of texts of university grade is relatively small.

II. THE DISCIPLINES. In order to discuss the development of the teaching of individual social sciences it is necessary to make an arbitrary definition of the social sciences as a group and of the scope of each subject, although in fact the distinction between the subjects is vague and is becoming more so as lines of approach and emphasis are modified in response to new doctrines in neighboring fields. It is possible, however, to distinguish four main groups: economics (including banking and currency, public finance, commerce and industrial organization, as well as theoretical and applied economics); history as a social study; law; and sociology (including anthropology and political science, the latter embracing the practise and theory of government).

Economics is today the most widely taught of all the social sciences, and since it was the first to enter the academic field it bore the brunt of the resistance to social science teaching. It was taught with varying degrees of effectiveness in the Scottish universities in the eighteenth century as part of the ethics section of moral philosophy, but it was only from Adam Smith that it received comprehensive and systematic treatment. Smith's friend Millar continued the tradition in part and dealt with economic doctrines in his law classes from 1761 to 1801. At the beginning of the nineteenth century Dugald Stewart at Edinburgh and Mylne at Glasgow were delivering separate courses on political economy. By the time of the Scottish universities Commission of 1831 the subject was being studied at all the universities except Aberdeen, for its own sake and not for the light it threw upon man's duty to man. Yet the recommendations of the commission that there should be professorships in political economy at Edinburgh and Glasgow were not carried into effect until 1870 and 1896, although a special lectureship was created in Glasgow in 1892.

Elsewhere in Great Britain, superficially at least, the situation appeared even more promising at the beginning of the nineteenth century. Beeke and Symonds, the professors of modern history at Oxford and Cambridge, had introduced some discussion of economic doctrines into their lectures before 1810, and Malthus' appointment in 1805 as Professor of General History, Commerce and Finance at Haileybury, the East India Company's college, was followed in 1825 by Senior's appointment to the newly created Drummond Chair of Political Economy at Oxford. Meanwhile at Cambridge Pryme had delivered a course of lectures on economic theory from 1816, and was created an honorary professor in 1828. With the appointment of McCulloch in 1828 to a professorship in political economy at University College, London, of Richard Jones in 1831 at King's College, London, and of Longfield in 1832 to the new Whateley chair at Dublin, political economy seemed to have gained a secure foothold in the university system. But we have seen that the facts were otherwise. The lectures, usually limited to one course, frequently extended over only a part of the year and were but poorly attended; there was no opportunity for advanced work. Senior himself regarded the Oxford professorship as "rather for the purpose of occasioning books to be written than of affording oral instruction," and the same view seems to have been held by Whateley, Lloyd, Neate, Merivale, Twiss and other holders of the five-year chair. Although individual tutors occasionally lectured in the field, no second teaching appointment was made at Oxford until the creation in 1907 of an economic history lectureship (later a readership), to which a readership in economics was added in 1925. Both Thorold Rogers and Bonamy Price were active occupants of the Drummond chair, and in the eighties interest in economic subjects at Oxford revived, thanks partly to the personal enthusiasm of Toynbee. The treatment of economics at Oxford has been largely historical, in that emphasis is laid upon the study of past theories in relation to their historical setting, and teaching has been conditioned by the Oxford educational ideal to which reference has been made. Quantitative and statistical treatment of economics is almost entirely lacking and statistical material is but poorly represented in the Oxford libraries.

At Cambridge Pryme's lectures continued with occasional intermissions until 1863, when a paid professorship was created. Fawcett, as the first professor, delivered lectures which were classical in emphasis, and it was not until Marshall's appointment in 1885 that the influ-

ence of the work of European economists made itself felt in the teaching of economics. The change in emphasis was apparent at once; the scope of economics widened and the statistical and historical approaches were emphasized. As at Oxford, however, additions to the staff came but slowly. Lectureships in economics were created in 1896, 1904 and 1911, and in statistics in 1912. Nevertheless the scope of economics as taught at Cambridge is narrower than at London, especially in that less attention is given to the modifying influence of the other social sciences and much more time devoted to pure theory and to logical training. But Cambridge is, despite Edgeworth's long tenure of the Oxford chair, the most important center of mathematical and neoclassical economics in Great Britain.

In London the teaching of economics, which was suspended when McCulloch ceased teaching at University College, was resumed after Waley's appointment in 1853; but despite a succession of professors as able as Cairnes, Courtney, Jevons and Foxwell the subject, for reasons already indicated, failed to attract many students. After Jones' appointment as Malthus' successor at Haileybury in 1835 the teaching of economics ceased at King's College, London, for the professorship of principles and practise of commerce held by Joseph Lowe in 1831 seems to have been legal in emphasis. The Tooke professorship, created in 1859, like the Whateley professorship in Dublin, was remarkable rather for the quality of the men who held it (Thorold Rogers, Cunningham, Urwick, Hewins) than for the number of students attracted to lectures.

As already indicated, the real step forward in London began with the establishment of the London School of Economics in 1895 and the creation of a degree in economics in which economic theory was the central vitalizing principle. As the school has developed and the subject broadened out, professorships and readerships have been created to deal with such specialized topics as banking and currency theory, international trade, commerce and industrial organization; the emphasis, however, is on the essential unity of the study of the economic aspects of society. While under Cannan the approach to the advanced work in pure theory has been historical in emphasis, a course in the history of theory being the core of the work of the second and third years, Cannan's own skeptical common sense and interest in applied economics, together with the breadth of the curriculum and the emphasis upon the interaction of all the social sciences, which is so marked a feature of the school, have tended to develop a center of economics teaching which is institutional and historical as compared with Cambridge, and statistical and concrete as compared with Oxford.

In other universities developments have been slower. In 1894 when the British Association investigated the teaching of economics, lectureships in economics existed only in Bristol, Manchester, St. Andrews and Glasgow, although there had been professorships in Edinburgh and Liverpool since 1870 and 1891 respectively. At a few other colleges some teaching was given by professors of philosophy or history, but everywhere the treatment was narrow in scope and subordinate to other subjects. There were "little more than general opportunities for showing economic knowledge in examinations primarily devoted to other subjects," and an almost complete absence of advanced study. The growing interest in social problems that marked the turn of the century, together with the increased economic pressure of Germany and the extension of government activity, attracted greater attention to the study of economics. This change was materially assisted by the new and more liberal conception of the subject that was beginning to prevail as a result of the work of Marshall and Cliffe Leslie, and of the economic historians Cunningham and Ashley. Economics departed more markedly from philosophy and logic as the breadth of its scope and the subtlety and complexity of its doctrines came to be appreciated. These forces have led to the creation of departments of economics, commerce or administration, and since the war students have turned to economics in increasing numbers; nevertheless outside the three larger universities the degrees seldom attract as many as thirty students a year and, except at Liverpool, Manchester and Birmingham, the economics faculty in its widest interpretation rarely exceeds six or eight persons and is usually much smaller. The nature of the teaching is conditioned by the fact that the curricula of these colleges are largely based upon those at London, and until recently most of the teachers have been trained at Oxford and Cambridge. The approach to economic theory has therefore been in the main that of Marshall.

Unlike some of the other social sciences, history has been studied at the universities from the time of their foundation. The development

of history teaching, therefore, has been the story of the adoption of a broader view of the scope and content of the subject, and of its enrichment by the opening up of new sources of material during the nineteenth century and by the infiltration of influences from the other social sciences. Despite the existence of professorships in history, historical studies long remained closely connected with the classics. As late as the middle of the eighteenth century attention was focused mainly upon ancient history and textual commentary. Until 1886 history was regarded at Oxford as an easy discipline which had to be stiffened by an admixture of law. History textbooks, according to information furnished to the Commission of 1852, were written mainly by foreigners, frequently untranslated, while their superiority to native literature was declared "incontestable."

Furthermore, when in the latter half of the century history was elevated to the status of an honors subject and additional teachers were appointed, those selected favored a school of history which emphasized constitutional and political developments. This applied especially to Oxford, famous for its history department; there Stubbs, while reviving the study of English history and making available sources hitherto inaccessible, tended to narrow the view of the historian and this attitude received confirmation from his successor, Freeman. The unreliability of Buckle's brilliant work limited his influence in academic circles and, although the scope of history was widened under Kingsley and Seeley at Cambridge, Cunningham complained in 1898 that the study of social history "received little recognition in academic and scientific circles." Toward the end of the century, however, there was a marked increase in the number of teaching appointments, while the personal influence of such historians as Toynbee, Cunningham and Ashley who were keenly interested in economic history, and of such economists as Leslie and Rogers who desired to broaden the basis of economics, operated in favor of a new view of history. Since the beginning of the twentieth century economic and social history has attracted some of the most brilliant workers in the social sciences. At Birmingham under Ashley, at Manchester under Unwin, at Cambridge under Cunningham and Clapham, and at London under Knowles and Tawney, important schools of social history have developed; and courses in economic history are given at all universities. In the schools devoted solely to history, however, now very important numerically, the new history has developed side by side with the older constitutional or political history, but it enters only as one of several papers in the main history examination and has not as yet led to a new synthesis. The greatest developments of social and economic history have occurred in the schools preparing for degrees in commerce or economics.

Sociology found no place as a special subject of study in any of the universities until 1904, when Spencer's death stimulated the academic recognition of his favorite subject more than had his lifetime of agitation. At Edinburgh Geddes founded in 1892 a school of sociology which was not connected with the university and which sought a biological synthesis of social studies and applied the theories of Comte and Le Play to the study of civic evolution. This movement, largely outside the universities, has led to the foundation of various civic societies, and to the establishment of summer schools where the methods of Geddes have been applied to the study of the regions where the conferences have been held.

The first formal university course in sociology was given at the London School of Economics in 1904; in the same year the subject obtained recognition in the curriculum of the university, and in 1905 a second lectureship was established. In 1908 both lectureships were changed to professorships. Additional members have been appointed to the staff since 1918, especially in the allied fields of anthropology and ethnology and lectures have frequently been delivered by non-academic experts. Yet despite the offer of scholarships to promote its study the subject failed to attract many students, although the addition of the London School of Sociology in 1912, under the title of the Ratan Tata Department, stimulated the study of elementary sociology and led to further additions to the staff. Under Hobhouse at London the teaching of sociology has reflected his views as to its scope and content. Sociology has been the study of social institutions and behavior; sociologists have sought, on the one hand, a unifying principle coordinating the social sciences and, on the other, an evaluation of social development with a strong emphasis on social philosophy. This sociological approach has considerably influenced, and has been itself influenced by, the study of the closely allied subjects, political science and anthropology. Apart from the schools of social work already referred to, sociology outside of London can be studied as a

special discipline only at Liverpool, where a department of social science with three lecturers and a professor has existed since 1923. Independent lectureships in sociology have existed for short periods at St. Andrews and Aberdeen.

The Scottish professors lectured on aspects of political science in connection with the moral philosophy courses before 1800, and the study occasionally found its way into the classical studies at Oxford and Cambridge before 1850. Thereafter it secured a recognized, though minor, place in the various honors schools; but although occasional lectures were given by interested Fellows, the study was not seriously pursued, and to this day the absence of standard and comprehensive works has hindered its development. At Oxford where a readership created in 1910 was made a professorship in 1912, and at Cambridge where a professorship was created in 1927, attention has centered in political theories and their development. Political science has been studied at the London School since the second year of its existence. A professorship in public administration was created in 1913 and in political science in 1915. There is today a considerable staff, and many students offer public administration as their main subject for the honors degree. The teaching covers both the development of political ideas and a study of the practical operation of political and administrative institutions. In these later aspects the study has been influenced by the work of the Webbs, and by the psychological approach of Wallas, whose *Human Nature in Politics* and *The Great Society* suggested new and fruitful methods of attack. Elsewhere the subject, if treated at all, is taught by a special lecturer or by the professor of philosophy.

Psychology, although established in the academic field by the beginning of the twentieth century, has claimed affinity with the natural rather than with the social sciences. Through the work of McDougall, Ginsberg and, for a tragically brief time, Rivers, it has considerably influenced the social sciences, although the implications of the newer psychology have had less influence on economics in England than in other countries. The recently established department of industrial psychology at Manchester, however, promises important developments.

In the latter half of the eighteenth century Millar of Glasgow had lectured and written on anthropological subjects, and at Edinburgh the professor of civil law had touched upon the field in the early years of the nineteenth century. Nevertheless the efforts of the Royal Anthropological Institute and its two parent societies failed to obtain explicit academic recognition for anthropology until 1884, when Tylor was appointed reader at Oxford. Interest in this subject was first aroused in the universities by the professors of anatomy and of archaeology. Among the former Rolleston of Oxford prepared the way for Tylor, and McClelland at Cambridge delivered lectures in physical anthropology in 1884. Among the archaeologists Ridgeway in particular enriched the study of archaeology from 1882 by introducing anthropological methods and concepts, and by focusing interest in the subject by the formation of the University Anthropology Club in 1896. A lectureship in physical anthropology was created at Cambridge in 1893, and additions to the staff have since been made at both universities. Central boards of studies were created in 1904 to coordinate the work of the specialists whose lectures impinged on anthropological fields. An Anthropology Tripos was established at Cambridge in 1913, but has seldom attracted more than one or two students. Great stress is laid at Cambridge on field work of graduate status. At Oxford, except for an occasional student who may offer it as an additional subject in the Honours School of Natural Science, the study of anthropology is confined to graduates who may offer the subject for the B. LITT., B. SC. or PH. D. degrees. Efforts are made, however, to offer courses covering all aspects of the subject. In London anthropology has been taught in connection with sociology since 1904, and is now well recognized in the examination syllabi. It has gained considerably in popularity since 1918, and the teaching staff has been strengthened by the addition of workers in social anthropology. The main centers are University College (for physical and cultural anthropology and archaeology) and the London School of Economics (for ethnology and cultural anthropology), while physical anthropology is studied at King's College. Courses in ethnological subjects are delivered at the Imperial Institute and at the School of Oriental Studies. More coordination among the teaching groups is needed, and the subject, especially in the undergraduate courses, so far has failed to attract many students.

The British Association endeavored in 1900, and again in 1913 and 1923, to promote the academic study of anthropology. Yet except in the three larger universities, and at Liverpool, where courses have been developed in connec-

tion with the University Institute of Archaeology, and at the University of Wales, where anthropology is an important part of the honors course in geography, anthropology scarcely enters the teaching field. The teaching of geography is, however, being broadened to include some study of ethnology, and lectures in physical anthropology are given by the professors of anatomy in at least four colleges, although as a rule they are not compulsory. There is no doubt, however, that methods and results of anthropological studies are beginning to influence the teaching of other social sciences, especially sociology and economics.

It has already been suggested that law has in the main failed to receive attention as a social science in Great Britain because of the attitude of its professional organization and the educational theories held by the older universities. Chairs in civil law were established at Oxford and Cambridge in 1546 and 1540, and in English Law in 1758 and 1800. Nevertheless the Royal Commission of 1852 was informed that the Oxford professorship of English law was "a sinecure and a sham," and that the Regius professor of civil law had not lectured for more than a century. At Cambridge the situation was little better, and law was studied largely as an alternative to other subjects considered to be more difficult. The most comprehensive teaching was in Scotland, especially at Edinburgh and for a time at Glasgow, but the Commission of 1831 regretted the fact that law was not studied "as a liberal and enlightened subject." In the middle of the century Trinity College, Dublin, was an outstanding exception to the general decadence of law teaching. A series of investigations in England, a House of Commons inquiry in 1846, inquiries by the London University Commissions of 1895 and 1913, and deputations and discussions by the National Association for the Promotion of Social Science, all failed to stimulate the teaching of law in its wider aspects. Proposals for the establishment of a great law college in London, made intermittently since the middle of the nineteenth century, have all proved abortive because of the opposition of interested parties. Meanwhile the law staffs have been increased at the universities, especially in the fields of jurisprudence (beginning with Austin's appointment to the chair at University College, London, in 1828), Indian law, international law and commercial law, the initiative in all cases coming from the London colleges. The newly formed universities began to develop law departments at the end of the nineteenth century. The movement was accelerated by the passage of the Solicitors Act of 1922, but for financial reasons the schools have been mainly professional.

The legal teaching controlled by the professional organizations is in the hands of lecturers the majority of whom are barristers, although some are members of university staffs. But the study of law as a subject for honors or for advanced degrees is growing in favor in the three larger universities. Undergraduate teaching is dominated by the desire to make the degree the vehicle for a liberal education. The fourth year (for a higher degree) aims definitely to provide professional training. Teaching methods have not changed noticeably. Occasional use is made of the case method in a modified form, but with no consciousness of any epoch making departure from traditional teaching technique.

The study of law has, however, been much enriched by the influence of Maine, Maitland and Vinogradoff. If Maine broadened the basis of the study of law by linking it with an analysis of historical developments, Maitland revealed the potentialities of legal sources for advanced historical studies. Vinogradoff not only developed both fields but also united them with the broader study of social development. Unfortunately the preoccupation of the older universities with undergraduate teaching prevented any of the three men from developing great new schools of legal research. They have introduced a study of historical development into the teaching of law, but the philosophical and sociological aspects of the subject remain relatively neglected. Some progress may be expected in the future from London, where the three large colleges have taken steps to coordinate their teaching, while the London School of Economics is showing a distinct tendency to direct attention to the importance of the study of law as an integral part of the study of society.

III. THE PRE-UNIVERSITY SCHOOLS. The introduction of the social sciences into the pre-university educational system has been extremely tardy, owing partly to the slow progress of public education and partly to the sharp line drawn in the nineteenth century between primary and all other education. Since the primary schools were intended to meet the needs of a class which would obtain no other education and which would attend for but a short period, attention was concentrated upon imparting the

rudiments of reading, writing, grammar and arithmetic, with possibly a very little history. The teaching at the non-primary schools was dominated by the requirements of universities which, as we have seen, emphasized classical or mathematical studies.

From 1840 onward William Ellis began teaching social economy in the primary schools of London, and even founded schools on condition that the subject be taught. He also wrote several popular texts. In 1871, when a deputation from the National Association for the Promotion of Social Sciences urged upon the Educational Committee of the Privy Council the teaching of economics in schools under public inspection, it pointed to the work of Ellis and his followers in various parts of the country as evidence that it was possible to teach the subject to young people with success. The committee, however, although willing to recognize the subject when taught competently, preferred that the initiative in its introduction should come from the schools or from the enthusiasm of individual inspectors. Jevons took advantage of this opportunity to secure the introduction of the teaching of political economy into some of the schools in the Manchester district. Although some impetus was given to its study in grammar, high, and secondary schools by the inclusion of political economy as an optional subject in the Oxford and Cambridge local examinations, by 1900 the subject had made little progress in these schools and none at all in the elementary schools.

Political economy is taught today, if at all, mainly in connection with history, itself a somewhat neglected subject. The character of the teaching of history in the schools during most of the nineteenth century called forth the gibe that it "combined the respective disadvantages of the multiplication table and the Newgate Calendar," and not until after Green's *Short History of England* in 1874 had indicated a method, and Traill's editorship of *Social England* between 1893 and 1897 had supplied material, was new emphasis introduced. Recent years have witnessed a movement to teach more social and contemporary history, but the new textbooks have not yet conquered the field. Recently the teaching of geography has been broadened to allow emphasis upon human and historical geography, a change in which the influence of the ethnologist and sociologist is evident. A new impetus to the study of political economy and economic history may be expected from the recent inclusion of economics as an alternative to science or Latin in the senior schools and the London matriculation examination for which pupils are prepared all over the country.

To encourage the teaching of civics has been the object of the Civic and Moral Education League (formed in 1898 as the Moral Education League) and, from 1920 onward, of a special committee of the British Association. In the public elementary schools some indirect attention is paid to what might be regarded as civics in connection with lessons in history and in health, and some specific training in civics is given in individual secondary schools. Opinions as to its utility, however, differ widely. The number of textbooks on civics is large, but the problem of devising a course which shall avoid both details of government administration and civic duties, and moral maxims and patriotic exhortations, is not yet solved.

IV. POPULAR INTEREST. Popular interest in the social sciences has fluctuated in both intensity and direction. At the beginning of the nineteenth century economics was a popular fad. This situation was due in part to the industrial changes of the time and to the war, both of which were raising acute economic problems, and in part to the publication, following upon Smith's *Wealth of Nations*, of a series of books which for the first time gave promise of a science of economics. The sequel is evident in the enormous popularity of such expositions as Mrs. Marcet's *Conversations* and Harriet Martineau's *Tales in Political Economy*, and in more educated circles in the space devoted to social and economic discussions in such journals as the *Edinburgh* and *Quarterly* reviews. In the middle of the century contemporary interest concentrated upon the origin of man and resulted in a great increase in the popularity of ethnology and anthropology. With the publication of Darwin's *Origin of Species* in 1859 public interest reached its peak and thereafter declined. In the last quarter of the century public interest in the social sciences was at a low ebb. But Spencer's work achieved considerable popularity from time to time, and there was sufficient interest in a vague and semi-philanthropical social science to attract the exploitative activities of founders of popular sociological journals which seldom had a long career. Ruskin's lectures and addresses confirmed the prevailing conception of economics as harsh and unrealistic without offering

any positive substitute. The twentieth century brought a marked change. The problem of poverty became of pressing importance, and the development of a political labor party revived interest in the social sciences to such a degree that they are today probably more popular than any other branch of study.

Newspapers and popular periodicals of every creed and party have always been used to influence public opinion on the issues of the day. However, the smallness of the book reading public and the high cost of printed matter of necessity directed the efforts of the promoters of the popular study of the social sciences toward securing a forum from which lectures could be delivered. This need was partly met by a spontaneous movement from the public. Mechanics institutes were established after 1823, and numerous literary and philosophical societies supported by a somewhat higher social class sprang up all over the country, particularly in the middle third of the century. From 1853 the cooperative societies devoted a portion of their funds to education. From 1873 the universities began to offer extension lectures, and the Workers' Education Association, founded in 1903, also provided centers at which lectures could be given and discussions initiated. Despite the closeness of the relation between cooperative theory and economics, the regular classes in the social sciences, organized by the cooperatives from 1897 onwards, have been relatively unpopular, although there is a growing interest in industrial history. Until 1900 very few lectures on social science topics were given under the auspices of the university extension movement, but in recent years their number has increased relatively to all other subjects. The first classes in economics given by the Workers' Education Association in 1908 attracted students fewer in number than those attending other subjects, but whose desire to pursue the study more intensively led to the ultimate development of the tutorial class system. Such classes in the social sciences, frequently extending over three years, form over fifty percent of all courses organized by the Workers' Education Association. The proportion is considerably greater in the courses under the auspices of the less important, class conscious National Council of Labour Colleges which broke away from the Workers' Education Association in 1909.

Popular interest in the study of the social sciences has often been stimulated by political or partisan bodies. Of these the most important have been the Anti-Corn Law League, the Cobden Club and the Fabian Society. The former provided lecturers during the forties to teach political economy (with of course a free trade bias) to vast audiences all over the country. In 1843 alone the league distributed a million tracts through a staff of eight hundred persons. In 1866 the Cobden Club, animated by a similar interest in free trade, organized lectures, arranged for the publication in cheap form of economic works which advocated their principles, and from 1874 onward offered prizes for essays on economic subjects to students attending the universities and university extension courses. These prizes are still offered, although the other activities of the club have become unimportant. From 1884 the Fabian Society has diffused an interest in the study of the social sciences reaching far beyond its own membership through the publication of cheap *Fabian Tracts*, by holding public meetings and by providing lectures. More recently social questions have been studied by conferences and summer schools under the auspices of the different political parties.

The social sciences have been peculiarly fortunate in attracting the interest of men with an almost fanatical belief in the importance of promoting the study of their favorite science: McCulloch, who delivered lectures in Edinburgh and London and was an active publicist; Lord Brougham, who formed societies and financed the delivery of lectures and the publication of literature; Ellis, who founded schools and delivered lectures in various parts of the country; Hunt, the energetic founder of the Anthropology Society who delivered lectures everywhere and published magazines at his own expense; Spencer, the latter part of whose life was a constant plea for the study of sociology. The learned societies, too, have played their part, especially anthropological, ethnological and sociological societies. One of the most important achievements of the National Association for the Promotion of Social Science was its success in popularizing and extending the interest in the social sciences, especially in the localities in which its annual conferences were held. Universities and special benefactions have provided from time to time for such permanent lecture foundations as the Barrington, Gifford, Stevenson, Newmarch, or special public lectures which deal with the social sciences. Still more recently lectures in these subjects, delivered by well known experts, have been among the more pop-

ular of the educational courses included in the programs broadcast by radio.

V. THE LEARNED SOCIETIES. In the absence of any lead from the universities the learned societies played a unique part in promoting the study of the social sciences in the nineteenth century. For the greater part of the period they provided the only center where specialists could meet, and not only supplied a platform for the reading and discussion of papers and usually a medium of publication, but also pressed the claims of their sciences on all occasions, and agitated to secure for them greater academic recognition. Most of the teachers of the social sciences were members of one or more of these societies, and new teaching appointments were frequently made from among the more prominent members.

Of the large number of relatively small discussion groups and clubs (such as the Trijackea, the Utilitarian Society and the Edinburgh Speculative Society) which flourished in the first quarter of the nineteenth century and which were attended mainly by the Benthamite radicals or the so-called classical economists, only the Political Economy Club survives. This famous society was founded in 1821 by Tooke with the object of "promoting the knowledge of political economy" ; members were to regard "their own mutual instruction and the diffusion among others of just principles of political economy as a real and important obligation." Its small and limited membership, which originally included Ricardo, Malthus, Senior, McCulloch and Whately, consisted mainly of business men, politicians and public officials, but certain professors were later made members *ex officio*. Although in the century of its existence its members have included most of the chancellors of the exchequer and many well known public characters and prominent economists, the club has been famous rather than important. The quality of its debates has not always been maintained, and its limited membership and the absence of organized publicity have prevented it from playing a large part in the promotion of the study of economics outside its own ranks.

The discussions at the club, however, provide in miniature a history of the development of economics during the century. Holding a firm belief in the existence of "sound political economy" the club at first confined itself to the settlement of debated points of theory and the search for agreed and final definitions, and often disposed of as many as three issues in one evening. In the third quarter of the century the club became more interested in concrete problems; although doubts as to the invincible wisdom of laissez-faire began to obtrude themselves, it was still assumed that "whatever is in accord with the laws of political economy is necessarily right and proper and vice versa." In later years elaborate papers occupying the whole evening have come to take the place of the less formal discussions between members, so that "the provinces of the Statistical Society and the Political Economy Club tend to become confused."

Three statistical societies exist in Great Britain. The oldest, the Statistical Society of Manchester, was formed in 1833 and at first worked through committees which collected material and rendered reports on social conditions. These were at first published separately, but since 1853 have been included in a *Journal*. The majority of papers have been statistical or theoretical treatments of particular economic or social problems. Very few papers have been devoted to statistical technique, and in this respect the character of the society is unchanged today and closely resembles that of the more important Statistical Society of London. This latter society, which was formed in 1834 with a membership that included Malthus, Babbage, Richard Jones, Tooke, Senior and Whewell, was originally divided into four great sections: political, economical, medical, and moral and intellectual. The *Journal*, which continues at the present time, was first published in 1838. Fear of political entanglements led the society until 1857 to exclude discussion of causes and effects from its field and to concentrate on the collection of facts. Of recent years more attention has been paid to methods and technique, with which about a third of the printed papers are now concerned, but a detailed report on some statistical investigation more frequently affords the basis of discussion at general meetings. Committees of the society have been appointed from time to time to deal with specific problems such as the taking of the census, or to report on housing, strikes or education. In 1927 a proposal was made for less formal meetings at which junior members of the society could discuss developments of interest to the science as a whole.

A more general interest in social questions has characterized the Statistical Society of Dublin, formed in 1847 through the efforts of Hancock, at that time Whately professor. Its object

was to "promote the study of statistical and economical knowledge," and the papers read at its meetings were printed at first separately but from 1855 onward in the society's *Journal*. A Social Inquiry Society was formed under its auspices in 1850. In 1862 the parent society was itself reorganized on the lines of the National Association for the Promotion of Social Science which had visited Dublin in the previous year, and its name was changed to the Statistical and Social Inquiry Society of Ireland. Prizes were offered for investigations into special subjects, and in 1875 a special Charity Organization Committee issued a series of important reports. In addition to the activities of its subcommittees and its efforts to build up a library, the society holds monthly meetings at which papers are read. In 1851 a branch society was formed in Belfast.

In 1832 the British Association created with some misgivings a section for statistics, with interests in early years closely resembling those of the Statistical Society. Gradually, however, papers on economic and social topics predominated, and in 1864 the section became Section F (Economic Science and Statistics). Papers have since been of two kinds: reports on the social and economic conditions of the district in which the meeting for the year was held, and papers, mainly descriptive, dealing with special topics of contemporary interest in the field of economics. Singularly little attention has been paid to problems of method and technique, and although occasional presidential addresses have endeavored to give a synthetic view of the state of the science or to suggest outstanding problems, little has been done to give unity to the discussions at different meetings. Papers continue to reflect the particular bent of individuals.

The Royal Economic Society, founded in 1890, has a large membership but is mainly a publishing society, and very few meetings have ever been held. Its *Economic Journal*, published quarterly, is, however, the most important economic publication in Great Britain, and more recently it has subsidized the publication of books. The Christian Social Union, which existed from 1890 to 1914, published leaflets and arranged lectures. Its journal, the *Economic Review*, was not only the first economic quarterly but also maintained a high scholastic standard and represented all shades of opinion. The study of economics has been promoted by other societies such as the London Economic Club, small private societies at Oxford and Cambridge, and the Scottish Society of Economists (formed in 1897). The Association of Teachers of Economics, formed in 1924, has tended to give prominence to papers on special topics in which readers have carried out research, at the expense of discussions on teaching and the problems of the science as a whole.

Anthropologists have always been active in their learned societies. The Anthropology Section (H) of the British Association, created in 1884 as the result of long agitation by anthropologists, has been one of the most active units of the association and has, unlike the Economics Section, made extensive use of the committee system provided by the association for the purpose of dealing with matters of interest to the science as a whole. The Ethnological Society, formed in 1844, had a checkered career, but did valuable work in bringing together the few individuals who were interested in the subject. Its timidity in entering controversial fields and its deductive methodology led James Hunt, an ardent but not always wise anthropologist, to break away and form a rival Anthropological Society, which did much to broaden the study of the science in Great Britain by the translation and publication of works by foreign anthropologists. Until 1871 when, after the death of Hunt, Huxley was instrumental in achieving the amalgamation of the two societies to form the Anthropological Institute, anthropological study was hindered by disputes between the two groups concerning the origin of man, which came to a crisis over the Governor Eyre prosecution. Since 1871 a more sober and scientific atmosphere has prevailed.

All three groups had published journals which provided for the publication of research and the diffusion of a knowledge of the work done at home and abroad. The *Journal* of the institute is its main organ, and *Man*, a publication dealing with current literature and containing short contributions from field workers, has been published since 1901. For many years the scope of the science troubled the institute, and successive presidential addresses offered definitions of the field and rejected those of their predecessors. Of the large number of papers read and published during the last fifty years, those on physical or anatomical anthropology and on archaeology have gradually ceded place in numbers to papers on cultural and social anthropology. Contributions of varying quality are made also by the Folk Lore Society (founded in 1874),

the Royal Archaeological Institute of Great Britain, the Society of Antiquaries in London and numerous local archaeological societies.

The National Association for the Promotion of Social Science, founded in 1857, emphasized for nearly thirty years, in its annual congresses and weekly meetings and subcommittees, the importance of a study of the social sciences. Among its large and active membership were numbered many of the leading jurists—including Westlake, Harcourt and Levi—and most of the academic economists of the period. J. S. Mill, Fawcett, Jevons, Newmarch, Farr and Chadwick were among the members of the executive committee, which also included some seventy to eighty members of Parliament, a fact which enabled the association to give legislative effect to many of its proposals. The association published an annual volume of *Transactions* and occasional special reports. The object of the association was to afford those engaged in the numerous reform activities of the time "an opportunity for considering social economics as a great whole." Brougham and his optimistic cofounders believed that the association would be the means of discovering the "moral laws of the universe," which were "no less uniform, less simple and less secure" than the physical laws studied by the British Association. And yet despite its emphatic "belief in the unity of the social sciences" the greatest work of the association was accomplished precisely when it departed from its original aims. From the first the scope of the field to be covered led to a division into five sections, ultimately reduced to four: jurisprudence and amendment of the law, education, health, and economy and trade. The division was inevitable if advanced work was to be done, but certain to obstruct the desired synthesis of the social sciences. The addresses of the presidents of the sections at the annual congresses furnished no great measure of coordination, and in fact the sections went their individual ways. Especially noteworthy was the work of the section on jurisprudence, which amalgamated in 1863 with the Law Amendment Society, itself founded in 1844. It was directly responsible for many of the numerous coordinating and simplifying legal measures enacted between 1860 and 1885. Above all it stimulated many discussions by active lawyers as to the purpose of law and the relation of content to form, and led to a renewed interest in jurisprudence and, by virtue of Westlake's activity, in international law.

The scholastic achievements of the other sections were less significant. If those dealing with education and public health on the whole avoided deep speculative waters, it was because they found much practical work at hand; but even so the papers at the sessions contain valuable material on the social condition of Great Britain at the time. The economics section, producing less spectacular concrete results, was responsible for a series of valuable papers and reports on economic conditions, whose descriptive nature and reformist bias supplied a much needed balance, and allayed the prevailing suspicions in regard to the compatibility of economic theory and practical reform.

More lasting stimulus to the study of sociology, however, came from the Sociological Society, formed in 1903 in order to bring together the students of the individual social sciences "to set forth the unity of the social world and to organize more effective cooperation." A minority of the members were specialists engaged in research, but the majority were persons with general interests, or practical workers who encountered sociological problems in their daily work. The society published three volumes of *Papers*, replaced in 1908 by the quarterly *Sociological Review*, in which papers read at the meetings were discussed. From time to time groups of members formed special committees to consider particular problems. The earlier discussions centering around the objects and scope of the science attracted attention both abroad and at home, and did much to remove popular misconceptions as to the meaning of sociology. Later, as a diversity of subjects appeared in the discussions, the society operated rather to broaden the views of specialists in their own fields than to develop a new synthetic science. A cleavage between the views of the groups led respectively by Geddes and Hobhouse left the former group predominant in the society, and since about 1914 the *Review* has mainly reflected its interests. The influence of this group was further strengthened by the foundation by two of its members of the Le Play House Trust in 1920, which facilitated the correlation of work in the field of civic surveys and also made possible the collection of materials and exhibits.

Shortly after the war the Sociology Club, under the leadership of Hobhouse, was formed at the London School of Economics with the object of coordinating the work of students in the fields of the social sciences. The club meets

two or three times a term but publishes no records of its proceedings.

Until 1886 all efforts to found a historical review met with rebuffs from publishers. The Royal Historical Society, which in 1868 was formed to promote the study of history, was for long composed mainly of amateurs. From 1886, however, the quarterly *English Historical Review* has been issued, which publishes researches on specialized topics in the field of political and administrative history. The Historical Association, founded in 1906, is more popular in appeal, and has a large membership with numerous local branches. Interested mainly in the study and teaching of history, it maintains a library, has annual meetings at which papers are read, publishes bibliographies and, since 1916, a quarterly, *History*. The society has done much to broaden the teaching of history.

In 1927 the Economic History Society was formed to promote the study and teaching of economic history. Its membership consists largely of teachers of the subject, whose interests it aims to promote. It publishes an annual volume embodying the results of research by individual members. Other historical publications which deal from time to time with history as a social science are the *Scottish Historical Review* and the newly formed *Cambridge Historical Journal*. Since 1926 the Royal Economic Society has published an additional annual volume devoted to contributions to economic history.

Mention has already been made of the activities of the Incorporated Law Society and the Council of Legal Education. Several other societies exist or have existed to promote the study of law. The Legal Education Association was formed in 1870 to improve the study of law and to secure the creation of a law university in London. Failing in this latter aim, the society handed over its funds to the Law Society in 1901 after having accomplished useful work in directing attention to the importance of reform in legal education. In 1889 the Scottish Juridical Society, formed several years earlier, commenced the publication of the *Juridical Review*, which has consistently emphasized the closeness of the connection between political science and jurisprudence. The Society of Comparative Legislation, formed in 1894 to apply the comparative method to jurisprudence, has published from 1896 onwards the important *Journal of Comparative Legislation and International Law*. The Society of Public Teachers of Law, formed in 1908, is of more interest to the student of social science teaching. It has done excellent work in improving the quality of teaching and in broadening the syllabi. Papers are read at annual meetings and since 1924 a *Journal* has been published. Occasionally committees are formed to investigate special subjects. The Society of Commercial and Industrial Law, formed in 1921 by teachers in these fields, is of minor importance. The most important English law journal is the *Law Quarterly Review*, first published in 1885 under the editorship of Pollock. It contains technical legal articles, notes on current cases and book reviews.

VI. RESEARCH. Special training for research in the social sciences has developed but slowly in Great Britain, even since the war. Not only has research generally been regarded as the pastime of the enthusiastic individual, but it has been assumed that a thorough undergraduate training without further supplementation qualified a man for research. The universities have been slow to admit the necessity for a training too technical for inclusion in undergraduate courses. Even in the London School of Economics which, founded as it was under the influence of Sidney and Beatrice Webb, in its early program emphasized the importance of research technique, the teaching work is still organized primarily to meet the needs of undergraduates. As in other universities, the professors have a relatively large number of undergraduate courses and the methods of research training have not been clearly worked out. The school differs from most of the other universities in the large number of specialists in the social sciences on its staff, and in the attention paid to research seminars in individual subjects. Elsewhere, with such outstanding exceptions as the work of Tout in the Manchester History School and of Vinogradoff in jurisprudence at Oxford, the seminar has been little used as a method of graduate training.

Some research training within the universities is provided by the Galton Laboratory for National Eugenics, which publishes the *Annals of Eugenics*, and by the Biometric Laboratory, which publishes *Biometrica*, both at University College, London. In another field the Institute of Historical Research is an important center for study and training, although it has little concern with the broader aspects of history.

Quite as apparent as the lack of specific training for research has been the need for coordination of whatever research is carried on. The

learned societies might have promoted the discussion of common problems among experts, but they have not been greatly concerned with methods or techniques. The overlapping and confusion have been somewhat diminished, however, by the concentration of work in the social sciences at the London School of Economics, which has attracted more than seventy percent of all research students. In 1928 a Social Science Research Training Committee was set up in London to encourage the scientific development of economics and sociology, and "to secure the advantages of interchangeability and comparability in the results of research work" at the different universities. It is significant of a new emphasis that the committee in awarding scholarships for research will pay more attention to the methodological potentialities of the problem chosen for investigation than to any intrinsic importance in the subject itself.

Although inducements for research in the social sciences have increased since 1918, particularly in the generous traveling research fellowship and in the direct grants to British universities by the Laura Spelman Rockefeller Foundation, the relative financial poverty of the social sciences still affects seriously the volume and nature of advanced research. It has been reflected in the slight development of institutes for corporate research. Occasionally universities have organized cooperative programs, and groups of individuals have undertaken such work as the Cambridge histories. The more active of the learned societies have from time to time appointed committees for research in particular problems, but large endowed research institutes do not exist.

There are, however, some beginnings of corporate research. In 1923 a Railway Bureau was established at the London School of Economics to conduct research into railway problems. The London and Cambridge Economic Service, instituted in 1923 and supported by contributing firms, although it has only one full time editor and relies upon the teaching staff of the universities for material, issues monthly and quarterly publications and occasional memoranda on special economic subjects. The important Institute of Agricultural Economics at Oxford conducts research and publishes memoranda. The National Institute of Industrial Psychology, which is partially self-supporting, was incorporated in 1921. With a staff of psychologists, psychiatrists, economists and medical men it undertakes scientific investigation into industrial fatigue, vocational guidance and industrial planning and organization so far as they affect the worker. Occasionally it cooperates with the Industrial Fatigue Research Board and other government departments. Recently various government departments, particularly the Ministries of Agriculture and Labour, have begun to establish research divisions. Some measure of corporate research is also to be expected in the future from the Royal Institute of International Affairs and from the rapidly expanding department of international affairs at the London School of Economics.

Research in the social sciences is still limited by the paucity of equipment, a further reflection of financial poverty. Mechanical statistical devices are few in number and frequently primitive in kind. While the older universities, the British Museum, the Record Office and the law societies possess rich historical and legal libraries, there is a general lack of contemporary and statistical material and of foreign works. More recently the excessively high prices charged for official publications have further limited the purchase by university libraries of essential source material. The learned societies have made the collection of a library one of their main objectives, and the Statistical Society has frequently suggested improvements in the collection and presentation of statistics by the government. At present important collections of physical anthropological material exist at many of the universities, but the famous Pitt Rivers Collection at Oxford was originally a private collection, and for many years the Anthropological Institute stressed with little success the importance of adequate museums. Until the foundation of the British Library of Political and Economic Science at the London School in 1895 there was no complete collection of literature relating to the administrative authorities of the country. But since the eighties of the last century the British Museum collections have been enlarged and rendered more accessible; and the availability of the rich resources of the many private and public libraries of London will be greatly increased after the publication of the comprehensive London *Bibliography of the Social Sciences*.

VII. CONCLUSION. There is ample evidence that the long fight of the social sciences for academic recognition is to have a triumphant conclusion. The prejudice against them is dis-

appearing, while the events of the post-war years have directed attention to the pressing importance of social problems of all kinds. That this increased interest in the social sciences is not confined merely to those of practical importance, such as economics, is indicated by the recent foundation of the important British Institute of Philosophical Studies.

Since the war there have been at all the universities marked increases in the social science teaching staffs and in the numbers of students; subjects are being given more prominence in the curricula for first degrees. The success of the London School of Economics will do much to stimulate the popularity of the social sciences as an academic discipline by providing a richly endowed center where all aspects of the field can be studied. The great increase in the numbers of students taking training in research or offering the social sciences for higher degrees is a reflection of the slowly growing awareness of the importance of research technique. Work in the social sciences is coming to be less and less the hobby of the interested amateur. With this changed attitude there is likely to be a change in the relative importance of the learned societies which were of such significance in the nineteenth century. Now that the universities provide centers where interested individuals may meet those working in similar fields, one of the older functions of the societies has disappeared. They are likely in the future to concern themselves more positively with the organization and coordination of research on a larger scale. And although the question of finance is still crucial, there is likely to be a further development of corporate research, organized either by the universities or the societies or by newly created coordinating bodies.

E. M. BURNS

Consult: Universities of Scotland Commission Report, in Great Britain, Parliament, *Sessional Papers 1831* (London 1831) vol. xii, p. 111–547; Great Britain, Oxford University Commission, *Report* (London 1852); Great Britain, Cambridge University Commission, *Report*, 2 vols. (London 1852–53). Little has been written specifically on the teaching of the social sciences in Great Britain. However, the reader may consult: British Association for the Advancement of Science, *Report of Meetings*, vol. lxiv (1894) 365–91, vol. lxxxiv (1914) 235–36 and vol. xci (1923) 417–21 (reports on the teaching of economics and anthropology); Society of Public Teachers of Law, *Journal*, vol. i– (1924–); *History*, vol. i– (1912–); and proceedings of the various learned societies as well as the lives of some of the more important teachers of the social sciences.

II

France, Belgium and Romanic Switzerland

I. A history of the social sciences in France would be incomplete if it neglected the whole period preceding the nineteenth century. One need not go back to the Middle Ages, in which one could nevertheless, without forcing the terms, consider as "social sciences" the teaching of the Glossators and especially of the post-Glossators (Bartolus and his disciples) and of the founders of the canon law. The century of the Renaissance and the Reformation without doubt witnessed the flowering of works that brought social problems down from heaven to earth and formulated them in positive terms. It is chiefly in the matter of public and of international law that this change in orientation is significant. To grasp it, all that is necessary is to recall, in connection with the first of these disciplines, the name of Bodin, and, in connection with the second, that of Grotius, whose influence was considerable in France, as in all of occidental Europe. But economic phenomena themselves profited by this great intellectual ferment, and it is not without reason that, before Adam Smith, Montchrétien could be called the father of political economy.

If any generalization is suggested by the examination of the social sciences in their historic evolution, it is surely that they cannot live and flourish except in a relatively liberal medium. All progress in social science (private law, perhaps, excepted) exacts as a necessary preliminary the right to criticize existing institutions, and that right is the very thing which authoritarian and absolutistic regimes generally deny. It is not surprising that the seventeenth century saw scarcely any development of the social sciences in France, either in teaching or in theoretical writing.

The great movement of intellectual and social reform which characterized the following century concentrated on two points—the struggle against the church and the recasting of institutions in the direction of democracy. This is not the place to describe the part played by each of its promoters—Montesquieu, Voltaire, Rousseau, Turgot, Condorcet, Diderot, d'Alembert and the *encyclopédistes*—but it should be noted that their influence, however powerful it may have been, was indirect. Their invaluable service lies in having drawn public attention to questions of a political and economic order, in having emphasized their importance, in having considered them as possible objects of a positive science. On the other hand the new regime instituted in the wake of the revolution gave prominence to these questions in its program of instruction. Indeed the instruction reserved for the social sciences during the post-revolutionary period was more practical than scientific, in the sense that it had the training of future administrators in view and was largely inspired by the example of Germany, where the study of the so-called "cameral" sciences was customary. It is none the less true that a new taste for the social sciences was asserting itself in France as elsewhere. In support of this statement need only be mentioned two important creations on the part of the Convention, that of a second class of the so-called moral and political sciences at the Institut de France, reorganized in the year IV, and that of the Conservatoire National des Arts et Métiers, which was founded in 1792.

Napoleon's absolute power hardly conformed with liberal reflection on social matters; by a gesture symptomatic of his dislike of ideologists he suppressed the second class of the institute. As for the law courses in the imperial university, they had no other object than the exegesis of the five great codes elaborated in the first year of the century.

The Restoration was no more favorable to social science than the preceding regime had been. But the impulse had been given, and reflection on social facts became more intense each day. Henri de Saint-Simon laid down some of the fundamental principles of sociology and Auguste Comte applied to them the resources of an exceptionally vigorous and original mind. At the same time Fourier began to propagate his ideas, some nebulous, others fruitful. But this whole movement of ideas took place outside the university and, in large measure, as a reaction against it.

The July Revolution was destined to open wider the door to these new trends. Beginning with 1830, a chair of political economy was founded at the Collège de France and entrusted to J. B. Say. Another was created for Garnier in 1846 at the Ecole Nationale des Ponts et Chaussées. At the Collège de France, before an eager audience, Michelet and Quinet treated the most important social problems of the day. Augustin Thierry's works pointed out the influence of collective forces as well as that of individuals. At the newly founded Ecole des Chartes teachers of impeccable erudition, like Benjamin Guérard, tried to give a more veracious picture of the Middle Ages than was given by romantic writers of the same period. Two ministers of the bourgeois monarchy, Guizot and Salvandy, possessed the merit of wanting to give to the social sciences their due place. Guizot, himself a profound and original historian preoccupied with sociology, as witness his *Leçons sur l'histoire de la civilisation*, performed a decisive act in calling Rossi to the faculty of law in Paris to teach constitutional law in a new and really scientific spirit. Salvandy proposed to give the law faculties a new impulse and to draw up for them a very strict and modern program, which circumstances alone prevented him from realizing.

The protection accorded the social sciences by Louis Philippe was not unlimited, and theories that were too bold were more than once refused the right of expression. Michelet's and Quinet's courses were suspended; Saint-Simonism was alternately popular and discredited; and Proudhon had to struggle all his life against a public opinion which was scandalized by his paradoxes.

The Revolution of 1848 and the democratic conquests—notably that of universal suffrage—which it sanctioned, powerfully drew public attention toward questions of a political and economic order. The name of Louis Blanc deserves especially to be cited here; and the celebrated conferences at the Luxembourg, over which he presided, exercised a powerful influence not only on the state socialists, who shared his opinions, but on men of distinctly different outlook, like Le Play.

As might have been expected, the political regime instituted after the *coup d'état* of 1851 was not favorable to the development of the social sciences. They received new momentum only when, with the decline of the empire, the great liberal minister Victor Duruy was placed in charge of public instruction. Unfortunately the efforts of Duruy were openly or secretly thwarted. He was unable to carry through his plan for a section of juristic and economic science at the Ecole pratique des Hautes Etudes, which he founded in 1867. His only important creation in this realm was the establishment at the Collège de France of a course in the history of economic fact and doctrine, in charge of Levasseur.

In the course of the last half century the progress made by the social sciences in France, in the domain of teaching and also in public influence, has been reflected in a number of important innovations. These innovations have most frequently resulted either from social movements or from theoretical discoveries, exactly as in the course of the preceding century. Three events in the history of the Third Republic have especially contributed to the progress of the social sciences—the Franco-German War, the Dreyfus affair, and the World War. Each of these led to the creation of more or less important institutions. Following the Franco-German War the Ecole Libre des Sciences Politiques was founded, on the initiative of a man of large and penetrating views, Emile Boutmy, with the encouragement of Taine. This institution, as its name implies, took for its object the construction of the framework of French administration by means of the study of social facts. The Dreyfus affair, which shook the whole of France about the year 1900, provoked an important change in political orientation and at the same time a quick revival of interest in the social sciences. It expressed itself mainly in an intense movement to popularize social ideas and in a tendency to give greater prominence to the social factors in phenomena of every order. With this movement of ideas should doubtless be linked the meeting at Paris, in the year 1900, of the first international congress for the teaching of the social sciences, the establishment of an international library of the social sciences, and the creation of an Ecole des Hautes Etudes Sociales, founded in Paris on the initiative of Mlle. Dick May. The influence of the World War on the development of the social sciences was twofold. In the first place it drew eager attention to the relations between peoples and to all the problems involved in the League of Nations. As a result there came into existence not only numerous publications relative to the organization of peace, but various scientific institutions, some

French, like the Ecole des Hautes Etudes Internationales, founded in 1921 in connection with the law faculty of Paris, others of an international character, such as the Institute of International Law, or the Academy of Comparative Law, whose seat is at the Hague. In the second place, the events of the war and of the post-war period stressed the importance of economic factors and financial questions, and led to the multiplication of works and of periodical publications in this domain, as well as to the creation of new chairs of political economy and of finance in most of the institutions of higher learning.

In addition to the influence of these acute crises one must note the less easily distinguishable influence exerted on the progress of the social sciences by the sense of latent crisis which the machine age has, perhaps permanently, brought in its train. The parallel progress of capitalism and of socialism in France, and the elevation of syndicalism to a doctrine about the year 1900, combined powerfully to attract the attention not only of the masses, but of investigators, to an entire series of problems which, at about that period, were designated under the rather vague label of the "social question."

With varying sentiments and often with insufficient technical preparation, many thinkers attacked these problems with the object of resolving class antagonisms. There were socialist scholars who found their principal means of expression in a center of instruction, the Ecole Socialiste, and in the periodical, the *Revue socialiste*, founded in 1880 by Benoit Malon and interrupted by the war. The Ecole Syndicaliste had as its organ for several years the *Mouvement socialiste* of Hubert Lagardelle. More recently the communistic solution found expression in the *Revue communiste*, founded in 1920. On the opposing side the class in the moral and political sciences at the Institut de France remained for a long time the citadel of individualistic liberalism. Since then the institute has become hospitable enough to other schools of thought. The same kind of tolerance prevails in the domain of higher education. It is no longer accurate to say that the economic instruction of the law faculties or of the Collège de France spreads the so-called "classical" doctrines, as was the case during a certain period.

Between the two camps the Christian socialist movement, heir to the liberal and proletarian Catholicism of Lamennais, sought a solution of social conflicts in the inspiration of the Gospels. This movement, alternately encouraged and disowned by the Holy See, continues to play a not unimportant role in political and social life. Its two principal organizations are the Sillon group, directed by its founder Marc Sangnier, and the Semaines Sociales, dedicated to the study of social problems.

Here should be mentioned the school of social conservatism inspired by Le Play, which exerted strong influence during the years 1860 to 1890. With this is associated the Musée Social, of which we shall speak again later on. The school of Le Play had as its principal periodical the *Réforme sociale*, founded in 1881 and directed by Demolins, continued since 1886 as the *Science sociale*.

As for the official instruction of the church, dispensed by its institutions of higher learning—notably in the Institut Catholique of Paris and the Faculté Libre du Droit at Lille, which in 1893 created a section of social and political science—it manifestly oscillates between these different trends. While certain professors agree with Le Play's individualism, or at least with his emphasis on the family, others like Boissard are frankly state socialists, and still others, like Paul Bureau, have tried to reconcile the two tendencies.

It would be possible to measure the influence which the works of scientists have exerted on the development of the social sciences, but this lies beyond the scope of the present discussion. We shall confine ourselves here to one of the theoretical efforts that has had the significance of a historic event for our sciences. We refer to the work of Emile Durkheim, professor of sociology at Bordeaux and later at Paris. Bringing his thought to bear on the very object and method of social science, he elaborated a doctrine with which were aligned more or less completely a certain number of philosophers, jurists, historians, economists, linguists, anthropologists and psychologists. This means that his influence radiated through all branches of social science. Durkheim and his disciples formed a coherent group whose influence on their contemporaries was powerfully served by a periodical, the *Année sociologique*, a collective product inspired by the spirit of positive and critical science, which appeared from 1896-97 to 1913 and began the publication of a new series in 1925.

The theories of Durkheim, attacked at first not only by philosophers but also by sociologists

like Tarde, who were fundamentally individualistic in spirit, are still debatable. Nevertheless no one questions that they represent at the present time the most vigorous and coherent effort to study human societies yet made in France. The title "French School of Sociology" can legitimately be conferred upon those who work in this spirit.

II. Let us examine now, from the standpoint of the present, the state of the social sciences in French speaking countries, and the place they occupy in higher education and in culture generally.

The social sciences in France have become too differentiated to admit of instruction conveying new results under the name of sociology. And it is just this fact, which we mention in passing, that contributed temporarily to the discrediting of the very notion of sociology. There was a time when certain pseudo-scientists bestowed upon themselves the title of sociologist, and learnedly enunciated pretended social laws which were quickly contradicted by more serious research. We have passed beyond that, fortunately. It does not follow that the teachings of general sociology are useless. Quite the contrary is true, but those who present these teachings no longer consider themselves obliged, or even authorized, to include the whole vast realm of the social sciences. Sometimes they seek the most general features by which to grasp these sciences and then proceed to construct a course in social methodology or morphology; or again they take a definite subject which they choose by reason of their own individual training, or of their particular personal preferences, and treat it in its methodological bearings. Chairs of sociology are quite rare. They are absent from the law faculties. There is one in the faculty of letters at Bordeaux and another at Toulouse, but there are no others in the provinces. Paris is somewhat better equipped. The Sorbonne has one; there is, besides, a course of sociology at the Institut d'Ethnologie. The Collège de France has a chair of social philosophy. Finally a course in sociology is given at the Institut Catholique and at the Ecole des Hautes Etudes Sociales. Students of sociology in France find a general medium for discussion in the *Année sociologique*, founded by Durkheim. The publication of this periodical was interrupted by the war and by the death of its founder, but was renewed in 1925 under the direction of Marcel Mauss. Around it, about the same time, a scientific society was formed—the Institut International de Sociologie, whose members are for the most part collaborators on the *Année*. Kindred in conception but divergent in spirit and opposed to the ideas of Durkheim, the Société de Sociologie, which was organized in 1895 on the initiative of René Worms, publishes a periodical, the *Revue internationale de sociologie*, directed by G. Richard, professor in the faculty of letters at Bordeaux.

Leaving general sociology and passing to the study of the various individual social sciences, an initial difficulty awaits us. It concerns philosophy. To consider as social sciences all the branches of philosophy would be impossible. Some of them obviously include no social element. The question of social content presents itself only in the fields of ethics, psychology and pedagogy. In each of these sciences there is still an animated controversy between the individualists and the "sociologists." Each side, perhaps, could be given its due, for there are individual and social ethics, individual and social psychology, and individual and social pedagogy. Ethics considered from the social point of view has benefited especially from the work of Lucien Lévy-Bruhl (*La morale et la science des moeurs*, Paris 1903). A. Bayet has traced the historical development of ethics in a course of lectures given for the first time in the Ecole Pratique des Hautes Etudes in 1925. Social psychology is taught, notably by Halbwachs and Blondel, in the faculty of letters in Strasbourg. Finally social pedagogy, taught at the Sorbonne by Durkheim's successor Fauconnet has been a subject to which Binet, Simon and others have devoted themselves. The Musée Pédagogique, founded at Paris in 1894, is the center for all information concerning methods of instruction. In another Paris museum, of kindred purpose, an institute of professional orientation has been functioning for two years. It has two regional offices in the provinces. In this connection it should be noted that the new methods in experimental education (and in a general way all the rationalistic procedures, with the somewhat mechanical rigidity they require) find in France, which is a strongly individualistic country, less favorable ground than almost anywhere else.

In approaching history we find the same difficulty that confronted us in philosophy. Is history a science and, if it is one, is it a social science? Historians are, or are not, sociologists according to their intellectual tendencies, their

initial training, the subjects they study. They are far from agreement among themselves as to the place which should be reserved for collective forces and ideas. About 1900 the *Revue de synthèse historique* published a celebrated discussion of this subject which emphasized this fundamental disagreement. The historians Seignobos and Mantoux, the economist Simiand and the philosopher Rauh participated in it. Differences of opinion on the subject are still rife. The difficulties involved make it impossible either to include history among the social sciences or entirely to exclude it. To take an example, certain historians of Greek and Roman antiquity, like Gernet in Algiers, Glotz in Paris, Piganiol in Strasbourg, and others, allow a considerable place for social facts, while many of their colleagues—the larger number it seems —are inclined to envisage history as a succession of particular events. The same is true among historians of the Middle Ages and also among modern and contemporary historians. There are only three branches of history where the nature of the material compels the student to envisage facts from a social point of view, thus making a sociologist of him without his being aware of it. These are to be found in the domain of law and institutions, of religion and of ethnology.

The history of law in the larger sense includes also the history of institutions through ancient, mediaeval and modern times. Instruction in it is given especially in the law faculties, where the programs of study, after having for a long time disregarded it, now properly grant it a prominent place in the curriculum. Roman law is the only ancient juristic system taught. It is compulsory in the program of the first two years and in the studies required for the degree of Doctor of Laws (diploma of advanced study in private law). The other branch of historical instruction in the law faculties is that of French law, taught to first year students and to candidates for the doctorate (history of public law for the D.E.S. of public law, history of private law for the D.E.S. of private law). This instruction is given by professors known as Romance historians, averaging about three in number in the thirteen law faculties of the provinces and eight in the law faculty in Paris. The Paris faculty possesses, besides, a chair in the history of canon law which is duplicated at the Ecole des Hautes Etudes. For the sake of completeness it should also be mentioned that instruction in constitutional law allows an important historical division, and that the chairs of comparative legislation which exist in some faculties, notably in Paris, are now occupied by incumbents who are permitted to give courses in the history of foreign law.

The law faculties are not the only ones which include the history of law. There are faculties of letters in which the history of Roman and of French institutions is taught concurrently, though from a somewhat different angle and in programs which change every year. Faculties are rare that do not provide instruction in Greek institutions, at least in outline. The Ecole des Chartes has a chair of French law and of canon law, occupied for a long time by Paul Viollet. Babylonian and Assyrian law is expounded at the Collège de France by Fossey and at the Ecole des Hautes Etudes Sociales by Scheil. France, remembering that she is an Islamic power, disseminates rather widely the study of Mohammedan law. This is taught in the Algiers faculty of law by Morand, and in Paris at the Ecole Coloniale and at the Ecole des Langues Orientales by Milliot. At the Collège de France a chair of Mussulmanic sociology is held by Massignon. The institutions of mediaeval England form the subject of a course of study at the Ecole des Hautes Etudes Sociales under Joüon des Longrais, the successor of Bémont. Contemporary Chinese law is expounded by Escarra at the Ecole des Hautes Etudes Chinoises, while in the same establishment Granet in his course studies ancient Chinese institutions.

That two courses in this domain have been eliminated must be noted with regret. The lectures at the Ecole des Hautes Etudes Sociales in which Thévenin studied Frankish law, proceeding thence to Germanic law, were not continued after his death. On the other hand the chair of comparative law of the law faculty in Paris has not proved a substitute for the chair dedicated to the study of comparative legislation at the Collège de France, discontinued at the death of J. Flach. The object of the two courses of instruction is not the same: the courses in the faculty of law have as their aim the comparative study of contemporary legislative systems, while the instruction at the Collège de France had in view rather the comparative study of ancient systems of law and, with the writings of some rare jurists in the field of comparative law, such as Rodolphe Dareste, was the only equivalent in France of the German *vergleichende Rechtswissenschaft*.

French interest in the history of law is manifested not only by teaching faculties but also by scientific societies specifically dedicated to this study. Chief among them is the Société d'Histoire du Droit, of which Paul Fournier is president. Similar groups exist in the provinces: the Société d'Histoire du Droit Normand at Caen, and the Société d'Histoire du Droit des Pays Flamands, Picards et Wallons at Lille. As for publications, it is out of the question to attempt to give even a summary list. We shall content ourselves here, and also when we reach the other social sciences farther on, with indicating the most important scientific periodicals. The leading journal dealing with the history of law is the *Revue historique de droit français et étranger*, founded in 1855.

Instruction in the history of religion is more or less centralized in Paris in the division of the Ecole Pratique des Hautes Etudes which has been especially dedicated to it. This division was created in 1886 in spite of the opposition of those who feared that scientific investigation was sacrilegious. Most of the religions practised today or in antiquity are studied objectively there, from the religion of uncivilized peoples (Mauss) to the history of Christian dogma (Alphandéry). Nevertheless at least one lacuna is noticeable in the lack of attention to the history of the Protestant religion. Among the courses of instruction at the Collège de France there are several which touch closely upon religious history: Loisy's on the history of religion, Moret's on Egyptology, and Sylvain Lévi's on Hinduism. The provinces are very badly equipped in this respect, and faculties of letters that give instruction in the history of religion are rare. One can cite only Strasbourg (Alfaric), Lille (Jeanmaire) and Aix (Toussaint).

There would be some injustice in failing to notice that the institutions of higher learning founded by the different churches almost always give an important place to the history of their own religion. This tendency is marked in connection with the Institut Catholique in Paris; the faculty of theology in Strasbourg; the faculties in Lyons, Lille, Toulouse and Angers which are independent of the official university system of the state; and certain *grands séminaires*. For Protestantism it can be seen in the faculty of Protestant theology in Paris, likewise independent. However remarkable the instruction given in these institutions may be on occasion, they will always, rightly or wrongly, be suspected of fostering apologetics.

A number of scientific societies have been organized for the study of the history of religion. The most important is the Société Ernest Renan, founded in Paris. The Ecole des Hautes Etudes Sociales publishes at irregular intervals a collection of the writings of its teachers and of its best pupils under the name, *Bibliothèque de l'école pratique des hautes études* (religious sciences). There is likewise a special periodical, the *Revue d'histoire et de philosophie religieuses*, founded in 1921. The study of religious origins has been enriched by a special museum built in Paris in 1885 and named after its founder, a Lyons merchant, Guimet. This museum, dedicated especially to iconographic representations of oriental religions, is directed by J. Hackin.

For reasons at once theoretical and historical, ethnology has remained, for the French school especially, the favorite stamping ground of sociology. Nevertheless, down to these last years, the teaching of ethnology remained somewhat scattered. In 1924, on the initiative of L. Lévy-Bruhl, an Institute of Ethnology was formed, in association with the University of Paris, intended to group and to coordinate the various branches of ethnology, ethnography, anthropology, technology, linguistics, study of animal societies, etc. The ensemble forms a cycle of studies for which a diploma is issued. Two scientific societies, the Institut Français d'Anthropologie, founded in 1911, and the Société d'Ethnographie, founded in 1859, have made the study of ethnological questions their special task. As for periodical publications, since the disappearance of the *Revue des études ethnographiques et sociologiques* only the *Anthropologie* remains. Ethnography, one of the branches of ethnology, has its museum, founded in 1895 and located at Paris in the Trocadéro Palace. It is directed by Dr. P. Rivet.

Passing on to the consideration of law as a social science, we find, as is natural, that it is taught mainly in the faculties of law. The subject is traditionally divided into private and public law, the former customarily including penal law and civil procedure which touches public law at certain angles. It enlists the services of a numerous personnel of professors or instructors (averaging six in each of the provincial faculties, fifteen in Paris). Civil law is given most prominence. At its side are ranged commercial and maritime law, criminal law, private international law and, in certain faculties, insurance, registering and compara-

tive law. This last branch of instruction is developed especially at the University of Lyons, where an institute of comparative law was created in 1922. The accepted methods of instruction in the law faculties have been modified and rendered flexible during the last half century, especially since the World War. They now more nearly approach the practise of the other faculties. If the professor still conducts his course in robes, this practise is almost the last vestige of their particularism. Indeed since the thoroughgoing reform of 1924, which consisted, above all, in the introduction of written compositions into the examinations, the course of study has become more difficult and more serious, and the student who "does his law" without serious work, a common type formerly, runs the greatest risk of failing in his examination. Contacts between student and professor are more frequent and more direct. Study rooms have been multiplied; direction of theses and of work has become more effective. To put it briefly, in this domain, also, instruction tends to become an initiation of youthful spirits into new disciplines and methods, rather than an effort to communicate revealed truth. At the same time, by a parallel evolution, the foundation of the instruction itself has become modified. The exegesis of the codes has been replaced by the study of juridical facts. The professor no longer considers the statutes as the only facts worthy of his attention. He directs his glance to the decisions of courts of justice and even to humble practise, and finds in them social facts which merit his observation.

While instruction in civil and penal law is given almost exclusively in the law faculties, certain branches of private law are taught elsewhere. Commercial law, for instance, is taught at the Conservatoire National des Arts et Métiers and at the Ecole des Sciences Politiques, not to mention the Ecoles Supérieures de Commerce, where instruction is given which perhaps rivals that of the faculties, and which is often given by the same teachers. Private international law is taught at the Ecole des Hautes Etudes Internationales. Among the scientific societies engaged in the study of private law or of certain of its elements, may be cited the Société des Etudes Législatives, founded in 1901, which undertakes to facilitate the task of parliament by aiding it in the drafting of legislation; the Société de Législation Comparée, founded in 1869, whose title sufficiently indicates its object; and finally the ancient and celebrated Société des Prisons whose field of action overlaps that of penal law. In the provinces the Académie de Législation of Toulouse should not be forgotten. Periodicals devoted to private law are sufficiently numerous in France. We shall name only the most important. The *Revue générale de droit* bears at once on private and on public law. In the field of private law the *Revue critique de législation et de jurisprudence* deserves mention. The *Revue trimestrielle de droit civil*, founded in 1903, specializes in civil law; the *Annales de droit commercial* in commercial law; the *Journal de droit international privé* (founded by Edouard Clunet) in private international law. Along with these reviews should be noted the jurisprudence collections, or case books, in which many of the decisions emanating from the most important courts and tribunals are published and commented upon by professors of law and by jurisconsults. Several of these collections exist: the most celebrated are *Le Sirey*, started in 1831, and *Le Dalloz*, started in 1845.

The comments made above on private law apply equally to public law. Here also we witness a rejuvenation of methods in the exposition of the subject and in the doctrine itself; general public law, constitutional law, administrative law, public international law, public finance are taught in all the state law faculties, and most of them in the independent faculties as well. But it is especially the Ecole Libre des Sciences Politiques which here competes with the university. The preparation for high administrative positions (state council, diplomacy, inspection of finance, etc.) is very well organized there, and certain courses of instruction, such as the history of political ideas and doctrines, are given which one would seek in vain on the bulletin boards of the law faculties. In addition a whole series of courses, too numerous to list, allows a student to become acquainted with most of political science, without any serious lacunae. Public international law, which since the war has received such a sudden impetus, does not yet seem to have been given the place to which it is entitled in French law faculties. Instruction in it is still optional (but without doubt it will become obligatory before long). In any case this science is extensively taught at the Ecole des Hautes Etudes Internationales, an institution associated with the law faculty of Paris. The law of nations is likewise taught at the Ecole Libre des Sciences Politiques, not to mention such inter-

national schools as the academy at the Hague. Scientific societies properly called French, having as their aim the objective study of problems of public law, do not exist so far as we know. One could not thus describe the existing political groups, formed within the Parliament and outside of it, despite the generally high level of the work done there and the great value of some of it. The principal scientific reviews dealing with public law are the *Revue du droit public et de la science politique* (1894), and the *Revue de science et législation financières* (1903), both edited by Gaston Jèze, and the *Revue de droit international public*, edited by Geouffre de Lapradelle, Alvarez and Politis.

Among the social sciences political economy is without doubt the one in which widespread instruction has been most neglected. It took the stubborn efforts of Leveillé, about 1880, to gain an honorable place for it in the law faculties, and for a long time it was not treated in a truly scientific way. In this connection the Paris faculty seems to have been outdistanced by some of the provincial faculties. In any case the time has passed when instruction in political economy can be treated with disdain. The World War and its consequences have sharply drawn the attention of the public to the primordial importance of economic phenomena in modern societies. In the law faculties economic instruction is given by an average of three professors in the provinces and by fourteen professors in Paris, but public interest in economic questions has reached such a pitch that the number of teachers provided is no longer sufficient, especially in Paris, where the number of candidates for the economic doctorate already appreciably surpasses the number of aspirants for the degree of doctor of laws. This department of instruction comprises general political economy, the history of economic doctrines, working class legislation, rural legislation and colonial legislation. Certain faculties have courses in mining or public works legislation. Instruction in statistics, well organized in Paris in an institute of statistics, is unfortunately not given, so far as we know, in any of the provincial law faculties.

The law faculties are not the only places where economic science is taught. The Conservatoire National des Arts et Métiers possesses a chair of political economy, the oldest in France, made famous by the names of J. B. Say and of Blanqui, and at present occupied by F. Simiand. It has, besides, a chair of industrial economy and of statistics (Liesse), another of economy and social insurance (Mabilleau), a chair for the study of the organization of labor and of workingmen's associations (Aucuy), and finally a chair of economic geography (Hauser). The Collège de France likewise accorded quite an important place to economic science when it provided a chair of history of labor (G. Renard), a chair of cooperation (Charles Gide), a chair for the study of economic and social facts (Marion), and a chair of social work (Fuster). The Ecole Pratique des Hautes Etudes includes a department of economic history, too fragmentary a realization of the idea of Victor Duruy. This department of study is under the charge of Landry, Simiand, Pirou, Bourgin and Mathiez. At the Ecole Libre des Sciences Politiques numerous branches of economic instruction are represented. Finally we should add that a chair of political economy has existed at the Ecole Nationale des Ponts et Chaussées since 1846. Another chair may be found at the Ecole des Mines, and the Ecole Polytechnique has had since 1902 its chair of social economy. It is perhaps in the field of economics that scientific societies have developed most vigorously within the last few years. There are numerous groups that have set themselves the task of studying economic phenomena in their various aspects, but most of them are not of a truly scientific character, completely free from political, philanthropic or economic bias. We shall note only the Société de Statistique of Paris, founded in 1860, the Société d'Economie Politique, founded in 1842, and finally the Centre de Documentation Sociale, established at the Ecole Normale Supérieure. The principal French economic periodicals are the *Revue d'économie politique*, founded in 1887, the *Journal des économistes* and, in a more specialized branch of economics, the *Revue bancaire*. Economic history likewise has its periodicals, the *Revue d'histoire économique et sociale* and the *Annales d'histoire économique*.

Somewhat on the margin of political economy is urbanism, a new science, social *par excellence*. It is taught according to a simple formula, sufficiently recognized today, in an Institut d'Urbanisme (1925) associated with the University of Paris, and instruction there is given not only by economists but by professors of public law, by administrators, by architects.

Colonial questions are systematically studied in a special school, the Ecole Coloniale, as well

as in the law faculty of Paris and in the Ecole Libre des Sciences Politiques.

This rapid enumeration can not give any real idea of the present state of the social sciences in France. In order to complete the record many features would have to be added. Thus social hygiene and legal medicine, social sciences of the first rank, should have figured in it. They are taught in the faculties of medicine. In addition there is a chair of hygiene and the physiology of work in the Conservatoire National des Arts et Métiers.

It should be very clear from this exposition that the social sciences in France occupy an increasingly large place in the intellectual life of the country and require the efforts of a constantly growing body of investigators. At the same time it is evident that instruction in the social sciences is a thing of shreds and patches dispensed in various institutions by diverging methods and with differing, not to say opposing, purposes. If conformity in the social sciences means sterility, we in France are in no danger of suffering from this defect, and the time is still distant in this country when faculties of social science will be founded that shall be real institutions of higher learning divorced from all preoccupation with professional training.

III. To measure with precision the place occupied by the social sciences in public opinion would require a long and minute inquiry. In particular the curve of their progression would have to be established by means of a large number of charts and figures dealing with these sciences. There is no possibility of doing this statistical work here, even though at present it is facilitated by a very useful instrument, Grandin's *Bibliographie générale des sciences juridiques, politiques, économiques et sociales* (3 vols., Paris 1926).

Social science is elaborated for the most part in the scientific institutions of which we have spoken. One can do no more than point out some of the means by which it is spread and popularized. The first of these, and one of the most efficacious, is primary and secondary instruction. General sociology made its entrance into the programs of the normal schools as a result of the persevering efforts of Paul Lapie, a clear sighted administrator who was at the same time a philosopher-sociologist. The primary schools and *lycées*, though their programs are apparently unmodified, are making room for the social sciences through a kind of internal evolution. The teaching of history tends to bestow an increasingly large amount of attention on the institutions of different peoples. Geography, formerly exclusively physical or political, is giving place to economic and human geography. Under the name of civic instruction public law is explained in history and philosophy classes, and the day is doubtless not far off when children will be made familiar with the principal ideas of political economy.

Graduate and technical instruction in all its forms has developed extensively in France since the Great War, and necessarily yields a certain place to the social sciences in its programs. However, there is an entire series of gradations observable between some village school-room, with its humble evening course, and such a rich, powerful institution as the Ecole des Hautes Etudes Commerciales in Paris, where the level of instruction is almost on a par with that of the faculties, and the teaching is often done by the same instructors.

Workers' education in the early years of the century gave birth to numerous *universités populaires* where scholars came to expound scientific questions. This was no more than a fire of straw, for the instruction, dispensed with more zeal than method, was ill adapted to those who came to receive it. The problem of workers' education has been taken up on a new basis, and is being carried forward in the *bourses de travail* under the aegis of the syndicates. It goes without saying that, especially since the war, economic, social and political questions have most frequently formed the subject of lectures, and have attracted the most eager audiences. Another institution similarly concerned with problems of workers' education is the Ecole des Coopérateurs organized by the Fédération des Sociétés Coopératives de Consommation.

Among the institutions in Paris which have set themselves the task of popularizing social science, we must mention the Collège Libre des Sciences Sociales and the Ecole des Hautes Etudes Sociales. The first, founded in 1895, comprises courses of study divided into three sections: historical studies, theory and method, and technology. The Ecole des Hautes Etudes Sociales, founded in 1900, comprises five sections: social science school; school of philosophy; school of journalism and of preparation for public life; school of advanced international studies; school of art. In the provinces we may mention the Institut des Sciences Sociales

at Lille, founded in connection with the university, which each year gives series of public lectures and confers the diploma of doctor of social science. It would be futile to try to enumerate all the discussions and lectures on social subjects. They are of all kinds and all colors, from popular lectures, or a discussion in the *Annales* by some academician who happens to be in vogue, down to the educational lecture given by some candidate during an electoral campaign. Related in idea and daily increasing in power, the press spreads popularized notions of social science among the public. Here again it is impossible to give precise details which would, at best, often prove misleading. It suffices to compare a daily newspaper of today with an issue of the same paper thirty or forty years ago, and to note the increased space given to social problems, foreign politics and economics. To name all the reviews which in this field occupy an intermediate place between the scientific periodical and the newspaper would be dull and uninstructive. We shall content ourselves with citing those of a particularly technical character, such as, in political science, the *Revue des sciences politiques*, published since 1886, and the *Revue politique et parlementaire*, founded in 1894; in economics, the *Information sociale*, which in 1922 succeeded the *Information ouvrière et sociale;* the *Revue des études coopératives*, founded in 1921; the *Documents du travail*, which have been appearing for twelve years and serve as the organ of the Association Française pour la Lutte contre le Chômage et pour l'Organisation du Marche du Travail.

A last means of propagating ideas in the social domain is the museum. This assumes two forms, the temporary exposition and the permanent museum. Neither form is very popular in France. Without doubt the universal expositions held in Paris—notably that of 1867 under the impetus given by Le Play, but the following ones as well, in 1878, 1889 and 1900—did accord a large place to social institutions, but for the last thirty years no exposition of this size has taken place, and the smaller expositions do not seem to have aroused a lively public interest. As for museums strictly so called, one must not, despite its name, consider as such the Musée Social, founded in 1896 by the Count of Chambrun. It is something entirely different—a center of information, of documentation and of truly scientific inquiry. The only institution which answers the definition of a real social museum is that of the Conservatoire National des Arts et Métiers, which is, above all, of historic interest.

IV. Instruction in the social sciences in Belgium is well developed, and succeeded at an early date in arousing public interest. As far back as 1830 political economy had been taught in the two state universities (Ghent and Liège), and in 1862 an association, international it is true, was created in Brussels under the patronage of Lord Brougham, Garnier Pagès and Michel Chevalier for the purpose of promoting progress in the social sciences. At present the study of these sciences is being actively furthered in each of the four universities (Ghent, Liège, Brussels and Louvain).

The fact that the teaching of the social sciences flourishes in Brussels is largely due to Ernest Solvay, a man of vision, at once an industrialist and a sociologist. In 1889 he founded an Ecole des Sciences Sociales, which was reorganized in 1901 and is at present an integral part of the University of Brussels. This school comprises twenty-two courses given by fifteen titular professors and divided into three sections (political, economic and social science). The Institut de Sociologie, also founded by Solvay (1901), publishes documents and is provided with a rich research library. It is a center of both instruction and research.

Among Belgian scientific societies devoted to the study of the social sciences, the most important is, beyond question, the Académie Royale de Belgique, with its section in the division of letters devoted to the moral and political sciences.

Switzerland is original enough to possess at Geneva a faculty of the economic and social sciences which forms no part of either the faculties of letters or of law. The following subjects are taught there: sociology, political economy, economic history, statistics, commercial economics, commercial technique, commercial law. There exists, besides, in Geneva, a special institution called the Institut J.-J. Rousseau, founded in 1899 and dedicated to the study of psychology applied to professional orientation. Geneva is also, as need hardly be added, the seat of numerous international institutions.

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Consult: Hauser, Henri, *L'Enseignement des sciences sociales* (Paris 1923); Liard, Louis, *L'Enseignement supérieur en France*, 2 vols. (Paris 1888-94).

III

Germany

From the days of Thomas Aquinas, economic life was included in that complex of human experience which every *summa* and many scholastic monographs sought to organize and classify. The customary lectures on the moral sciences discussed economics side by side with political theory. Both of them were taught, however, merely as a part of the prevailing religious world outlook, observed facts being considered mainly from the standpoint of their compatibility with the teachings of the Bible, of the church fathers and of Aristotle.

Mercantilism, the economic doctrine of the new absolutist state, marked the transition of the discipline from theology to science. Not until the second half of the seventeenth century, however, did it produce a distinguished representative in the person of Johann Joachim Becher, and only in the first half of the eighteenth century did it gain admittance into the universities. Cameralism, the German variety of mercantilism, considered economic and financial questions primarily from the standpoint of the *camera*, or the prince's household. Nevertheless it produced some theoretical discussions and achieved conclusions which anticipated many of the doctrines of the English classical economists. While this is true for Johann Heinrich Gottlob von Justi and in a limited measure for Hörnigk, it by no means applies to economics as a university discipline. There economics, like politics and ethics, was taught as a part of practical philosophy and, in Schreber's words (1764), presented little more than a system of precepts for the master or the mistress of a household, for children and servants. Although Leibniz had already strongly emphasized the importance of economics and Thomasius had insistently demanded the establishment of an economic professorship, it was not until 1727 that a separate *Profession in Oeconomie, Policey und Cammersachen* was founded at the University of Halle. Even then the intention was not to develop a science of economics but to promote the training of state officials. Frederick William I, who established in the same year an economics chair at Frankfort on the Oder, considered economics as the science of rational management of both private and public economic affairs. He hoped to remedy the evil of "poor economy" practised by many youths who were burdened with debts at the completion of their university terms; at the same time he favored such "politica, oeconomica und cameralia" as might be really useful as an indispensable preparation for the academically trained administrator in the age of mercantilism.

A more intensive study of economics at the universities and an increase in the number of professorships came only gradually and after numerous setbacks. It is significant that for some reason (probably his refusal to embrace Catholicism) Justi failed in 1752 to receive a position intended for him at the Vienna Theresianum, and though as police commissioner of Göttingen in 1755 he was allowed to give lectures, this teaching appointment was conferred only two years later upon a professor of natural history and chemistry. However, it is important that Germany had six professorships at the time when the physiocrats brought about the establishment of the first chair of economics in France. In the last quarter of the eighteenth century the increase in Germany was more rapid, so that by 1798 twenty-two higher institutions of learning had chairs of economics.

Although the physiocrats had remarkably little effect upon science in Germany, yet indirectly their writings provided the stimulus for the founding of the first school of cameralistics, the Kameral-Hoheschule in Kaiserslautern in 1774. Despite the hearty welcome given it by the *Ephémérides du citoyen*, this was not as yet a school of economics in the modern sense. Coordinate with, indeed superior to, the professor of agriculture, commerce, finance and administration was the professor of natural history, chemistry, pure and applied mathematics, architecture and mining. Instruction took no cognizance of the new tendencies in science but was still guided entirely by the old cameralistic aims. Nor did the removal of the institution from Kaiserslautern to Heidelberg effect any change. The establishment of an economics

faculty at the University of Giessen seemed of greater promise, for the government of Hesse summoned the most distinguished German physiocrat, Johann August Schlettwein, to the newly founded chair of economics. But his activity there lasted only for about a decade (1777–85); moreover he was not essentially successful there as he had been earlier at Karlsruhe and Basel. Since all attempts to develop German economic science thus died in their infancy, it remained for the *Wealth of Nations* to make the decisive break and to launch modern economics in Germany as elsewhere. The adaptation of Adam Smith's economic principles and the controversies they aroused determined the fortunes of economics in German universities for nearly a century.

Like Quesnay and his followers in France and Ricardo and John Stuart Mill in England, the great German economists also lived outside the universities, and were indeed often antagonistic to them. Johann Heinrich von Thünen developed and applied his doctrine of localization as a practical agriculturist. Karl Rodbertus was likewise a Prussian landowner. Friedrich List, the gifted opponent of cosmopolitan classical political economy, did, to be sure, teach at the University of Tübingen for a short period in his youth; but at the time he wrote his treatise and the great political essays, he had no official or professional standing and found academic science no less hostile than bureaucratic politics. Karl Marx early gave up the idea of qualifying as professor and in his theoretical writings he sharply attacked university science; the universities in their turn ignored his contributions to theory and banned him for decades on account of his hostility to the state.

The peculiar course of German economics since the forties has been largely determined by the fact that when opposition to the classical school developed among the professors, it was based on methodological and philosophical grounds propounded by the historical school rather than on specific theoretical disagreements like those of F. B. W. von Hermann, Theodor von Bernhardi or H. K. E. von Mangoldt. Ranke and Savigny, Jakob Grimm and Otfried Müller were the spiritual descendants of Herder and the romanticists, who among other things aroused the feeling for natural "organic" growth of an individual and of a nation, and who substituted for a mechanistic explanation an organic-intuitive "understanding" connected with an appreciation of the intangible forces of nationality and national spirit. This new method of historical interpretation, which was developed first in other sciences, provided subsequently the necessary impetus for economics as well. From this vantage point Karl Knies, Wilhelm Roscher and Bruno Hildebrand recognized the weakness of the classical position, its lack of a historical sense, its consequent "cosmopolitanism" and "perpetualism" and conceived in broad outlines a program of "political economy from the standpoint of the historical method" (Knies, K., *Politische Oekonomie vom Standpunkt der geschichtlichen Methode*, Brunswick 1853, 2nd ed. 1883).

After the appearance of these three men, the so-called historical school of political economy held almost undisputed sway at the German universities down to the end of the nineteenth century. The content of instruction, however, did not remain stable. It experienced a significant change with the rise of the younger generation of Schmoller and Wagner, Brentano and Knapp, Held and Gothein, who combined political inferences and recommendations with their historical knowledge to a greater extent than their predecessors. The usual lecture on practical political economy often became a lecture on economic politics in more than name; norms of economic policy and even of social policy formed an important part of the lecture content. Because the classical theory was seen to be inconsistent with historical or contemporary life, and because the continuance of social misery was known to threaten state and society with revolutionary cataclysms, it was inferred that the task of science is not only to explain but also to solve the social problem.

This new trend of university economics, which its opponents characterized as "socialism of the chair," did not lead to a reorganization of the faculties nor to a specialization of professorships in distinct disciplines. Financial arrangements provided for continuous functioning of only two full professorships at any but the large universities of Berlin and Munich and hence forced the professors to give successive large lecture courses on general and practical political economy, finance and later also on economic history, in addition to occasional special courses which were ordinarily left to instructors of lower rank. However, this was merely one factor in the situation. More important in the present context is the fact that since all courses had history as their common basis, the need of specialization appeared less urgent than in the

Anglo-Saxon countries. The usual course of theoretical economics given by adherents of the historical school, and also by theorists like Adolf Wagner, propounded not abstract doctrines but a historical and sociological economic theory. The relation between theoretical and practical economics was therefore not one of complete contrast and mutual exclusiveness in subject matter; on the contrary, the latter made practical application and drew conclusions on matters of policy from the teachings of the former.

Intensification, not specialization, was therefore looked upon as the method for the further development of teaching and study. This was the purpose of the seminars which were organized to supplement lectures in the middle of the last century and which served above all to unite upper classmen and their teachers in working groups. The seminars of Hildebrand, Knies and Ernst Engel of the older generation and, more recently, those of G. F. Knapp and Gustav Schmoller attained to eminent distinction as centers of scientific training.

For a multiplicity of reasons the first decade of the twentieth century marked a change and inaugurated a transformation in faculties, in subject matter and in methods of instruction, a process which is still in progress. The impetus came from a group of scholars who, under the leadership of Max Weber and Werner Sombart, attacked the confusion of ethics, politics and economics characteristic of both the older and the younger historical schools and espoused the cause of emancipating the social sciences from value judgments. This movement was the inevitable result of the thorough inculcation of the relativity of all values by the historical school. With the laying bare of historical roots and limitations of all values, all divergent value judgments seemed equally justifiable and comprehensible. Therefore science could be kept out of the conflict of opinions, philosophies and parties only if every judgment of value were tabooed as unscientific. It was no accident that the old names "Volkswirtschaftslehre," "Nationalökonomie" and "Politische Oekonomie" became objects of suspicion. To be sure they were not entirely superseded. It is significant, however, that the great compendium which began to appear under Max Weber's direction and which was designed to replace a similar older work edited by Schönberg, was entitled *Grundriss der Sozialökonomik* (Tübingen 1914–) rather than *Handbuch der politischen Oekonomie* (3 vols., Tübingen 1882–85). By their origin and also by the meaning of the single words of which they were compounded, the old terms pointed to a political and national emphasis; the new name in its colorless generality seemed exactly right for the new "objective" science, divorced from all judgments of value.

At about the same time theoretical interest was reawakened and theoretical work resumed. While the historical school was at its zenith the rationalistic and pure theory trends had not developed. Only a few scholars such as Lexis, Dietzel, A. Wagner, Neumann, Diehl continued in this period to build on the basis of the classical and the German theory; the new marginal utility doctrine of the Austrian school had exercised no substantial influence for an entire generation. But now the Anglo-American and the Austrian schools came to the fore in Germany (Schumpeter, Lederer) and theory was being developed even by adherents of the historical school (Spiethoff, Sombart, Alfred Weber, Plenge). Important contributions to theory were also made by the individualistic-liberal and individualistic-socialist groups (Liefmann, Oppenheimer), by Marxist revisionists (Lederer, Heimann) and by the new universalistic school (von Gottl-Ottlilienfeld, Spann).

The rise of sociology in Germany also falls within this period. Of course the nineteenth century did not lack men of great sociological penetration. Nietzsche and Jakob Burckhardt, Ranke and Droysen, Schmoller and Gothein, intellectual leaders and scientific lights of varying brilliancy, often had a more profound sociological grasp of such large entities as peoples, epochs and cultures than professional sociologists attain in a lifetime of work. But a distinct science of sociology was not developed at that time. The works of Auguste Comte and Herbert Spencer had only slight influence; Lorenz von Stein's attempt at a doctrine of society foundered in contradictions from history; Ferdinand Tönnies' work of genius, *Gemeinschaft und Gesellschaft* (Leipsic 1887), in which he boldly created the fundamental concepts of German sociology, was not appreciated for twenty years. With the turn of the century the sociological work of philosophers and economists laid the foundation for the new science in Germany. Simmel's sociology and the work of Max Scheler showed how much sociological insight was to be gained from psychological observation and phenomenalistic explanation; the writings of Max Weber and Sombart, Alfred Weber and Oppenheimer,

showed with what subtle sociological sense leading economists interpreted the problems of the establishment and operation in society of the various cultural phenomena. A "formal" or "materialistic" sociology developed alongside of this more philosophical sociology. Methodologically akin to American researches, the new discipline of social relations (von Wiese) scrutinized many social formations in order to discover the underlying principles of association. Anthropology was also influenced by the new sociological trend, and the excellent work of the nineteenth century in primitive organization (Bachofen) was continued and supplemented by studies of primitive peoples and cultures (P. W. Schmidt, Thurnwald, Graebner).

The rapid increase in the subject matter of social science seemed to doom the old university practise which required every lecturer to treat all branches of social science or at least to be capable of doing so. Indeed, Max Weber declared separation into special disciplines essential, practically inevitable, and was certain that future developments would make the German university resemble the American institution. The rich variety of contemporary German social science can be properly understood only if it be borne in mind that Max Weber's prophecy was not fulfilled. Although the pressure of various mutually opposed trends resulted in a loosening up of the old academic scheme, it did not bring about specialized separation of all disciplines and chairs. It is significant that only a few German universities have professorships in sociology—Tönnies was *Privatdocent* up to his fifty-fourth year; Max Weber did his sociological writing when illness caused him to retire; Alfred Weber gave his sociological lectures as ordinary professor of political economy. The same condition prevails in other fields. During the last twenty-five years problems of the manufacture of credit (Schumpeter, Hahn) and business conjuncture and crises (Spiethoff, Lederer, Löwe) have been subjects of intensive investigations; but no special professorships for currency and credit or for business cycles were founded. Of the group of older disciplines only public finance showed a strong, widely recognized tendency toward separation in teaching and teachers. Of the newer subjects international economics, which is still associated chiefly with the person of Bernhard Harms, has attained the dignity of a separate discipline; so also has the economics of private business enterprise with all its subdivisions. Because the latter had been developed as a special subject at the new higher schools of commerce, it was continued as a special subject when the schools at Frankfort and Cologne were converted into universities.

Although the recent expansion of the social sciences has not resulted in a pronounced specialization, it has separated them more distinctly from the related disciplines of philosophy and history, and has emphasized their practical applications. In many cases the teaching of the social sciences was transferred from the faculty of philosophy to the law faculty; this is in line also with the general tendency toward an ever closer association of law and social science in education for public life. In other cases social-scientific instruction was entrusted to newly organized faculties of law and political science and, in less frequent instances, to special economic and social science faculties. A great deal of social science, particularly of applied and business economics, is being taught at present in the higher schools of commerce. Their number has increased considerably and their teaching program made broader so that the best of them differ little from the economic faculties of the newer universities. Owing to the traditional freedom of teaching and to the immunity from removal that professors enjoy as state officials, the question of the identification of the social science disciplines with a particular faculty is merely a matter of formal university organization. Its significance is limited to exposing the faculty members to a particular type of intellectual contact, and to the influence it may exercise on the choice of supplementary subjects by the students. It may explain, for instance, the relative neglect of philosophical and methodological disciplines by present day students who major in social science.

Another indication of the tendency to separate and to standardize the instruction in social science is the establishment in 1923 of a uniform examination in all federated German states for the diploma of *Volkswirt*. The significance of such a measure will appear more clearly if it is realized that the German student enjoys complete freedom in the choice of courses and in the sequence in which he attends them. The object of the new examination is to make more uniform, purposeful and intensive the course of study followed by the average student. The examination, taken after the completion of six semesters of social science, is both written and oral. The written part consists of an essay on an assigned

subject, prepared within a period of six weeks, and of two examination papers, one on an economic and the other on a legal topic. The oral examination covers general and special economics, public finance, statistics, business administration (for which may be substituted economic history or economic geography or the law of industrial relations), elements of civil and commercial law, general political science, and constitutional and administrative law. When a student passes the examination he becomes a candidate for the degree of *Doctor rerum politicarum* (or *Dr. oec. pub.* at Munich). This is awarded after the completion of two additional semesters of social science work, the presentation of a rather extended piece of independent scientific research and the passing of an examination covering the four principal subdivisions of economics and jurisprudence.

Since the establishment of the new degree, the doctorate in philosophy, which used to be frequent before, is now awarded only by a few outstanding universities (such as Berlin and Heidelberg) and only to those who specialize in the more theoretical phases of social science. The dissertation presented for this degree must deal with either economic or sociological theory and the examination covers theoretical and applied economics, sociology, and two supplementary subjects taught in the faculty of philosophy, generally philosophy and history. As a result the course of study of a candidate for the doctorate of philosophy is also somewhat different: he does not display as a rule an interest in business economics or practical law, but attends instead many more lectures on philosophical and historical subjects.

A tendency toward the democratization of faculties and the stimulation of research by financial assistance may be discerned in another post-war change affecting the teaching personnel. The teachers in German universities are divided into several groups: there are the ordinary or full professors, who give the large lecture courses basic for the faculty in question; lower in rank are the extraordinary professors, who may or may not be full-fledged faculty members; finally there are the *Privatdocenten* (private lecturers) and private persons engaged for special courses. The rank of *Privatdocent*, which is the first step in the academic ladder, is open to any university graduate who qualifies on the basis of a published book and of a special oral examination given by the entire faculty. The compensation for his lectures is limited entirely to students' fees. Even under ordinary conditions this arrangement provides little financial security; but during the inflation period it proved entirely unsatisfactory because it resulted in a one-sided selection of persons of wealth for academic work. To remedy this evil two measures were taken. In the first place fellowships were granted to a limited number of *Privatdocenten* to tide them over until they should receive a paid appointment. The second change was the provision for an increased number of paid positions for assistants in research and teaching. Although a paid assistant may teach as a *Privatdocent* in his own right, he is ordinarly either a research worker or less frequently an assistant instructor taking over the more elementary portions of his superior's work.

Paid assistantship is not the only link between research and teaching. In Germany, as in other continental countries, an overwhelming proportion of research in the social sciences is done in the universities or at least in association with them. Such a relationship is strengthened by the fact that successful and voluminous research work is a prime qualification for an academic career. In addition to the scholarly labors of individual professors, the seminars were in the pre-war period responsible for a large share of the research output. At present more importance attaches to institutes forming an integral part of the universities or at any rate affiliated with them. The institutes are for the most part permanent organizations with a managing director and paid assistants. All of them have more or less specifically defined fields of research, some specializing in problems restricted to a definite region. The Institut für Weltwirtschaft und Seeverkehr at the University of Kiel, the best organized of them all, has influenced the development of similar organizations. Institutes of some size exist at the universities of Berlin, Breslau, Cologne, Frankfort, Hamburg, Heidelberg, Königsberg, Münster, etc., and also at the Nuremberg school of commerce. The Institut für Konjunkturforschung at Berlin is the only institute not affiliated with an institution of higher learning. It is a part of the central statistical bureau of Germany and is engaged in a scientific treatment of statistical materials in order to elicit results of both theoretical significance and practical value.

Research by scholars with academic standing is not entirely confined to universities and associated organizations. A great deal of historical research has been done through the academies

of sciences and similar institutions which exist in several German states; their work was more important for the social sciences before the appearance of special research institutes within university walls. Many local associations for the study of specific subjects or for the correlation of science with practise also stimulate research work. Finally the learned societies of national scope bring about greater coordination of the researches of individual scholars and provide a publishing outlet for its results.

The Verein für Sozialpolitik is perhaps the oldest and most important of the learned societies in the field of social science. It was founded in 1872 in order to effect a wider acceptance of "socialism of the chair" in both theory and practise. In 1881, after Bismarck had definitely fixed the trend of the government's social policy, the society discontinued its attempts to influence general public opinion and sought instead to provide a basis for scientific discussion through extensive research. The meetings of the society, first annual and later biennial, provided the forum for an interchange of scholarly opinion. Gustav Schmoller, one of its founders and its president from 1890 until his death in 1917, decisively influenced the viewpoint of the society for nearly half a century. Under his successor, Heinrich Herkner, an increased interest in theoretical and financial questions led to the establishment of a separate subcommittee to deal with them. The society publishes a series of *Schriften* (175 vols. have appeared since 1879), which contain reports of proceedings as well as the results of research of the individual members. Although discussions of practical social and economic questions predominate in this collection, its range is really much wider than problems of German social policy. Alongside of studies on farm labor and handicrafts in Germany, one finds articles on the commercial policy of the principal countries, on French and American trade unions, on German financial and monetary problems and on international cartels.

A learned society whose prominence is of more recent date is the Deutsche Gesellschaft für Soziologie, established in 1909 and honored by the presidency of Tönnies. Its membership is limited to persons with a well-established interest in sociology. It is of service to science mainly through its conventions, in which all schools of thought are represented and the proceedings of which are published in full. The discussions in these conventions range over a wide variety of problems, taken from the formal as well as empirical, psychological as well as cultural, branches of sociology. Side by side with topics like the relation of technology to culture or of law to economic life, the conventions discuss the sociological significance of nationality and of revolution, or the metasociological question of understanding. Since 1926 special groups have met in addition to the general convention. They consist of professional scholars and deal with a limited branch of sociology, such as the methodology of the social sciences (Sombart), anthropological sociology (Thurnwald) and the science of social relations (von Wiese).

The Friedrich List Gesellschaft is more than a learned society. Established in 1925 and directed by its president, Bernhard Harms, it seeks to bring about a collaboration of scholars and men of affairs in order to furnish carefully thought out solutions of current economic and social problems. Its task in the publishing field is to arrange for a complete and authoritative edition of the works of Friedrich List and to stimulate interest in the history of the social sciences by the publication of numerous series of studies. So far two volumes of the List edition have appeared; the proceedings of two important conventions, *Deutsche Verkehrsprobleme der Gegenwart* and *Das Reparationsproblem*, have also been published.

It will be observed that none of the series of studies described above represents the product of a definitely articulated school of thought. With the single exception of *Deutsche Beiträge zur Wirtschafts- und Gesellschaftslehre*, founded by Othmar Spann and Georg von Below and having a pronounced universalist viewpoint, contemporary Germany does not possess a publication which serves as the center for a recognized school or tradition. These series of studies, if they are more than compilations for convenience in publishing, are as a rule characterized more by external limitations than by adherence to a definite viewpoint. The series of dissertations published by some universities (Munich, Jena, Greifswald, etc.) or by a combination of several universities (Badische Hochschulen), or the *Sozialwissenschaftliche Forschungen*, a series of the best dissertations prepared at any German university, display obviously a wide variety of viewpoints. Some series confine themselves to dissertations prepared under a single professor; these of course are bound to possess a greater uniformity of outlook. Of such character was the old *Staats- und sozialwissenschaftliche Forschungen*, edited by Schmoller and affiliated

definitely with the younger historical school. Another rather external limitation which may characterize a series is that of the range of subjects treated. Of this type are the *Probleme der Weltwirtschaft*, edited by Harms, and *Finanzwissenschaftliche und volkswirtschaftliche Studien* founded by Karl Bräuer for a serious discussion of public finance in post-war Germany.

The observations made about these series of studies are equally applicable to present day social science periodicals in Germany. The contrast with the situation in the nineteenth century is well marked. Although functioning under flexible limitations as to the branch of sciences which it attempts to serve, a modern German periodical welcomes as a matter of principle scientific contributions of all schools and methodological orientations. Nevertheless a keen observer would still detect certain characteristic differences. For instance, *Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im deutschen Reiche* (est. 1877 as quarterly, ed. by Schmoller 1881–1917, bimonthly since 1925, present editor A. Spiethoff), once the leading organ of the younger historical school, still remains the recognized center of publication for all research in the field of historical and empirical theory of economics and politics. Likewise the *Archiv für Sozialwissenschaft und Sozialpolitik* (bimonthly, est. 1904, present editor Emil Lederer), once edited by Max Weber and Werner Sombart in the spirit of "emancipation from value judgements," is distinguished today by habitual recurrence of rationalistic-theoretical, sociological and socialistic studies. Yet these distinctions are neither fundamental nor permanent. It is significant that editors of one periodical regularly contribute to other rival periodicals, a situation scarcely conceivable before the war.

In addition to *Schmollers Jahrbuch* and the *Archiv*, one must note the *Zeitschrift für die gesamte Staatswissenschaft* (bimonthly since 1926, est. 1844 by Robert von Mohl, numbering among its editors Schäffle, Schönberg, A. Wagner and Karl Bücher; present editor Georg Brodnitz), equally wide in scope, embracing all branches of social science. Somewhat more limited to economics with an emphasis on its practical and statistical aspects are Conrad's *Jahrbücher für Nationalökonomie und Statistik* (monthly, est. by Bruno Hildebrand, ed. 1872–1915 by Johannes Conrad, present editor Ludwig Elster), and the *Weltwirtschaftliches Archiv* (quarterly, est. 1913), organ of the Institut für Weltwirtschaft und Seeverkehr and edited by Harms. The *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* (est. 1903 by St. Bauer, G. von Below and L. M. Hartmann, the first of whom is still editing it) is the outstanding German periodical in the field of economic history. *Finanz-Archiv* edited since its establishment in 1884 by Georg Schanz, is a semi-annual periodical of international reputation, cultivating a special branch of economics. There has been a large recent growth of periodicals devoted to the new science of business economics and management. The outstanding ones are *Annalen der Betriebswirtschaft* (quarterly, est. 1927, ed. by A. Heber), *Zeitschrift für Betriebswirtschaft* (monthly, est. 1924, ed. by F. Schmidt) and the older *Zeitschrift für handelswissenschaftliche Forschung* (monthly, est. 1906, ed. by K. Schmaltz). The *Allgemeines statistisches Archiv* (quarterly, est. 1890 by Georg von Mayr, ed. by Friedrich Zahn) is the leading periodical dealing with general statistical problems. Political science in its theoretical and empirical aspects is stimulated by articles in the *Archiv des öffentlichen Rechts* (quarterly, est. by Paul Laband, ed. by G. Holstein, O. Koellreutter and H. Triepel) and in the *Vierteljahrschrift für Politik und Geschichte* (est. 1923 as *Archiv für Politik and Geschichte*, ed. by Hans Roeseler). The important sociological magazines are *Kölner Vierteljahrshefte für Soziologie* (est. 1921; L. von Wiese is one of its editors), *Zeitschrift für Völkerpsychologie und Soziologie* (quarterly, est. 1925, ed. by R. Thurnwald) and *Ethos* (quarterly, est. 1925, ed. by D. Koigen, F. Hilker and F. Schneersohn). The socialist periodicals *Sozialistische Monatshefte* (monthly, est. 1896, ed. by Joseph Bloch) and *Die Gesellschaft* (monthly, est. 1924, ed. by Rudolf Hilferding) often contain scholarly articles on various social-scientific problems. Finally it must be mentioned that many research institutes publish periodical bulletins and that serious studies can often be found in the more specialized periodicals dealing with practical problems of business, public finance, trade unionism and cooperation.

In summing up we may observe that neither as teaching disciplines nor as research programs do the social sciences in contemporary Germany display uniformity of viewpoint or of method. A new synthesis of theory, history and practical studies is sought on every hand, but there has not developed a dominant tradition nor has a generally acknowledged leader appeared. Under the old faculty designations and in the new re-

search institutes, through societies and periodicals, each new trend develops its own doctrines and hopes to bring about their general acceptance.

EDGAR SALIN

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IV
Austria and Hungary

I. AUSTRIA. This section refers only to the territories comprised in the present Austrian Republic. In most of the other regions of the former empire the social sciences have developed not only in a foreign language but in a fundamentally divergent spiritual environment as well.

Austrian and German social science research have always been associated in the closest kind of interrelationship. Most of what can be said about the social sciences in Germany is applicable to Austria as well: the ethnic and linguistic kinship has proved distinctly a stronger influence than the political separation. To avoid repetition we shall in this section place the emphasis on those viewpoints in which Austrian social science research diverges from the general German stream, and thereby reveals distinctive Austrian traits.

The contrast between south German Catholicism and north German Protestantism, and the fact of Austria's political separation, have always been the two most important causes of occasional divergences between Austrian and German social science currents. The political mission of the former Austrian Empire was to unite in a state a multiplicity of historically and nationally quite heterogeneous peoples: this endeavor emerges consistently in Austrian social scientific thought. We can perhaps observe it most clearly in the social science echo of the romantic movement. The German romantic movement, which lifted German culture out of the general stream of the European Enlightenment, directed the social sciences toward an essentially idealistic and, beyond that, a nationally conditioned historical viewpoint, while in Austria it evoked social science theories that were partially rationalistic in motivation and absolutist and centralizing in tendency.

In the practical execution of her centralistic political aspirations Vienna could not afford to stress too strongly either the historic or the juristic point of view, for she had to curb a multiplicity of nationalities which stood on the soil of their own rich historic and juristic traditions. The political union of the Austrian peoples seemed firmly grounded only on the plane of economic unity. So the former Viennese government missed no opportunity of bringing out the idea of reciprocal economic advantages and of planting it deep in the consciousness of its subjects. Small wonder, therefore, that economics became the central point of Austrian social science research at a comparatively early date. Moreover we find here the reason why economics as a subject of instruction has from the beginning belonged to the law and political science faculty of Austrian universities.

The development of Austrian economics and finance down to the present day reveals three flourishing periods quite clearly. In the first period the political viewpoint in its distinctively Austrian character played a leading role. When in the second half of the seventeenth century mercantilistic ideas began to penetrate into German speaking areas, an active group of nationalist economic writers was formed about the Viennese court, which brought out very sharply the fundamental idea of all mercantilism, the economic emphasis on the absolute monarchy. In the history of thought these writers are called the south German Catholic branch of the cameralists. Generally speaking, neither physiocracy nor the individualistic liberalism of the classical school succeeded in fruitfully stimulating Austrian economic thought, for the liberal current was in direct opposition to the Hapsburg state. So much the more would conservative and interventionist viewpoints in economic research necessarily flourish in the Viennese environment. The absolutism of the Holy Alliance greeted them with open arms. It is, however, decidedly significant that the historical school itself, which after all sprang from romantic thought, received comparatively little attention in Austria. Researches in economic history were likely to remind the different peoples of the monarchy of their former political independence. It was necessary to turn their attention in exactly the opposite direction toward the present and the future, toward the economic advantages to be expected from their political union by reason of a

division of labor and mutual aid. The rationalistic, thoroughly abstract, deductive system of thought which brought forth the theory of marginal utility was admirably adapted to this purpose, and that explains why it could flourish so exuberantly in Austria.

Perhaps the two decades before the World War, when the Austrian marginal utility school stood at the height of its power, are at the same time to be looked upon as the Golden Age of Austrian social science research. Not only did the Austrian marginal utility theory celebrate a triumphal progress geographically over extended foreign territories; it pushed forward into neighboring regions of thought as well, and inspired the hope that the struggle over method which it involved would raise economics to uncontested leadership among all the social sciences.

With the breakup of the Austrian Empire after the World War, the efforts of the earlier, characteristically Austrian research to support it theoretically likewise disappeared. At first German nationalism raised its head, and forces hitherto suppressed were developed in a thoroughly organic, speculative economy. This fresh new current is called universalism. It delves consciously into the organic thought treasure of former times, but especially into the economic doctrines of the romanticists, and stands in sharp opposition to the individualistic traditions of the marginal utility school. The present status of Austrian economic research is characterized by this struggle.

Sociology in Austria has always developed in the wake of economics; economic changes are mirrored rather consistently in Austrian sociological thought. West European influences predominated to about the time of the World War; the individualistic and partially mechanistic trend of the marginal utility theory was favorable to the positivistic and rationalistic doctrines of sociology. Since the World War new currents have appeared in two directions. In the first place the reaction against the marginal utility school emerges in the realm of sociology with a purely conceptual universalist system of thought which is recognized even beyond the boundaries of Austria. No less important is the second current which emanates from the philosophy of law and develops the principles of sociology on the basis of neo-Kantian ideas.

As in economics, so in the science of law and in other political sciences Austrian development has been closely bound up with the centralizing aspirations of the Viennese government. The intention of bringing, so far as possible, the various peoples of the monarchy closer together by means of a uniform system of law led to early codification which played a significant part not only within the monarchy, but also within the whole domain of German law. Hence it is that in Austrian juristic research the dogmatic viewpoints of positive law have been strongly predominant since the beginning of the last century. After the World War neo-Kantian law philosophy took a sudden rise in Austria—we have just referred to it in connection with sociological research. The effort was made to grasp the essence of the law concept on purely idealistic grounds, and thus to establish its connection with positive law, the function of which consists only in determining content.

During the period of imperial government Austrian statistical research enjoyed a very favorable environment. As early as the seventeenth century the Viennese government sought to facilitate its centralistic activity by statistical compilations. So in the eighteenth century it enjoyed the prestige of having for the first time carried through a general census for a large country at one and the same time and with one and the same viewpoint. In 1829 an administrative statistical service was organized in Vienna. In 1863 it was enlarged into a central statistical commission, which since 1921 has continued its very active work as a national statistical office. The activities of this office have made possible the various branches of statistics that have flourished in Austria. There are, in addition to figures dealing with population and nationalities, several kinds of statistics bearing on administrative and economic problems. Statistical research at the universities has always been in closest relationship with official statistical work. Courses in statistics were given at all Austrian universities as far back as the beginning of the last century.

Of any distinctively Austrian historical research it would be difficult to speak in a methodological sense; interrelations with German science are so strongly developed here. In general special features are the result only of objective specialization on cycles of problems which are particularly important in Austrian history. Thus the question of nationalities has always received much attention. The series of events in the rise of the house of Hapsburg have also been always in the foreground. In a measure the pan-

Germanic idea emerged rather sharply. Research and critique of mediaeval archives flourished at the University of Vienna beginning with the end of last century. Perhaps, however, Austrian historical research has matured its most valuable fruits in the domain of economic history—another proof of the central position of economics in the framework of Austrian social science. Austrian intellectual history has also had several notable triumphs to record recently.

Some of the marginal social science disciplines succeeded in taking root in Austria with most favorable results. The wealth of the Hapsburgs permitted the flourishing of the imperial museum collections and therewith of archaeology, while aesthetic research has been stimulated by the general love of art in Vienna. The ethnic and linguistic heterogeneity of the former monarchy presented an admirable foundation for philological study and, in partial connection with it, for ethnology and anthropology also. Moreover anthropology has been materially promoted by the advanced medical science of Austria; Austrian biological and psychological researches in their social bearings owe their development in part to this source.

The University of Vienna must be regarded as the center for all these social disciplines in Austria. Founded in 1365, it is the second oldest university in Central Europe. The centralistic politics of the imperial court and of the former Viennese government redounded particularly to its benefit; in this way the social sciences could develop favorably there too. Amply provided with appropriate chairs of learning, with seminars and special research institutes, the University of Vienna has always had a strong attraction for foreign as well as native students. Contemporary Austria is trying by every means to maintain the high level of the University of Vienna, for it is conscious of the fact that Vienna's former political power can be replaced in the cultural sphere only in this way. As centers of instruction in the social sciences, the universities founded at Graz in 1585 and at Innsbruck in 1673 must also be taken into account. Of significance for German speaking Austria from this point of view must be reckoned the University of Prague, founded in 1348, the oldest university in central Europe, and the University of Czernowitz, founded in 1875. After the World War these two universities were ceded to Czechoslovakia and Rumania respectively. An attempt was made at that time to introduce, in addition to the traditionally united law and political science faculty, special political science instruction after the German model, but the effort met with little success.

There are, in addition to the university in Vienna, a number of important advanced schools of equivalent rank, in which not only economic subjects are taught but individual legal and political disciplines as well. Worthy of note from this point of view are the Export-Akademie, founded in 1898, transformed in 1919 into a Hochschule für Welthandel; the Hochschule für Bodenkultur (1872); the Konsularakademie (1754), an advanced public school since 1919; also the Wiener Technische Hochschule. Popular university courses and lectures, given outside the universities and advanced schools, are highly developed in Austria. With the vigorous cooperation of university professors and advanced school teachers they render useful service in the spread of knowledge in the social sciences. The Wiener Internationale Hochschulkurse, annually organized every fall since 1922, has served the same purpose internationally. Generally speaking, Austria endeavors rather to bring foreign students into the country than to send her own students into foreign countries. Consequently Austrian students of the social sciences are for the most part dependent on fellowships and subventions of foreign foundations.

In addition to the ranking and comparatively well-equipped seminars and research institutes of the University of Vienna in economics, sociology, jurisprudence, history, statistics and other social sciences, there are, besides, of some importance: the Oesterreichisches Archäologisches Institut (1898), the Oesterreichisches Institut für Konjunkturforschung (1927), the Forschungsinstitut für Gemeinwirtschaft affiliated with the Gesellschafts- und Wirtschaftsmuseum, the Forschungsinstitut für Osten und Orient (1916), the Wissenschaftliches Institut für Kultur und Geschichte des Sudetendeutschtums (1920), the Institut für Genealogie, Familienrecht und Wappenkunde (1922) and the Forschungsinstitut für Rassen- und Konstitutionsanthropologie, affiliated with the Naturhistorisches Staatsmuseum (1923).

Of the Vienna museums the following are important from the standpoint of economic science: the Oesterreichisches Museum für Kunst und Industrie (1863), the Technisches Museum für Industrie und Gewerbe (1918) and the

Technologisches Gewerbemuseum (an institution for instruction and experiment); for historical research the Historisches Museum der Stadt Wien (1888), the Kunsthistorisches Museum (1891) and the Oesterreichisches Heeresmuseum (1885) are to be noted; for ethnology and anthropology the corresponding divisions of the Naturhistorisches Museum and the Museum für Volkskunde (1896).

Like the museums the Vienna libraries derived benefit from the centralistic endeavors of the earlier governments and from the wealth of the imperial dynasty. The Hofbibliothek (called Nationalbibliothek since 1920), founded in the second half of the sixteenth century, is one of the most important in Europe so far as the social sciences are concerned. In addition to the university and advanced school libraries, and the libraries of the federal chancellery and of various ministries, special reference must be made to the Wiener Stadtbibliothek (1856), the Bibliothek des Bundesamtes für Statistik and the Bibliothek des Nationalrates (1870). Of the Vienna archives these are especially valuable: the Haus-, Hof- und Staatsarchiv (1749), the Hofkammerarchiv (1516), the Archiv der Stadt Wien, the Kriegsarchiv and the Deutschordens-Zentralarchiv (1904).

Since the University of Vienna, with extremely extensive interests, covers a very material portion of the work in Austrian social science, and since the German social science societies and associations extend their keen activity to Austria as well, the sphere of the corresponding Austrian associations is comparatively limited. The most distinguished among them is the Wiener Akademie der Wissenschaften (1847), which materially advances the social sciences through the numerous special commissions of its second division. For economics only, the Oesterreichische Gesellschaft für Sozialpolitik (1924) is to be taken into account. The erstwhile very active society of Oesterreichische Volkswirte was already discontinued during the World War. For historical science these societies are important: Verein für Geschichte der Stadt Wien (1853), with its yearbooks; the Gesellschaft für die Geschichte des Protestantismus in Osterreich (1879), likewise with its yearbooks; the Heraldische Gesellschaft "Adler" (1870), with its monthly journal, and the Wiener Prähistorische Gesellschaft (1914), with the *Wiener prähistorische Zeitschrift*. Dedicated to jurisprudence are the Wiener Juristische Gesellschaft (1867), the Oesterreichische Kriminalistische Vereinigung (1906) and partly also the Internationaler Anwalt-Verband (1899), with its periodical *Gerichtshalle*. For anthropology and ethnology reference must be made to the Anthropologische Gesellschaft (1870), with its *Mitteilungen*, and to the Verein für Volkskunde (1894), with the *Zeitschrift für Oesterreichische Volkskunde*, and to the Oesterreichischer Heimatschutzverband (1913), to which belong all Austrian associations for the preservation of national customs and folklore. The Geographische Gesellschaft, which publishes *Mitteilungen*, was founded as far back as the year 1856. Finally in the fields of philology and psychology the following are to be noted: the Wiener Neuphilologischer Verein (1894); the Internationaler Verein für Individualpsychologie (1911), with the *Internationale Zeitschrift für Individualpsychologie;* the Wiener Psychoanalytische Vereinigung (1922), with the *Internationale Zeitschrift für Psychoanalyse*, and the Internationale Religionspsychologische Gesellschaft, with the *Archiv für Religionspsychologische Forschung*. Devoted only partially to the pursuit of the social sciences in general are the Oesterreichische Leogesellschaft (1892), with its yearbooks, and the Wissenschaftlicher Klub in Wien (1876), with its monthly journal.

Despite the multiplicity of separate Austrian social science societies and periodicals, the center of gravity of Austrian achievement in this field lies in the work which is performed jointly with German social science research. Austrian social scientists are constantly working for German periodicals and occasionally even editing them. The same interchange takes place in connection with joint compilations and textbooks. Exchange students and professors have always been most numerous between Austrian and German universities. As a result of this extremely active interrelation, which we must again emphasize in conclusion, it is often quite difficult to draw a dividing line between Austrian and German social science research. It should be added that there is in Austria no desire to stress such a boundary. For the movement toward union with Germany strongly asserts itself in the field of the social sciences.

II. HUNGARY. The Hungarians are a nation of jurists. One of the most prominent traits in their character is the lively interest, among the most widely separated strata of society, in problems of public law. The high development of this interest is due to the peculiar history of their

country. Surrounded by peoples ethnically foreign, the Hungarian state could maintain itself during the thousand years of its existence only by constant political struggles. This is the first reason why problems of public law have always been in the foreground. A second reason may be found in the eternally problematic political relationship to the other half of the former Austro-Hungarian monarchy. Finally, since the breakup of the monarchy, the aspiration toward a revision of the Treaty of Versailles has been strongly influenced by a public law viewpoint.

This general preoccupation brought with it, as the earliest development in the field of the social sciences in Hungary, the juristic and political disciplines, which still maintain their lead today. Juridical subjects were expounded in the oldest Hungarian universities—in the university at Pécs, founded in 1367, and in the universities at Óbuda and Pozsony which date, respectively, from the end of the fourteenth and the middle of the fifteenth centuries. But while these early universities did not survive, a leading role should still be assigned to the juristic faculty established in 1667 at the University of Nagyszombat, which later moved to Budapest. At first this faculty consisted of only four chairs of instruction, dedicated respectively to Roman law, canon law, Hungarian positive and formal law. A differentiation in these branches of instruction, and the addition of other juristic and political subjects, followed in the course of later centuries. In addition to these faculties at the University of Budapest complete faculties of law and political science exist now in the universities at Szeged and Debreczen and in the new university at Pécs. Significant as showing the extent of Hungarian juristic and political instruction is the fact that there were in addition twelve law and political science schools called law academies, whose curricula corresponded with those of the universities. Only three of these independent schools still exist—in Miskolc, Eger and Kecskemét.

The law of custom plays an extremely important part in Hungary even today. Moreover the Hungarian constitution is decidedly historical in character. Hence the historical viewpoint has long been prominent in Hungarian juristic research and in the always closely associated research in political science. It was only during the second half of the last century, when codification of laws was making great strides, that a new energy manifested itself in the institution of positively directed research. In addition, attempts to codify Hungarian civil law, which had been going on for decades, served to bring out strongly the legalistic, political viewpoint. After the important prewar literary creations, embracing whole fields of knowledge, especially private law, commercial and criminal law, procedure and state and administrative law, this last decade, juristically and politically so restive, has yielded mainly monographic treatments.

History as a discipline developed mainly within the faculty of philosophy of the University of Nagyszombat during the eighteenth century. Instruction in history was introduced also into other philosophic faculties and was later partially included in the law faculties as well. In general, public law and also statistical and geographical influences played an important part in historical research in Hungary as far back as the beginning of the eighteenth century. Protestant scholars were leaders in this research; while Catholic investigators—especially Jesuits—applied themselves mainly to studies in church history. In the second half of the eighteenth century the two currents were combined in active, critically conducted, historical research. Later, however, during the romantic period the scholarship preoccupied with original sources suffered a certain decline. Only since the second half of the last century has it flourished again by dint of modern methods and a far reaching, systematic division of labor. In the last generation the juristic, economic and socio-historic viewpoints have again been emphasized. Since the dismemberment of the country, Hungarian historical research still looks upon the lost territories as within the field of its labors.

Economics has been included in the curriculum of the law faculties since the beginning of the last century. Recently, in 1914, instruction in economics was materially extended by the establishment of an economics faculty at the Budapest Higher Technical School. In addition, several older, independent schools, with economic interests and university rank, have been combined to make possible a special University Faculty for Economics in Budapest, with twenty-two chairs of instruction and well-equipped seminars. Everywhere in Hungary instruction in finance is closely connected with the course in economics. After an initial inclination to classical economic theory of individualistic-liberal stamp, Hungarian research in eco-

nomics produced its first internationally distinguished fruits in the second half of the last century, under the influence of the German historical school. A socio-ethical current made itself felt particularly strongly about this time. The psychological and mathematical viewpoints of modern abstract theory found much favor during the last decades of the century. But gradually the significant public law viewpoint, so characteristic of the Hungarian way of thought, also penetrated into economic research; and just recently the juristic presuppositions of economic institutions have been emphasized by Hungarian writers with ever growing success. In addition, the general political interest of the Hungarian has brought forth several noteworthy scientific achievements in the field of social politics and economic policy.

The teaching of statistics in Hungary is confined to the law faculties. The development of this science was for a long time held back by unfavorable political conditions, but, since the second half of the last century—that is, since the founding of the National Statistical Bureau (1871) and of the Statistical Bureau of the City of Budapest, both decidedly of first rank—it has made a sharp ascent. It changed rapidly at that time from a mere description of the notable events in the life of the state to modern, methodical observation of the conformities that emerge in the social growth. Scientific achievements in Hungarian statistics are characterized by profound methodological observation and by a lively socio-ethical sense. Hungarian research may claim great significance in the field of enterprise and business statistics, in the perfection of export statistics on the basis of international cooperation, and in individual branches of public health statistics.

The prominence given to public law in Hungarian thought and the central position of juristic and political science, as the two decisive emphases in the development of all the social disciplines, manifest themselves most clearly in Hungarian sociological research. As a result of this lively interest in public law Hungarian sociology, just as it was attaining a higher development at the turn of the century, was drawn into the proscribed area of political struggle. This fact explains why it has been impossible, even to this day, to establish separate chairs of sociology in the Hungarian universities. Sociological lectures are held only here and there. As to content, the predominant role of juristic and political science appears especially in this: that sociological research in Hungary received its most valuable stimulus from juristic philosophy; it received, besides, most inspiring contributions from general political science. On the soil of these two influences it has developed a fruitful, idealistic attitude in speculation, which partially inclines toward the Kantian theory of norms. The second main current of Hungarian sociological research bears the impress of Comtian positivism, of Darwinian materialistic evolutionism and of the Spencerian organic theory. Adherents of this phase of sociological theory became extremely active during the decades before the World War.

In the second half of last century the Finno-Ugric extraction of the Hungarian people was established, as against the Turko-Tartar hypothesis, in the course of a long controversy which brought about the rise of comparative philology in Hungary. Ethnology and anthropology both gained strength from the controversy. As to the socially important philosophical sciences, it is to be noted that a chair of aesthetics had already been established in 1774 at the University of Nagyszombat. Hungarian pedagogical research is also of comparatively early origin; indeed Comenius worked in Hungary for several years about the middle of the seventeenth century. Recently the socio-pedagogical and in a measure also the psychotechnical trend of modern pedagogy has excited special interest. Ethical research, in its socio-ethical relations, has always rendered most useful service to the Hungarian social sciences. The disciplines mentioned in this paragraph are taught in the faculties of philosophy in the universities.

The Hungarian Scientific Academy deserves a most conspicuous place in the history of the development of the social sciences in Hungary. Founded in 1825, it has since assembled, especially in its second division, the most distinguished Hungarian representatives of the social sciences. Its activity concerns especially the organization of lectures and discussions, the publication of historical and other source material, of scientific compilations and individual monographs, and the publication and subvention of scientific periodicals. Most of the social disciplines in Hungary owe their present degree of development mainly to the stimulation received from the academy. By reason of large gifts the academy has recently come into a position where it will be able to extend its activity even more widely in the future.

In addition to chairs for the separate social disciplines, all Hungarian universities have arranged seminars after the German pattern in which the students approach a practical understanding of what they have learned under the leadership of the professors and their assistants. Social science research institutes outside the universities are only in process of formation. A Sociographic Institute was established in Budapest in 1924 for the observation of general social phenomena. The Socio-Political Institute in Ujpest (1910) seeks to investigate living conditions among factory workers, while the Hungarian Institute for Economic Research in Budapest is dedicated mainly to the observation of the business cycle. Since approximately the beginning of the century popular university courses, in which the social sciences occupy front ranks, have been held in Budapest and several other Hungarian cities. In general, however, these courses drew a comparatively poor attendance. After the war an unsuccessful attempt was made to introduce into intermediate school instruction the principles of economics and of sociology in addition to history. Great significance attaches to the Hungarian Historical Institutes, founded in Rome and Vienna in 1888 and 1919 respectively, and active in gathering from the Vatican and the Vienna archives material that is valuable from a Hungarian standpoint. After the war Hungarian colleges were established in Berlin, in Vienna and in Rome. They offer numerous young Hungarian scholars the opportunity to penetrate into the spirit of foreign social science. Lately numerous fellowships for the same purpose have been granted annually, in part by the Hungarian government and in part by foreign scientific societies and foundations.

Besides the various divisions of the National Museum in Budapest, the following Hungarian museums are of especial significance for the individual social disciplines: the Social Museum, the Museum of Commerce, the Agricultural Museum, the Museum of Industrial Technology, the Museum of Military History, the Museum of Industrial Arts, the Museum of Plastic Arts, the Hopp Ferencz East Asiatic Museum and the Museum of Public Health, all in Budapest; also the Museum of Christian Art in Esztergom. The most important Hungarian library for the social sciences is the Municipal Library in Budapest; others, likewise important, are the Budapest libraries of the National Museum, the Scientific Academy, the Parliament and the National Statistical Bureau, also the various advanced school libraries and, above all, the library of the University of Budapest. Among the archives these are especially to be noted: the great National Archives in Budapest, the archives of the Budapest National Museum, and those of the Prince Bishop of Esztergom. Valuable libraries and archives were lost in the dismemberment of the country. Since 1922 most of the public scientific collections of Hungary have been combined in a great country wide union, so as to secure the advantages of unified management.

Numerous Hungarian scientific societies are developing a very lively activity in the field of the social disciplines. Some of these societies strive toward a popularization of the social sciences. For jurisprudence front rank is held by the Hungarian Association of Jurists, founded in 1879, with its periodical, *Magyar Jogászegyleti Ertekézesek* (Transactions of the Hungarian Association of Jurists). In the domain of historical science the Hungarian Historical Association (1867) is especially worthy of consideration, with its periodical, *Századok* (Centuries); also the Hungarian Archaeological Society (1878), with the periodical, *Archaeologiai Ertesitö* (Archaeological Reports); the Minerva Society (1921), with yearbooks and the periodical, *Minerva*; also the Hungarian Heraldic and Genealogical Association (1883), with the periodical, *Turul*. For political economy the Hungarian Society for Political Economy (1894) is to be noted, with its periodical, *Közgazdasági Szemle* (Review of Political Economy); for statistics the Hungarian Statistical Society (1922), with the French periodical, *Journal de la Société Hongroise de Statistique*; for sociology the Hungarian Social Science Society (1925), with its periodical, *Tarsadalomtudomány* (Social Science). The following periodicals are sociologically important: *Budapesti Szemle* (Budapest Review); *Városi Szemle* (Municipal Review); *Statisztikai Szemle* (Statistical Review); *Századunk* (Our Century); also the *Magyar Filozófiai Szemle* (Hungarian Philosophical Review), edited by the Hungarian Philosophical Society (1900). For pedagogy, aesthetics, linguistics, ethnology, anthropology and geography the following deserve prominence: the Hungarian Pedagogical Society (1876), with the periodical, *Magyar Paedagógia* (Hungarian Pedagogy); the Hungarian Society for Child Study and Practical Psychology (1903), with the periodical, *A Gyermek* (The Child); the Association for

Higher School Teaching (1907), with the periodical, *A Felsöoktatásügyi Egyesület Közleményei* (Reports of the Association for Higher School Teaching); the National Hungarian Association for Plastic Art (1861) and the National Hungarian Association for Industrial Art (1885), with the periodical, *Magyar Imparmüveszet* (Hungarian Industrial Art); the Budapest Philological Society (1874), with the periodical, *Egyetemes Philogiai Közlöny* (General Philological Reports); the Hungarian Linguistic Society (1904), with its periodical, *Magyar Nyelv* (Hungarian Language); the Hungarian Ethnographic Society (1889), with its periodical, *Népélet* (Folk Life); the Turanic Society (1910) with its periodical, *Turán*; the Körösi Csoma Society (1920), with its periodical, *Keleti Szemle* (Eastern Review); and the Hungarian Geographic Society (1872), with the periodical, *Földrajzi Közlemények* (Geographic Reports). Societies which reach out into several fields of knowledge but which are also of special importance for the social sciences are the Saint Stephan Academy (1915), the Protestant Literary Society (1888), the Hungarian Society for Foreign Politics (1920), the Hungarian Scientific Society Urania (1899), the Budavár Scientific Society (1920); also the associations of the Friends of Szeged (1922), of Debrecen (1922), and of Pécs Universities (1921). After the war the scientific societies of Hungary, like the public scientific collections, were combined in a great country-wide union.

In general these societies and their periodicals provide the connection between professional activity, under the leadership of university professors for the most part, and wider groups of the educated public. In addition to the periodicals mentioned other social science literature is enjoying a most gratifying growth. Even in the subdivisions of most of the sciences the students have had good Hungarian textbooks at their disposal for two or three generations. However, in view of the linguistic isolation of the country, some Hungarian writers consider it necessary to publish the results of their social science research, either entirely or at least in summary, in one of the world languages. German is generally preferred, inasmuch as the spiritual ties, even in respect to the social sciences, are strongest with Germany and Austria; indeed the most important literary influence has always come from these countries. Occasionally, however, French and English are used, even Italian in individual instances.

THEO SURÁNYI-UNGER

V

Italy

I. ITALY TO THE END OF THE WORLD WAR. The progress of the social sciences in Italy is bound up with university instruction. This is in accordance with the observations of John Stuart Mill regarding the development of a learned class. "The most effectual plan and at the same time the least liable to abuses," he wrote, "seems to be that of conferring Professorships, with duties of instruction attached to them. The occupation of teaching a branch of knowledge, at least in its higher departments, is a help rather than impediment to the systematic cultivation for original researches, and the greatest advances which have been made in the various sciences, both normal and physical, have originated with those who were public teachers of them; from Plato and Aristotle to the great names of the Scotch, French and German Universities."

The academic teaching of the social sciences in Italy dates from 1754, when Bartolomeo Intieri, a Tuscan abbot, founded a chair of political economy at the University of Naples. In the agreement with the university Intieri stipulated that instruction be given in Italian, a radical innovation at that time; that Antonio Genovesi occupy the chair for life; that Genovesi's successors be selected by competition; and that no occupant of the chair be chosen from the ranks of the regular clerics. It was also stipulated that instruction in mechanics and commerce was to cover a two year period.

At the time of his appointment to the new chair of political economy, Genovesi was forty years old. He had already been professor of philosophy, metaphysics and ethics, and only his somewhat unorthodox Biblical criticisms had prevented his being appointed professor of theology. Genovesi's enthusiasm for his new duties was shared by his students. Until his death (1769) he lectured to crowded audiences, which frequently included illustrious foreign scholars; and the impetus to the study of the social sciences in eighteenth century Italy was in large measure due to his eloquence and erudition. He discussed the works of John Cary, Locke, Melon, Dutot, Forbonnais, Ustariz, Ulloa, Montesquieu and Hume. In 1765 he published his lectures on commerce and civil economics; they went through several editions in Italy, were translated into German in 1776, into Spanish in 1785, and remained in use as a textbook in Italy for many years. Although Genovesi was neither free from mercantilistic prejudices nor absolutely opposed to the regulation of internal commerce, he attacked privilege and monopoly, which led an adversary to declare that he was the first to arouse the democratic spirit. The most prominent representatives of Neapolitan erudition in the last decade of the eighteenth century were his disciples, and it was his teaching that inspired the works of Filangieri, Palmieri, Briganti, Pagano, Galanti, Delfico, Torcia and many others, all zealous promoters of the cause of scientific progress and of social betterment.

Cesare Beccaria's teaching, which began January 9, 1769, in the Palatine Schools of Milan, was less influential. Beccaria, famous as the author of *Dei delitti e delle pene*, taught what was known as cameral science, although it dealt with political economy, as may be observed from the lectures which circulated in manuscript and were published by Custodi in 1804, ten years after the author's death, in the collection of Italian economists. He relinquished his post after two years, for he was appointed to the Supremo Consiglio di Economia in 1771. Both Beccaria and Verri were instrumental in doing away with the guilds and also in instituting other reforms in the economic and financial administration of Lombardy, especially in provisioning, currency, weights and measures. Beccaria's lectures are models of precision and rigorous deduction, although he is of course not entirely free from mercantilistic misconceptions and concedes the value of protective tariffs.

In 1772 a chair of civil economics was founded at the University of Modena and the professorship was conferred upon Agostino Paradisi, distinguished both as poet and as prosodist. Although they lasted only eight years, Paradisi's

courses served to arouse thought and discussion in the field of financial and economic reform. He advocated the abolition of tax privileges, simplification of the tax system and more precise regulation of charitable institutions. When Paradisi retired, the chair was suppressed and was not reestablished until 1859 when Modena was politically reunited with Italy.

The following economists should also be mentioned in a review of the teaching of economics in Italy: Vincenzo Emanuele Sergio, professor of economics, agriculture and commerce (the chair was founded in 1779 in the R. Academia degli Studi in Palermo and was retained until 1806), and Paolo Balsamo, who succeeded him in the academy, which had been transformed into a university some years earlier. By his effective teaching he spread Smith's doctrine in Sicily; he attacked barriers of all kinds, maximum prices, government contracts—in general all prohibitions which restricted agriculture and industry in Sicily—and even went so far as openly to declare himself in favor of international free trade.

As in the Universities of Pavia and Padua, the executive directorate of the Cisalpine Republic created a chair of political economy at the University of Bologna. It likewise founded chairs of public and international law, history of customs and laws, as integral parts of the faculties of jurisprudence. From 1801 to his death in 1828 Luigi Valeriani occupied the chair at Bologna. Although the chair of political economy had been suppressed in the reorganization of the University of Bologna undertaken by the papal government in 1824, by an exceptional ruling it was continued during the lifetime of Valeriani in consideration of his signal merit. Valeriani's teaching was indeed fruitful for the progress and the spread of the social sciences: his works are original, erudite and keen, especially in his treatment of the theory of value and of the relations between economic and juristic phenomena. Among his pupils was Pellegrino Rossi.

From this period of rather occasional teaching of social economics, we pass with the unification of Italy to a systematic period. In 1846 Piedmont effected the administrative reforms which cleared the way for the constitutional liberty and the purposive action of the political Risorgimento. In the faculty of jurisprudence a chair of political economy was instituted which was held by the young Neapolitan Antonio Scialoja. He had, a few years earlier, at the age of twenty-two (1840), published the *Principi della economia sociale* which aroused the admiration of his colleagues because of its sound doctrine and its scholarly research. His lectures were attended not only by students but by such eminent Piedmontese as Camillo Cavour, Massimo d'Azeglio, Cesare Balbo—"by all that brilliant constellation of great minds and famous men that rose on the political horizon of Italy and anticipated the new era. And he conquered the souls of his hearers by his marvelous eloquence, and confounded them by the loftiness of his ideas" (Carlo de Cesare, *La vita, i tempi e le opere di Antonio Scialoja*, Rome 1879, p. 34). Scialoja continued to teach until the first months of 1848, when his desire to cooperate in the political regeneration of his native land caused him to return to Naples. There public opinion soon forced him into the councils of the king, who at that time seemed sincerely disposed to pursue the paths of liberty. After the reaction he was jailed with several other ministers. At Turin another *émigré*, the Sicilian, Francesco Ferrara, who had just emerged from that very Bourbon prison in which his predecessor was about to be shut up, succeeded to Scialoja's professorship. Ferrara taught at the University of Turin until 1859 and his courses were widely attended by very select audiences. According to Cavour, who speaks of them in various articles on the Risorgimento, they mark a "new era in the study of economic science in Piedmont." At that time he began the publication of the *Biblioteca degli economisti* and of those masterly prefaces in which he used the occasion afforded by these translated works not only to discuss their content but to proceed to his own analysis of scientific problems. He exercised great influence upon all Italian students by his profound wisdom, his spirited enthusiasm, his irresistible argument and his fascinating style; and it may be said that for several decades he occupied a prominent place in Italian economic literature.

After Italian unification, beginning especially with the third decade before the close of the nineteenth century, the study of the social sciences in Italy became completely, or almost completely, identified with the universities. This was in part due to the ordinances governing higher education. The original law of 1859 provided that all professorships were to be awarded competitively and that the competition was to be judged on the basis of scientific reputation. The contestants must prove

that they had mastered their subjects, and must give evidence of research ability. The functions of the *Privatdocent* were similar to those of the official professor. The position was and is conferred following tests of the candidate's ability to understand scientific truths and to disseminate the spirit of research. The greatest freedom of instruction is guaranteed; no programs are arranged other than those proposed by the professors themselves and approved by the faculty with a view to coordinating the various disciplines. These programs can be changed annually and there is no set mode for the presentation of a given subject.

Beginning with 1860 instruction was instituted in political economy, and in 1875 in statistics, in the faculty of jurisprudence, which comprised in addition the chairs of private law and of the philosophy of law and various chairs of public law. The ordinance of 1885 introduced into all Italian universities special chairs in the science of administration and finance, which had previously existed in only a few of the universities. Separate faculties of political and social science have been established only recently, in some universities only after the Gentile Law of 1923 gave them wider autonomy in determining their courses and in selecting their faculties. However, almost all the faculties of jurisprudence instituted schools and courses comprising subjects of a social and political nature which previously had not been specifically represented, such as economic history, history of economic doctrine, history of treaties, constitutional history, commercial policy, etc. They were empowered to confer the doctorate in social and political science, or in political and economic science, as well as in jurisprudence. These added courses, however, are almost always based upon various courses constituting the faculty of jurisprudence proper, which they complement. According to individual university regulations the doctor's degree in social science can generally be obtained by doctors of jurisprudence with two years or even a single year of attendance in special courses. Ever since the unification of Italy the institution of special faculties of political or of social and political science had been discussed, but the idea prevailed of maintaining the unity of the jurisprudence faculty, which was, indeed, becoming more and more a juristic-social rather than a purely juristic faculty. Professors of economics were able successfully to impart a scientific character to their courses, which were widely attended, since students of jurisprudence considered courses in economics fundamental even for a strictly juristic training and the doctor's degree in jurisprudence was requisite for admission to many careers and public offices as well as to the practise of law.

In Florence the Instituto di Scienze Sociali, "Cesare Alfieri," founded in 1874, was more concerned with preparation for the diplomatic and the consular service than with purely scientific learning. The higher schools of commerce, with numerous professorships in economics, had a more or less professional cast, at least until recent years. The one at Venice, R. Instituto Superiore di Scienze Economiche e Commerciali, is an exception; since the beginning it has had a section for teachers and for the preparation of docents in economics in the secondary schools.

The revival of the study of the social sciences in Italy was, as we have said, promoted almost entirely by the universities. Luigi Cossa was a famous professor whose pupils either directly or indirectly included all the university professors of the last thirty years of the nineteenth century; among them should be mentioned Giuseppe Ricca-Salerno, Maffeo Pantaleoni and Achille Loria. Cossa had the spiritual and intellectual qualities that inspire scientific research, and he understood the aptitudes of his pupils, assigning to each the work to which he was most suited. Angelo Messedaglia, an eminent scholar who dealt with various economic, demographic and financial problems with gratifying results, was contemporary with Cossa. Scientific research, characterized by critical objectivity, advanced under these leaders and was extended to all fields of economics—doctrine, history and policy, demography, and methodology and application of statistics. It was a result of the impartiality which characterized these investigations that Italy never gave rise to any independent school of economics. Each investigator used the method most suited to the nature of his research and his inclinations. Chairs of sociology were established only in a few universities, relevant courses were given only occasionally, in certain years; but sociological research was pursued nevertheless by professors of philosophy, of demography and of political economy. Although political economists did not adhere to the materialistic interpretation of history, they constantly referred to the importance of the economic factor in the constitution of society and also devoted special

courses of lectures to the sociological doctrines.

The introduction of the study of political economy in the technical institutes likewise served not only to disseminate economic culture generally but especially to encourage scientific research, for several distinguished university professors began their academic careers in these institutes. In the universities there were institutes or seminars, with special libraries, attended by young men exceptionally qualified for scientific work. The first, which was called Laboratorio di Economia Politica, was instituted by Professor Cognetti de Martiis of the University of Turin in November 1893, and many of the pupils of that laboratory are today university professors with distinguished reputations in the fields of economics and social research. Since 1879 Siena has had a juristic institute with a special library and sections for economics and finance. Today all universities have these seminars for scientific training and advanced research. Many of them publish annals or reviews in which the memoranda and the papers of professors and students are collected. Moreover the reviews that are not the direct product of university faculties or schools publish papers that are influenced or inspired by the universities, the higher institutes or works of university professors. The academies encourage the publication of scientific studies by awarding prizes on topics that may or may not be specifically assigned. These writings in the social field, however, with occasional rare exceptions, are the work of university professors or their students.

AUGUSTO GRAZIANI

II. ITALY UNDER FASCISM. The two great figures which dominated the social sciences in Italy immediately before the advent of Fascism were Vilfredo Pareto and Benedetto Croce. Both of these scholars involuntarily contributed to the setting of the stage for Fascism. Pareto, the economist, led the attack on democratic institutions and conceptions of government and made a strong plea for genuinely scientific statecraft carried on by economic experts. Croce, the historian and philosopher, contributed largely to a self-conscious national tradition in thought and culture and erected a philosophic framework for the social sciences which was peculiarly a product of Italian experience. Although Pareto and Croce had little in common, the net outcome of their systems was to link politics and economics closely together and to separate them from the moral ideas which the Catholic church on the one hand, and the French Revolution on the other, had associated with political life. Fascism continued to emphasize the economic factor in social science, but it refused to divorce morals, art and religion from politics. The Fascist doctrine that society is to be understood in terms of the clash of peoples or nations, and that each people must be a spiritual and economic unity which must be expressed by the sovereign and omnicompetent state, found its chief expression in three schools of thought: the idealistic school of Giovanni Gentile which glorified the state, at the expense of the church, as the embodiment of Italy's moral and spiritual life; the nationalist group of politicians, led by Enrico Corradini, who revived Italy's imperialistic ambitions and made a cult of Italian expansion; and Mussolini and his associates, who used their syndicalistic doctrines of violence and creative will first against the socialists and then against the democratic liberals. The implications of such doctrine for social science are that the various social disciplines must all be subordinated to politics; that politics itself is an art rather than a science; that it must be conducted by a small group of political experts or geniuses; and that these political experts must use and develop the social sciences as technical instruments for their art. In short, social science is conceived by the Fascists as primarily a technical discipline for statecraft, not a general subject matter for public education.

In practise this means that the elementary schools lay stress on patriotism, art and religion; that superior schools emphasize technical and vocational training in social science; and that universities are centers of research. All children are taught a practical familiarity with their national traditions and social institutions from the very start. They are taught a romantic kind of history and the conventional forms of religion, but the emphasis is always on the appreciative or practical aspect; they are taught to love their country, admire its heroes, sing its songs, practise its rites, etc. In the superior schools a restricted, selected fraction of the people is taught the technical detail of the operation of social institutions for professional use. History is treated more scientifically than in the elementary schools, and the teaching of philosophy and sociology is substituted for religious instruction. In the universities a still

smaller group is given freedom for research, for guiding the solution of social problems and in general for the development of a critical competence in social science. Of course much of this educational program is not characteristically Fascist. The chief innovations introduced by the Fascists were the teaching of religion in the elementary schools and the development of technical, vocational education in the social sciences in the superior schools. These are, however, merely applications of the fundamental principle that religion, morals, art and science are all but aspects of social organization, and as such they are to be subordinated to and supervised by the state, the organ and expression of the social unity of the nation.

The technical organization of social science teaching has undergone less change than the content of the instruction. The Fascist government was forced to proceed slowly in the reorganization of the universities, partly out of fear of arousing active opposition among intellectuals who were already cool toward Fascism, partly because of the pressure brought to bear by ambitious politicians who sought professorships as sinecures and as spoils of political victory. Nevertheless, immediately after the march on Rome, would-be professors began to expound various aspects of Fascist doctrine at the universities as *liberi docenti*. Courses were offered in the recent history of Italy (usually a camouflaged title for Fascist propaganda), in the principles of national syndicalism, in corporative law, in the theory of the state, etc. A second type of Fascist influence in the universities came from those regular professors who had joined the Fascist party and who naturally became Fascist leaders in university circles. Among these should be mentioned Alberto de Stefani, Giovanni Gentile, Alfredo Rocco, Sergio Panunzio, Gino Arias and Gioacchino Volpe. These scholars, and many others, have applied their knowledge of the social sciences to the cause of Fascism.

A special effort has been made to concentrate the teaching of the social sciences according to Fascist principles in a few universities. Most notable was the founding of the Fascist Faculty of Political Science at Perugia in 1928, where it is planned to train Fascist leaders intensively. Lesser centers of Fascist teaching have been established at Rome, Pavia, Padua, Florence and Bologna. At Bologna there is a "Fascist University" which is really little more than a group of courses organized by Fascist students and teachers for the spread of Fascist propaganda. The Instituto Nazionale Fascista di Cultura, which is more serious in nature, was established by Gentile at Rome. Its official organ is *Educazione fascista*, and it enjoys the cooperation of a number of reputable scholars.

At every university there is a Fascist student organization which serves as a social club, as a center of propaganda and political activity and also as a means of encouraging serious political studies. Edmondo Rossoni, the Fascist labor leader, has recently established a Labor University, but little can be said as yet of its activities or probable success.

Far more typical of Fascism, however, than these academic agencies of social science, are the research bureaus which are directly attached to the government. Most significant of these are the various federations of syndicates and the ministry of corporations, which is really a bureau for the cooperative solution of the nation's economic problems. Here the secretaries of the federations of syndicates and other experts are summoned, as need may arise, to investigate sources of conflict, waste or disorder among the various economic groups or interests of the nation. Closely allied to the ministry of corporations are the compulsory labor tribunals. These courts, in cooperation with the ministry of corporations (under the leadership of G. Bottai) and the ministry of justice (headed by Alfredo Rocco), are constructing a new body of law, dealing in a new way not only with labor problems but with almost every imaginable phase of economic activity. The codification and reconstruction of Italian law is in itself an enormous task assumed by Rocco and already well under way.

Several agencies dealing with specific problems have been created by the Fascist government, e.g. the Institute for Exportation, the Institute for Emigration and the Central Bureau of Statistics. No doubt the most vital and effective research now being done in Italy is being carried on by these non-academic agencies.

The Fascist theory is that social science is, or ought to be, in the service of the state. Hence the demand is constantly made by Fascist politicians that the universities be "purified" of all anti-Fascist elements and teaching. In a famous speech in the Chamber of Deputies on the Law of April 3, 1926, Mussolini said: "The professor fulfils a function in national life much more delicate than that performed by the official of a public service or by the

magistrate. The professor, who molds minds and consciences and can make of men either heroes or cowards, has an extremely important function in the life of the nation. Hence he must be an atom, not a group or association, in the state." In other words, associations of professors, like associations of public employees, have no legal status in the Fascist syndical law, and the principle enunciated is that the more vital a person is to the life of the nation the less liberty he has. At least one economist has been forced to resign and a number of others have been intimidated by violence or threats of violence; and in general no pretense is made of respecting academic freedom. In spite of this theory many social scientists who are not Fascists are still tolerated in the universities.

The press has been more quickly and thoroughly "Fascisticized." Editors are expected to avoid publishing political debates, discussions, council proceedings and in general anything reflecting the presence of various points of view, and to publish only the results of the deliberations, thus giving the appearance of unanimity, "discipline," and successful cooperation within the Fascist ranks. The public is supposed to know outcomes of issues, not to participate in their discussion or solution. But here again the theory is more stringent than the practise, and anyone who knows how to read between the lines can get a fair amount of political discussion from Italian newspapers.

It goes without saying that all the agencies of political science which we have mentioned receive their financial support either through local governments or *fasci* or through the central government. In addition the government has lent its support increasingly to various agencies of social welfare which have no immediate political functions. The compulsory syndicate tax serves to support most of such institutions. Among them should be mentioned the Dopo Lavoro (a national agency for the education and recreation of laborers), the Association of War Cripples and Invalids, the Institute of Insurance, the Institute for the Protection of Maternity and the Institute against Tuberculosis. A special effort is being made to increase the production of grain by means of prizes, exhibits, lectures, etc. In general the government is most active in fostering agricultural science, drainage, irrigation, hydroelectric engineering, etc.

In short, practically all organizations of public import are being "protected and disciplined" by the Fascist government. Only the church has retained its independence, and even it has sacrificed some of its social organizations to the secular government and has stopped the political activities of others.

HERBERT W. SCHNEIDER

VI
Russia

I. IMPERIAL RUSSIA. The history of Russian universities begins with the foundation of the Imperial Academy of Sciences, established in 1724 partly according to the conception and plan of Leibnitz. This institution, located in St. Petersburg, was throughout the greater part of the eighteenth century something more than an ordinary academy; it was also the first Russian university. Like all the universities of that time it was a combination of secondary school and higher school of the university type. Until 1733 there was not a single Russian among the members of the academy, there were more teachers than students in its university classes, and it had to depend not only on foreign professors but also on foreign students. It was, moreover, very difficult to maintain regular and uninterrupted teaching. Nevertheless there were courses in the social sciences; among them were law (including Russian law), moral philosophy, history (including Russian history), and Roman and Greek antiquities, although as a rule they did not occupy the foremost place in the academy. In these fields the works and teaching of S. Th. Bayer (who entered the academy in 1725), G. Fr. Müller (1731), J. E. Fischer (1732), Strube de Pyrmont (1738), A. L. Schlözer (1765) and J. G. Stritter (1779) laid the foundation for the scientific study of Russian history, law and institutions. Even the work in natural sciences, the primary interest of the academy, was, in both research and teaching, of some importance in the development of the social sciences. The naturalists of the St. Petersburg academy were perhaps the first learned statisticians in Russia and the first to expound there the conception and practise of statistics.

Although university teaching in general and that of the social sciences in particular had its inception in St. Petersburg, the real development of the social sciences began in the University of Moscow. The first professors of that university, which had been from the outset divided into three faculties (law, medicine and philosophy), were drawn partly from the Russian graduates of the St. Petersburg academy and partly from abroad. In the faculty of philosophy, general and Russian history were taught in addition to philosophic subjects. Among the purely social sciences in the faculty of law in its initial period, we find natural law, international law, Roman law, public law of the Holy Roman Empire, general and Russian jurisprudence, and politics. All of these subjects were taught by Philip Heinrich Dilthey, who had been specially invited from Vienna and who for a while embodied in his own person the entire faculty of law. Although at first he lectured apparently only in Latin and French, Dilthey soon learned Russian, familiarized himself with Russian law and became the founder of academic jurisprudence in Russia. Two future professors of law and several statesmen were graduated from the University of Moscow during its first eight years. The two professors, Desnitsky and Tretiakov, studied later at the St. Petersburg Academy of Sciences, and were then sent as university stipendiaries to Scotland, to the University of Glasgow. There they became the pupils of Adam Smith and the followers of David Hume. Tretiakov died early (in 1776), leaving only a small historico-economic treatise, in which he had expounded some of Adam Smith's ideas four years before the publication of the *Wealth of Nations*. Desnitsky was active for twenty years as teacher and scholar, succeeding Dilthey at Moscow University. He enriched Russian legal literature with a translation of Blackstone's *Commentaries*, excellent for its time but unfortunately incomplete, published in Moscow in 1780–82 by special command of Catherine II. Foreigners continued to appear in the law faculty of Moscow University, although in 1768 the Empress Catherine, at the very height of the nationalist and liberal period of her reign, proposed that lectures in the university, and especially those in connection with the faculty of law, should henceforth be delivered in Russian. From that year on, Russian became the principal language of instruction.

At that time university teaching was practically confined to general courses, based on

printed textbooks which had to be approved by the university authorities. Among the approved authors in the social sciences were Pufendorf, Nettelbladt, Heineccius, Vattel, Bielfeldt, Achenwall, Pütter, Montesquieu. A course of lectures by Professor Schneider, giving an exposition and interpretation of Montesquieu's *De l'esprit des lois*, was published in Moscow in 1782 in Russian and French. Toward the end of the eighteenth century Kant's influence left its mark on the philosopher Schaden, who lectured after 1776 on natural law and politics and was the teacher of the great Russian historian Karamzin. Apparently no instruction in political economy was given at the time at Moscow University, but economic policy was taught as a part of political science. Once during this period a course on private economics was announced. Statistics, as understood by Achenwall, was taught in connection with history almost from the founding of the university. In 1773 Professor Reichel published in Russian a short textbook on the statistics of the principal European countries. In jurisprudence the practical as well as the theoretical aspects were continuously stressed. The successor of Dilthey and Desnitsky was Goriushkin, a practical jurist, himself a judge and a high official, a specialist in positive law and the author of practical textbooks on Russian law and procedure.

Closely allied to the scientific and academic life of Russia, especially of Moscow, was the publishing activity carried on in connection with the university by the famous educator, the freemason N. I. Novikov. His friend and associate in editorial work was Johann Georg Schwartz, professor of philosophy and of the German language. Novikov's activities were at first limited and then suppressed during the reactionary period of Catherine's reign, but in spite of that a considerable cultural impetus was given to Russian public life, and a great bulk of educational matter, such as historical sources of great value, became accessible to the public, thanks to him and his associates.

With the beginning of the nineteenth century a revival of Russian academic life became apparent. New elements, both Russian and foreign, were injected into the University of Moscow. The Göttingen professor, Meiners, author of many books on the history of civilization, including a standard work on the universities of Germany, was the principal counsellor of M. N. Muraviev, who was then curator of Moscow University and active in efforts to reform it. During this liberal epoch political economy was becoming especially popular in Russia. The works of Adam Smith, Herrenschwand, Verri, Alexander Hamilton and many other writers were translated into Russian. The influence of Jeremy Bentham was also felt at this time. Chairs of political economy were established in the Academy of Sciences, in the University of Moscow and in such other newly founded universities as those at Dorpat (1802), St. Petersburg (1803), Vilna (1803), Kazan (1804) and Kharkov (1804); the subject was taught in the faculty of moral and political sciences. Among its teachers were such distinguished men as Heinrich Storch, at the academy, Christian Schlözer, who lectured at Moscow University in German and French, and the Kantian, Jakob, at Kharkov. During the academic year 1806–07 the first course on finance was given in the University of Moscow. About the same time statistics, taught as a part of history in the faculty of letters at Moscow, was intrusted to a special professor of statistics, Grellmann. After him it was for a long time taught by Heym, originally a philologist, who later specialized in statistics and geography and also lectured, sometimes publicly, on the theory and practise of commerce. In 1821 Stepan Maslov, in standing for the degree of doctor of moral and political sciences, defended in the University of Moscow a printed Latin thesis on the scope and history of political economy.

The same period witnessed the definite establishment of the practise of sending young Russian scholars abroad for study, and henceforth they were dispatched in large groups. As early as the eighteenth century the Academy of Sciences and Moscow University were sending young Russian scholars to complete their studies in foreign universities. The University of Göttingen and, to a lesser degree, the universities of Leipsic and Strasbourg acquired in this way a special importance in Russian academic culture. In 1808 twelve scholars, provided with special instructions, were sent from the University (Pedagogical Institute) of St. Petersburg, some of them students of economics and law. Likewise in 1828 and 1834 the universities had to nominate candidates to be sent abroad to study, with the understanding that they were to be chosen on the basis of an examination in the Academy of Sciences. Upon their return to Russia the young law scholars were examined by a commission con-

sisting of professors and practical legal experts, according to a program drawn up by the great Russian statesman and jurist, Speransky. In this manner the future distinguished professors of public and administrative law (Redkin and Leshkov), of Roman law (Krylov), of criminal law (Barshev) and of political economy (Chivilev) were selected for the University of Moscow.

In 1835, by a new general statute concerning the universities, the separate faculty of law which had originally existed in the University of Moscow was restored. In it the following subjects were to be taught: philosophy and methodology of law, public law of Russia, Roman law and its history, history of Russian law, civil law, criminal law together with security police, welfare police (administrative law), financial law (finance), diplomacy and international law, and ecclesiastical law. After the closing of the universities of Vilna and Warsaw, courses on the system of law which was still in force in Poland were given in the University of Moscow, partly by former professors of the two universities named. Political economy and statistics, which was still understood in Achenwall's sense as a descriptive part of political science, were by this statute transferred to the faculty of history and philology. However, by the more liberal statute of 1863 they were restored to the faculty of law. With unimportant changes the subjects here enumerated cover all the disciplines taught in the faculties of law until the time of their suppression by the Soviet government. Under the statute of 1835 the teaching of the social sciences finally assumed its real university character, preserving at the same time a close contact with the needs of the outside world. Practical teaching of jurisprudence attained at that time a very high degree of perfection, since the number of students was small and the character of the teaching staff was showing constant improvement.

Although the fluctuations of government policy affected the character of university teaching, this influence must not be exaggerated. The excitement during the reactionary period of the reign of Alexander I, caused by the reprisals against the liberal professors of the universities of St. Petersburg and Kazan, lost its force in the following reign, when the whole matter was formally dropped. Of particularly great moment for the freedom of university life was the fact that under the autocratic regime of the nineteenth century the Academy of Sciences, being exempt from outside censorship, preserved an absolute independence in matters of learning. The statute of 1804 directed that "every professor shall choose for his lectures one of his own works or that of another well known man of learning; in both cases the work so chosen shall be submitted for consideration to the University Council and if the Council thinks fit to introduce any changes into it, the professor, after having made same, shall submit them to the Council for approval." The statute of 1835, however, no longer contained this provision. Professors therefore achieved a greater independence, and the principle of freedom in teaching became so well established that it persisted as the leading principle of Russian university life. Whenever deviations from it took place they were due to political pressure, directed to the selection of professors (discriminating against those regarded by the government as politically undesirable) or to the selection of courses to be included in the curricula. Examples of the latter are the suppression, in the reign of Nicholas I, of the teaching of *jus naturae* and later of secular philosophy, and also the reactionary university reform of 1884.

Of the various social sciences, the greatest success, both in teaching and in training for research work, was achieved at this time in connection with Russian history, including legal history in the widest sense of the term, and also economic history. The founding of Russian history as a discipline may be ascribed to Gerhard Friedrich Müller and the Göttingen professor August Ludwig Schlözer, both of the St. Petersburg Academy. Considerable influence was also exercised by Johann Philipp Gustav Ewers of Dorpat University. Since the beginning of the nineteenth century this university, through its special institute for the training of Russian professors, had played a very important part in university education. Beginning with the thirties and forties Moscow University became the center of the systematic cultivation of Russian history, especially through the work of Mikhail Pogodin, a pupil of Heeren, and Sergei Soloviov, a disciple of Guizot, Ranke and Ritter. At the same time in St. Petersburg some particularly fruitful work in legal history was being done by Nevolin, author of the classical *History of Russian Civil Law* (in Russian, St. Petersburg 1851) and of a remarkable introductory textbook on law, translated at the

time into German. Russian history was at that time turning to a systematic study of historical sources, a great number of which were then being discovered and published. Legal and political history were greatly in advance of economic history. Church history, with its important social aspects, was intensively studied in the ecclesiastical academies, especially in Moscow, Kazan and Kiev.

The fundamental institutional changes of the sixties could not but affect the social sciences. The number of universities did not appreciably increase, but the number of students grew exceedingly and teaching became specialized. The dual role played by the universities became more conspicuous: they served as training grounds both for the professions, especially public service, and for scientific research work. Their standards of vocational instruction showed a decline. Thus the study of jurisprudence was, for the average student, practically reduced to a series of examinations whose nature depended almost entirely on the personality of the examiner. There were several reasons for this: the unsatisfactory character of the teaching in the schools preparing for the university; the overcrowding of universities; the absence of a clear conception of the fundamental difference between elementary university education and training for research work. At the same time universities were rapidly improving as training schools for future scholars. In spite of its general reactionary nature the university statute of 1884 proved helpful by introducing the German institution of *Privatdocent*, and the principles of free teaching and free choice of courses by the students. The scholastic work of each individual student was also intensified by the development, especially in the nineties, of the system of seminars and pro-seminars.

The greatest progress in training future scholars was made in the field of history, partly because of the large number of gifted teachers in the field. In the University of Moscow Vladimir Guerrier was the founder of seminar training for students of history in its broad sense. His work was continued and expanded by Paul Vinogradoff. Somewhat later Kliuchevsky and his pupils (among whom Miliukov, Liubavsky, Kiesewetter and Bogoslovsky occupied the first rank) exercised great influence. In Kiev historical schools were founded by I. V. Luchitsky, known by his investigations into the social history of France before and during the revolution, and V. B. Antonovich who contributed to the study of the social history of southwestern Russia. In the University of St. Petersburg a school of Byzantology was founded by V. G. Vassilievsky who was chiefly interested in the social history of Byzantium. Another eminent Byzantinist was Fedor Uspenski of Odessa. Some fruitful work in general history, especially that of France and Poland, was done by N. I. Kareyev. A. S. Lappo-Danilevsky (of the Academy of Sciences) and S. F. Platonov, both lecturers in the University of St. Petersburg, did important work in Russian economic and social history. In the last decade before the 1917 revolution the activity of Rostovtzeff in the same university was of considerable importance for the study of the economic and social history of the ancient world.

In the general theory of law and public law a great influence was exercised in St. Petersburg by A. D. Gradovsky, N. M. Korkunov and L. I. Petrazycki; in Moscow at first by B. N. Chicherin, then by M. M. Kovalevsky (who, however, had to leave the university for political reasons), A. S. Alekseyev and P. I. Novgorodtsev. In the history of Russian law a great number of students were trained by M. F. Vladimirsky-Budanov in Kiev, and F. I. Leontovich in Odessa and Warsaw; at St. Petersburg Professor V. I. Sergueyevich, although an excellent lecturer and a great scholar, had no gift for training individual students. In Roman law the outstanding names were S. A. Muromtsev in Moscow, later speaker of the first Duma, Joseph A. Pokrovsky in Kiev, and David Grimm in Dorpat and St. Petersburg. Least successful was the training of research workers in such practical disciplines as civil and criminal law; in this direction legal practise in the reformed courts was of a much greater significance than university teaching.

The destinies of political economy and statistics took a peculiar course. Until recently progress in economics was not fostered primarily by the universities, but rather by the political and economic sections of the so-called "thick" reviews, which were not subjected to preliminary censorship. This situation was similar to that which existed in England in the early nineteenth century when the principal instrumentalities for the dissemination of economic knowledge were books, pamphlets and magazines rather than university teaching. Statistics being treated primarily as a special adjunct to

public administration, the best publications in the field, even when not strictly official, were not by university scholars but by persons in the government service, where the most adequate statistical training was to be found. Interest in statistical and descriptive economic studies was also stimulated by two learned societies which enjoyed the protection of the government: the Free Economic Society, founded as early as 1766; and the Geographical Society, founded in 1845. In the last quarter of the nineteenth century the statistical departments of the units of local self-government (*zemstvo*) had come to occupy a preeminent place as schools for Russian statisticians. *Zemstvo* statistics, though influenced by A. I. Chuprov, professor of political economy and statistics at the University of Moscow, and by A. F. Fortunatov, professor of agricultural economics in the Higher School for Agriculture in Moscow, can by no means be said to owe its existence to the lectures and studies of academic scholars. In the beginning of the twentieth century, however, a leading role in statistics was assumed by two university professors: A. A. Chuprov, master of mathematical statistics, and A. A. Kaufman, who became professor only after a long practise as administrative statistician.

One of the peculiar features of Russian economic teaching was the independent place allotted, after 1835, to public finance or, as it was officially called, "financial law." It was formally elevated to the rank of an independent discipline, and a special chair was created for it, as well as special degrees of master and doctor of financial law. Usually, however, at least until the twentieth century, it was taught by ordinary economists. Among the particularly prominent teachers of finance were: in Moscow, Yanzhul, Ozerov and Haensel; in St. Petersburg, Lebedev at the university, and Friedmann and Tverdokhlebov at the Polytechnic Institute; in Kiev, the Yasnopolskys, father and son, and Silin; in Kharkov, Migulin and Alekseyenko, who afterwards became a competent chairman of the budget committee in the Third and Fourth Dumas of the empire. However, few persons studied for a degree in financial law, and this separation of finance from economics, unknown either in Germany or in England, was scarcely a judicious measure.

Economic history was cultivated in the Russian higher schools both by historians and by economists. The most important contribution to the teaching of that subject was made by two historians, the mediaevalist Vinogradoff and the Russian historian Kliuchevsky. In the department of economics of the St. Petersburg Polytechnic Institute, economic history was a compulsory subject, its teaching being entrusted to one of the professors of political economy. The chair was occupied first by Ivaniukov and then by Struve. The courses given by the latter contained an exposition of historical sociology of economic life, industrial economics and commercial policy. In the law faculties of the universities economic history was an elective subject. In St. Petersburg it was for a long time taught by I. M. Kulisher, author of the most popular textbook of European economic history. Instruction in economic history was often combined with the history of economic theories. Such combined courses were delivered by A. I. Chuprov in Moscow, V. Levitsky in Kharkov, and S. Bulgakov in the Moscow Institute of Commerce.

Sociology was not taught until very recently in Russian universities or similar schools, but the sociological method, older and more influential than the formal science of sociology, was for a long time applied to the study of law, history and economics. In academic circles the outstanding sociologist was Nikolay Kareyev, a professor of history and author of numerous historico-philosophical and sociological works. He was closely connected with the Russian sociological school of Lavrov and Mikhailovsky. This group, although scantily represented in the halls of official learning, has made probably the most important Russian contributions to sociology in the nineteenth century. The researches of M. M. Kovalevsky, historian of legal and economic institutions, gave a considerable stimulus to the development of genetic sociology. With his assistance the well known Russian neurologist, Bekhterev, founded in St. Petersburg the Psycho-Neurological Institute, the first higher school in Russia where sociology was taught under its proper name.

A great improvement on the old university teaching, which provided no adequate vocational instruction in social science, was furnished by the department of economics of the St. Petersburg Polytechnic Institute, a new type of school established in 1903 on the initiative of the minister of finance, S. J. Witte, and of the famous chemist, Mendeleyev. Political economy and statistics, taught in the faculties of history and philology or, after 1863, in the faculties of

law, were naturally subordinated to the major disciplines professed in these departments. In this new school and in the institutes of commerce modeled after it, instruction in all the economic sciences, including finance, was given on a very large scale, and the law disciplines were represented in proportion to their relevance to the study of economic institutions. Thus a prominent place was given to constitutional and international law and to civil and commercial law; some criminal law was taught, but no courses were given in Roman (*sensu stricto*) and canon law.

In this new school at St. Petersburg, elementary instruction in statistics and economic geography, which practically amounted to descriptive economics operating chiefly with statistical data, was given by two, and later three, special tutors who were themselves practical statisticians. Working under the general guidance of V. E. Dehn and A. A. Chuprov they coached individual students by offering them a series of concrete problems whose solution required familiarity with statistical sources and technique and the specific application of economic reasoning. This organization of practical exercises, unusual in Russia, determined the success of this school in the training both of practical statisticians and economists and of research men in these fields. For the latter valuable lessons were to be learned in the statistical seminar of A. A. Chuprov, which produced a series of valuable monographs; in the economic seminar of V. E. Dehn and P. B. Struve, which was engaged in a number of research projects in all branches of theoretical, historical and applied economics; and in the seminar on finance of M. I. Friedmann, later carried on with the participation of V. N. Tverdokhlebov. In the Moscow Institute of Commerce similar work was conducted by the late A. A. Manuilov and I. M. Goldstein. Numerous researches in descriptive economics, chiefly of Russia, originated in their seminar.

From the preceding description it is clear that the social sciences in Russia were considerably influenced both as systems of ideas and as teaching disciplines by borrowings and adaptations from abroad. As early as the eighteenth century the practise was inaugurated of sending young scholars to foreign countries. It continued in force until Russia was isolated by the World War and the revolution. After graduation the ablest of the students became stipendiaries either of the universities, which always disposed of relatively large funds for this purpose, or of the corresponding government departments. The purpose of such traveling scholarships, however, changed substantially in the course of time. Originally young men were sent abroad to study in the literal sense of the term. Thus in the eighteenth century Lomonossov was studying with Christian Wolff in Marburg, and many other Russians with Achenwall in Göttingen. Later on the chief object of traveling scholarships was to enable young Russian scholars to study foreign sources and literature and to familiarize themselves with the conditions of scientific work prevailing in other more advanced countries. Fellows sent abroad were expected to render reports on their studies and observations, which were sometimes published. Such reports, published in the sixties in the *Zhurnal* (Journal) of the Ministry of Education and in many cases written by persons who afterwards distinguished themselves as scholars and teachers, form an extremely interesting source for the study of scientific life in Europe from the Russian point of view.

Familiarity with European culture led to an understanding of foreign systems of thought and made possible their adaptation to the peculiar problems with which Russian social sciences were confronted. Since the beginning of the nineteenth century Russian thought had been swayed by the same intellectual currents which dominated the rest of Europe. In the first half of the century the idealistic philosophy of Schelling and Hegel exercised a strong influence. Of the Russian Hegelians the best known was the Moscow professor of public law, B. N. Chicherin, a legal historian and philosopher of great penetration. In the fifties, sixties and seventies of the nineteenth century the influence of Comte, Spencer and J. S. Mill was dominant, and the latter's *System of Logic* was studied intensively in the law faculties. The influence of Buckle in the sixties and seventies of the last century is obvious even in the works of Soloviov and still more in the works of Shchapov and Nikitsky. Robert von Mohl and Lorenz von Stein were the standard authors in the field of political science. With A. L. Block, of the University of Warsaw, Stein's ideas were blended with a peculiar sociological nationalism of Slavophil coloring. The influence of Marx, in many points akin to that of Stein, was of course very great. Later the doctrines of Simmel, first introduced into Russia by the writings of Struve and the

university lectures of Kossinsky in Odessa and Kiev, acquired a considerable following.

As early as the forties of the nineteenth century the university teaching of statistics in Russia fell under the influence of Quetelet. It appears that his first Russian followers were Roslavsky-Petrovsky in Kharkov and J. Vernadsky, then of Moscow University. Economic thought was dominated in the seventies, eighties and nineties by German "socialism-of-the-chair," often mingled with the doctrines of Rodbertus and of Marx. The most influential teachers of political economy in Russia at that time—Chuprov, Ivaniukov, Issaev, Kablukov—were representative of that trend of thought. While their theoretical views were akin to Ricardo and still more to Marx, in the field of agrarian policy they rather sympathized with the Russian variety of socialism, the so-called populism (*narodnichestvo*) with its idealization of the village community. The main bulwark of economic liberalism, mixed with moderate "historism," was in this period to be found in the University of Kiev where the teaching of political economy and economic policy had been put on a firm footing by N. Ch. Bunge, founder of a real school of his own; his work was taken up by his pupil D. I. Pikhno and in the twentieth century continued by Pikhno's pupil A. D. Bilimovich. The influence of Jevons, Walras, Menger (as theoretical thinker, not as methodologist), Böhm-Bawerk and Wieser was not felt until very late; it blended in a peculiar way with the enormous influence of Marx and Marxism. It is curious to note that at the department of economics of the Polytechnic Institute in the period 1912–17 the populists Ivaniukov and Posnikov were succeeded by two former Marxists, Tugan-Baranovsky and Struve.

The development of scientific studies is vitally affected by the system of selection of the teaching personnel for schools of the university type. The Russian system, although orderly and well conceived, was characterized until the revolution by undue and harmful formalism. Any university graduate was entitled to be admitted to the so-called "magisterial" examination on a group of subjects pertaining to the faculty in question. As it developed towards the end of the nineteenth century this examination was essentially calculated for persons intending to devote themselves to scientific or professorial work. Those who passed it were entitled after two trial lectures to become *Privatdocenten* in the appropriate discipline. The faculties, however, were allowed to admit as lecturer any person who had gained a reputation as a scholar, even though he had not passed the examination.

For the degree of master of a particular science (the first scientific degree) it was necessary also to defend a special thesis (dissertation); this, after 1863, had to be submitted in printed form. The examining board of the respective faculty was entitled either to admit that thesis for defense or to reject it, and it could pronounce the defense itself to be satisfactory or not (although in actual practise it was seldom refused). At first the thesis was not required to be scientifically independent and original, but from the seventies of the last century the *usus* of all the universities required that it be a piece of original research. Under the university statute of 1884, and up to the revolution, the defense of a thesis did not *ipso facto* confer any special rights upon the person who had defended it; he remained *Privatdocent*. However, by virtue of a special act which had to be ratified by the emperor, masters were often admitted to fill the functions of extraordinary and even of ordinary professors. Shortly before the revolution, when the office of regular docent which existed under the statute of 1863 was reinstated, the granting of a master's degree conferred a formal right upon its recipient to fill that office. The second and the highest degree, that of doctor, was granted when a second printed thesis was defended. It conferred upon its recipient a formal right to professorship.

This system, which in its main features originated in the first half of the nineteenth century and which was incorporated in the statute of 1863, encouraged the development of Russian learning in its crucial early stages. In the course of time, however, the shortcomings of the system became increasingly evident. Anyone who had passed the magisterial examination could obtain the right to teach in the higher schools, even though he had not published a single scholarly work. On the other hand a person who had scientific works to his credit but who for some reason had not passed the magisterial examination could become a *Privatdocent* with the permission of the university authorities, but had no chance of getting a professorship unless it occurred to some university to grant to him a doctor's degree *honoris causa*. In other words, a man's ability

to fill a professorial office was determined by a purely external test and not by any appreciation of his intrinsic qualities as scholar. As a result there could often be found among the professors persons who had completely fulfilled the formalities required of them, but whose qualities as scholars were almost negligible. Just before the revolution it became clear that some kind of reform was urgently needed in the organization of university promotions and admissions to professorships.

PETER STRUVE

II. SOVIET RUSSIA. In pre-revolutionary Russia the social sciences were taught in the eleven universities in the faculty of law and the faculty of history and philology. In the former were trained the lawyers and officials of bourgeois Russia; in the latter the instructors of secondary schools. With the collapse of the capitalist order the need for lawyers declined very considerably, and professional officialdom was dispensed with in the Soviet administrative machinery, which is run in large part by elective officials and for the rest by amateurs among the more intelligent workmen and peasants. The superfluity of law faculties was so patent, and they were so obviously breeding nests of reactionary ideologies and counter-revolutionary opinions, that at first they were suppressed altogether. Later, when a sufficient number of jurists with a thorough Marxist background were trained, several law faculties were reopened under the name of faculties of Soviet law. Their purpose is primarily to prepare court and prison personnel—judges, prosecutors, criminal investigators, members of commissions on child delinquency, jurisconsults, notaries—and officials for the diplomatic and commercial representations of the Soviet Union abroad. Soviet law faculties exist now in five out of thirteen universities of Russia proper (Russian Socialist Federation of Soviet Republics): Moscow, Leningrad, Saratov, Kazan and Irkutsk.

The transformation of the faculty of history and philology was somewhat similar to that of the faculty of law. After the revolution these faculties were no longer needed, because the training of teachers for secondary schools was taken over by pedagogical faculties and institutes organized especially for that purpose. They were used therefore as the basis for the faculties of social science, established soon after the Soviets came into their own. Some of their departments served as a foundation for the faculties of anthropology. At present there are faculties of anthropology in Moscow, and of linguistics and history of material culture in Leningrad. These are engaged principally in the training of ethnographers for work among the numerous nationalities of the Soviet Union and also of staff members for the many museums; to some extent they also prepare students for future scholarship in the field of ethnography, linguistics, history and archaeology.

Having thus reduced by more than half the number of old faculties in which the social sciences were taught, the Soviet government has developed extensively the system of higher schools of economics. Their pre-revolutionary prototype was the institute of commerce, founded and supported largely by individuals and private organizations. After the revolution these served as nuclei for institutes of national economy with a considerably extended teaching program. The largest of them, the institute named after Plekhanov in Moscow, may be taken as typical. It consists of three faculties, electrical-industrial, technical and economic, and is thus a combination of a technical and an economic school. Although the faculties are quite independent and have different programs, nevertheless the bringing together under one roof of technology and economics makes it possible to train the type of graduate wanted—a practical economist well oriented in technical disciplines and having a broad economic outlook. The social sciences taught in the first year in the economic faculty are economics and economic geography, European, American and Russian economic history, and statistics; additional courses are given in higher mathematics, physics and chemistry. In the second year, besides a continuation of general economics, there are special courses in the economics of industry, public finance and business law, and courses in technology and the qualities of merchandise. In the third year the students are divided among the commercial, industrial and statistical sections; all of the students, however, take courses in international economics, Soviet economic policy, history of economic doctrines, agricultural economics and business law, as well as the third year of general economics. In the sections there are certain compulsory subjects; in the industrial section, for example, the requirements include the economics of Russian industry, business cycles, industrial statistics,

industrial accounting, labor law, and special elective sequences for separate branches of industry (metals, textiles, petroleum, coal mining and leather). The Industrial-Economic Institute named after Rykov in Moscow, the Institute of National Economy named after Engels in Leningrad, the economic faculties of polytechnic schools and of the Timiryazev Agricultural Academy, are similar to the Plekhanov Institute.

In addition to the organizations named, in which the social sciences constitute the chief subject of study, there are a number of special schools in which these sciences are taught. To this group belong in the first place pedagogical faculties and institutes, of which there are eighteen in Russia proper. They have special social-economic departments comprising two sections, that of the science of society and that of economic geography. The first offers training to teachers of social science in the secondary schools, the second prepares for the same schools teachers of economics, economic geography and statistics. The teaching program of these sections includes economics, statistics, European and Russian history, elements of constitutional and economic law of Soviet Russia—in short, the same subjects that are taught in the institutes of national economy and in the faculties of Soviet law and of anthropology, but in a less specialized form. For instance, general economics is given in these departments only for seven hours a week in the first and second years (two hours of lectures, two hours of elementary seminar and three hours of advanced seminar work), while in the Plekhanov Institute the same subject is allotted ten hours for three years (four hours of lectures and six of seminars).

The teaching of the social sciences in the universities and institutes of Soviet Russia is not limited to the comparatively special courses described above. There is no faculty—not even the medical—in which some phase of social science is not taught as a subject of general educational value, for the government believes that no expert, however technical the character of his work, can be really useful in the Soviet state unless he is socially minded. Thus in the medical faculties are found provisions for seven hours a week of social science in the first two years of study. In the schools of geodesy twenty-two hours a semester are given to social sciences, or 6 percent of the entire number of hours; in the schools of agriculture these sciences account for 6.5 percent of the total study program; in the department of metallurgy of the Moscow Mining Academy (just as in other faculties of the same type) they amount to 5.5 percent of the program. A considerable part of these courses is of a practical nature and is intended to convey to the students concrete information on Soviet constitutional law and economic policy, on trade unionism, etc. The latter is of direct interest to the students, all of whom are members of trade unions. However, courses of a theoretical character are also given. Of this nature are the courses on historic materialism and on general economics. In their practical aspects these courses are adapted to the interests of the particular vocation for which the school trains its student body. Thus in the industrial faculties more time is devoted to the industrial policy of the Soviet state and to labor law. In departments of agriculture emphasis is laid on the agrarian policy of the Soviets, rural social relations, etc.

A sequence of courses in social science forms a compulsory part not only of higher education but also of general primary and secondary education. The elements of social science are included in the programs of all schools, beginning with the fifth year. In this year a separate single course is given, combining the elements of economics, political science and history. It starts with a general characterization of industry; by using concrete examples some notion is given of the superiority of large scale machine production over small. Then follow data on the position of the working class prior to the revolution and at present, on the conditions in the village before and under the Soviet government, and on the economic and cultural ties between the city and the country. In the sixth year the pupils learn of the important developments in the economic life and social history of foreign countries (the industrial revolution, the French Revolution, the international labor movement, etc.). The seventh year is devoted to the modern period. The course begins with a description of the system of imperialism, which is followed by a detailed account of the history of this period (especially in Russia) and a comparison of the constitutions of the members of the Soviet Union with those of other states In the eighth and ninth years more specialized courses are given in the same subjects, approaching in their scope those offered in the universities. Before the eighth year the teaching of history does not go farther back than the

eighteenth century, but in the last two years feudalism, the age of discoveries and the sixteenth and seventeenth centuries are covered.

The social sciences are also taught in a number of schools for adults, such as workmen's faculties (special schools preparing workmen for the universities) and Sunday universities. In content the courses given there do not differ from those just described, although in matters of exposition they are adapted to the age and background of the student body.

The fact that the social sciences in one form or another are now taught in all schools of the university type is responsible for a large demand for social scientists with professorial qualifications. At the very start the problem of training a considerable number of such persons was the most urgent that confronted the Soviet government in the field of higher education. The government made a brave beginning by establishing in 1921 the Institute of Red Professors, at that time a series of seminars for young Marxists. Since then the training of a university teaching personnel has been systematized and organized on a much larger scale.

At present the abler graduates of universities who choose a professorial career become "aspirants" and are granted scholarships by various institutions. The scholarship covers a term of three years, and at the end of that time the aspirant is supposed to present and defend at a public debate the results of his independent researches in his special chosen field. In Russia proper the training in economics is given in the Institute of Economic Research, the first half of the three year course being set aside for general training and the second being used for specialization in one of the fields, such as economics of industry; economics of commerce and cooperation; money and credit; public finance; international economics; and economic geography. In the Institute of Soviet Law the aspirants are prepared for the teaching of law. The special fields here are those of constitutional law, international law, criminal law and procedure, business law and civil procedure, labor law, agrarian or land law. In the Institute of History every aspirant begins in the seminar on historic materialism; in the course of his study he is supposed to work up two topics in his special field (which may be ancient history, mediaeval history, modern history, Russian history, contemporary Russian history or anthropology) and two topics in two of the other divisions of history. In his last year of training every aspirant is supposed to teach in a university in his special field and to present to the corresponding institute a detailed outline of his course. Approximately the same study plan and the same requirements are adopted by the Institute of Red Professors, which has the following social-scientific departments: economics, with a separate sequence of agricultural courses; cooperation; history with subdivisions of western history, oriental history and Russian history; history of the Communist party; and law. The students of this institute have a four year course of study and are supposed to teach during the last two years of residence. The old Academy of Sciences also has a small number of aspirants (they are called "practicants"). A score of young scholars having the rank of junior scientific contributors are attached to the Communist Academy. The total number of persons in training for professorships and research in the social sciences is about one thousand for the entire Soviet Union.

As already indicated, at least half of the period of preparation for university teaching is devoted to research. It is not surprising, then, that the scientific output of the schools for professorial training is quite large. The total number of published titles credited to the students of the Institute of Red Professors reaches 3000, including 800 separate books and pamphlets. The institutes of Soviet Law, of Economic Research and of History form together the Russian Association for Research in the Social Sciences. This association, although it was organized only in 1923, has already published a considerable number of works.

Organized research in the social sciences is not limited to institutions designed primarily for the training of university personnel. At the present time there are in Russia a large number of organizations giving their entire time to research. Of these the principal one is the Communist Academy established in 1918 as the Socialist Academy of the Social Sciences. It is now a vast congeries of scientific institutes and learned societies, of which the following are specifically social-scientific: the Agrarian Institute, the Institute of International Economics and Politics, the Institute of Soviet Organization, the Society of Historians-Marxists and the Society of Statisticians-Marxists. In addition the Communist Academy has sections of economics and of law and government and

issues a number of periodic and non-periodic publications. The *Viestnik Kommunisticheskoy Akademii* (Herald of the Communist Academy), serving the interests of the organization as a whole, is a magazine with a file at present of thirty issues; it prints articles dealing with methodological problems. *Na Agrarnom Fronte* (On the Agrarian Front), *Mirovoe Khoziastvo i Mirovaia Politika* (International Economics and Politics), *Vlast Sovietov* (Soviet Authority), *Istorik Marksist* (Historian Marxist), *Voprossi Ekonomiki* (Problems of Economics), *Revolutsia Prava* (Revolution of Law), are magazines serving as outlets for the respective institutes, societies and sections. Organizations for general social-scientific research outside of Moscow include the Institute of Marxism at Kharkov and the Leningrad Institute for the Study of the History and Theory of Marxism. The Ukrainian Academy of Sciences in Kiev has a special chair of Marxism and Leninism; and the White Russian Academy of Sciences also devotes a great deal of attention to the history and economics of White Russia. According to the last draft of its charter (1927), even the old Academy of Sciences in Leningrad devotes considerable attention to the whole range of the social sciences, not limiting itself to history, as it did before the revolution. After the new elections (1929) four economists joined its ranks, which contain now eleven historians but as yet no jurists. This list must be supplemented by the inclusion of two very large special organizations: the Marx-Engels Institute, with enormous archives and the largest library on Marxism in existence, which publishes the results of its researches in *Arkhiv Marksa i Engelsa* (The Magazine of Marx and Engels) and in *Lietopis Marksizma* (Annals of Marxism); and the Lenin Institute which has extensive archives and a library and is engaged in publishing Lenin's works and correspondence.

The study of the social sciences in Soviet Russia in all research organizations and in schools of all types is based on a single scientific method, that of dialectic materialism. Only a few establishments (including until recently the Academy of Sciences) and a few of the scientists of the old school fail to reflect in their work the influence of this method. Practically all young scholars are Marxists. In the last few years, with the complete strengthening of the economic foundations of the Soviet Union, all traces of wavering in this respect have disappeared. Simultaneously with the establishment of the Marxian method there has occurred a significant change in the subject matter studied. In the field of law, for instance, abstract investigations in Roman law and other subjects having little relevance to legislative practise of the day predominated in the pre-revolutionary period. At present organizations for the study of law function as laboratories out of which come the fundamental principles of Soviet legislation. The codes of civil and criminal law with all their later modifications are based on a long reworking of the corresponding topics in the Institute of Soviet Law and the section of law and government of the Communist Academy. The new land code was turned over for preliminary discussion to this academy by special resolution of the government. The work of economic research agencies is very closely connected with the administration of national economy. Each of the government bureaus charged with the management of the economic affairs of the country has research divisions (the Supreme Council of National Economy has a score of them) furnishing the scientific basis for its work. An overwhelming majority of economic research projects are therefore an outgrowth of the current problems of economic management (reconstruction, balanced economic development, tempo of economic development, rationalization, etc.). Other investigations attempt to summarize the changes introduced by the revolution into economic institutions and to provide a theoretical analysis of these changes. Of this nature is the work of the Commission for the Study of the Consequences of the Agrarian Revolution, attached to the Communist Academy, and the work of individual scholars, such as the book of N. I. Bukharin on the economics of the transition period (*Ekonomika Perekhodnovo Perioda*, Moscow 1920, tr. into German as *Oekonomik der Transformationsperiode*, Hamburg 1922) or that of L. Kritsman on the economics of military communism (*Geroicheskiy Period Velikoy Russkoy Revolututsii*—The Heroic Period of the Great Russian Revolution—2nd ed. Moscow 1926). In the field of history, ancient and mediaeval history have lost ground in comparison with modern history. Instead of discussing the origin of serfdom or the character of the authority of the feudal lords in old Russia, scholars inquire now into the nature of Russian imperialism and the causes of the World War. Analogously in European history, instead of the interest in the mediaeval village, a subject

carefully studied by the students of Vinogradoff, may be observed the emergence of an interest in the party conflicts of the French Revolution or in the Paris Commune of 1871 (the works of Lukin and his students). This does not mean, however, that the general study of Russian history or of world history is entirely neglected. On the contrary, a whole range of problems could be scientifically posited and widely discussed only in Soviet Russia. Such are questions of the origin of religion, of the personality of Christ and the origin of Christianity, of the class struggle in antiquity. At the same time young Marxist scholars carefully study the works of their bourgeois predecessors. Among the books published by the Institute of Red Professors there is a large group presenting a detailed analysis of the views of various Russian historians beginning with the first half of the nineteenth century. No such aid to the study of Russian historiography was available in pre-revolutionary Russia.

From the social sciences the method of dialectic materialism is being taken over with some success into adjoining fields. Especially brilliant applications of this method have been made in linguistics. The newest theory of the origin and development of languages, put forward by the academician Marr and his school, is essentially a Marxist theory, even though Marr arrived at his conclusions, independently of any theoretical assumptions, by observation of the actual development of various tongues, primarily those of the Caucasian tribes. In ethnology and ethnography Professor Tan (Bogoraz) is close to the materialistic school, although he is farther from Marxism than Marr. Yet Tan has many students who are consistent Marxists, so that the appearance of a Marxist school of ethnologists can be expected in the near future. Finally, in the last few years dialectic materialism has exerted a decisive influence on the study of natural sciences; the problem of a dialectic of nature is of the greatest interest to young biologists, chemists and physicists in Soviet Russia.

M. POKROVSKY

Consult: FOR IMPERIAL RUSSIA: Lappo-Danilevsky, A. S., "The Development of Science and Learning in Russia" in *Russian Realities and Problems*, ed. by J. D. Duff (Cambridge, Eng. 1917) p. 153–229, containing numerous bibliographical references.

FOR SOVIET RUSSIA: Harper, Samuel N., *Civic Training in Soviet Russia* (Chicago 1929), particularly chs. xii and xiii; R. S. F. S. R., People's Commissariat of Education, *Public Education in the Russian Socialistic Federation of Soviet Republics* (Moscow 1926); *Arbeiter- und Bauernuniversitaten in Sowjetrussland*, Bibliothek des Kommunistischen International, no. 6 (Hamburg 1921); *Obshchestvennie nauki v S. S. S. R. za 10 liet* (Social Sciences in U. S. S. R. in the Last Decade) (Moscow 1927); *Desiatiletie Kommunisticheskoy Akademii* (A Decade of the Communist Academy) (Moscow 1928); U. S. S. R., Glavprofobr, *Uchebnie plani Vuzov* (Study Plans of Schools of Higher Learning) (Moscow 1927); Singalevich, S., *Obshchestvovedenie v trudovoy shkole* (The Study of Society in the Labor School) (Moscow 1925.)

VII
Scandinavia

In Denmark, Norway and Sweden the universities take the lead in promoting the social sciences, both on the teaching side and in the work of research. There are state universities, with complete curricula, in Copenhagen, in Oslo and in the Swedish cities Lund and Uppsala. There are also, in Sweden, two private universities located at Stockholm and Gothenburg. The University of Gothenburg is incomplete in that it teaches only the humanities. Most of the social sciences are taught in all of these universities.

The first chair of economics in Scandinavia was founded in 1740 in the University of Uppsala and was known officially as *jurisprudentiae, oeconomiae et commerciorum professio*. One of the first persons to occupy this chair, P. N. Christiernin, was the author of some remarkable work in monetary and foreign exchange theory around 1760, anticipating parts of contemporary and later doctrines in English political economy.

Copenhagen obtained a chair of *Kameralwissenschaft* in 1785, from which economics was taught. In Oslo a chair of land economics, political science and technology was established in connection with the faculty of philosophy in 1814. Three decades later it was transferred to the faculty of law, where it was occupied by A. M. Schweigaard, a brilliant writer on monetary and tariff problems. In the last few decades there has been a tendency to free economics from its traditionally intimate connection with law. However, in Uppsala, Lund and Oslo the chairs of economics still belong to the faculties of law. In the two former universities they cover the subjects of economics and financial law; in Oslo the chair combines instruction in economics and statistics. The universities in Copenhagen and Stockholm have faculties of law and political science. The chairs of economics belong to the political science section in Copenhagen and to both sections in Stockholm, where there is also a chair of economics in the humanities faculty. In Gothenburg economics is associated with the humanities.

The university colleges of commerce in Stockholm and Gothenburg, and the University College of Technology of Trondhjem (Norway), all of undoubted university standing, also have professors of economics.

The number of chairs with or without such additional subjects as statistics or financial law is eight in Sweden, four in Denmark and three in Norway. In addition there are a number of assistant professors (docents) and lecturers in the institutions already mentioned and in special institutes for higher studies of technical subjects, forest problems, etc.

In Sweden political science has long attracted a great deal of attention. As far back as three hundred years ago the University of Uppsala established a chair of political science and rhetoric in connection with its faculty of philosophy, and later the universities of Lund and Gothenburg established chairs of political science. The three law faculties have chairs of constitutional law and devote special attention to the legal aspects of political science. Similar chairs exist in the universities of Copenhagen and Oslo.

Sociology has been rather neglected in Scandinavia. Nowhere is there a chair exclusively devoted to this science. Gothenburg University has a professorship of economics and sociology. From 1883 to 1918 Copenhagen University had one dealing with philosophy and sociology. At present the teaching in sociology is done by one of the professors of economics.

In Lund and Uppsala sociology has been classed as a branch of practical philosophy. Some of the professors have lectured and written on sociological topics in the speculative and abstract manner which dominated sociological science everywhere in the last century. Newer tendencies of sociological thought of a more concrete sort have hardly become known to Swedish students, except in Gothenburg.

Among other sciences treated in a way that makes them akin to the social sciences history should be mentioned first of all. Particularly in the last two decades leading historians have

begun to place emphasis on economic and sociological factors. This tendency, which is a reaction against excessive concentration on the purely political aspects of history, is perhaps more conspicuous in Norway than in Denmark and Sweden. But in all three countries economists and historians have become aware of the necessity of cooperation in the treatment of subjects which border on their respective sciences.

The law faculties in all the Scandinavian universities with complete curricula have long had chairs of legal history and public law. The treatment of these subjects by the different professors has been varied. In some cases the sociological viewpoint has played a prominent part and it tends more and more to come to the fore. The same tendency can be found in the treatment of other branches of the legal sciences.

Recently some professors of psychology have dealt with the social aspects of their subject. The economic aspects of geography have been given increasing prominence. Anthropology is not taught in Scandinavian universities, except in connection with anatomy, archaeology and ethnology. Students of the two latter sciences naturally acquire some contact with the social and sociological viewpoint.

Ever since 1848 the University of Copenhagen has had a special degree for the students of social sciences, *candidatus politicus*. In general five and a half years of study are required, which corresponds to an American post-graduate course of about three years. Economics is the principal subject studied, but statistics, sociology, economic history, public law, constitutional law and other subjects are also included. The University of Oslo has a similar examination in economics and statistics, but its preparation takes only half as long. In Sweden the social sciences can be combined with any other subject taught in the philosophy or humanities departments. The law students in all three countries study a little economics. In the university colleges of commerce economics, economic geography and statistics naturally play a large part.

The teaching used to be done by means of lectures, sometimes supplemented by the discussion of papers in seminars after the German pattern. In late years discussions and laboratory work have come to play a more important part. Nevertheless the "case method" has not had much influence on the mode of teaching. Absolute freedom of teaching is an old tradition in Scandinavian universities and is jealously guarded. There is no danger that a scientist's views, whether radical, communistic or of any other tendency, will furnish the occasion or the pretext for preventing him from teaching.

Various social sciences are taught outside of the universities. In Sweden this kind of instruction is given at the Institute of Social Policy and Municipal Government, the Citizens' School and the Workers' Institute. Folk high schools in the country districts and circles of study under the direction of scientists in the four university towns should also be mentioned. In Denmark the Teachers' High School, the Workers' High School and various folk high schools give elementary courses in social sciences. The Folk University Association also arranges series of lectures on social subjects. In Norway there are folk academies and workers' institutes. The Nobel Institute in Oslo has recently appointed a couple of lecturers on the social sciences.

In all three countries the business schools teach elementary economics, and the higher ordinary schools and seminaries for primary school teachers give some instruction in "knowledge of society." A number of associations of present or former students of the social sciences arrange lectures and discussions. These associations are separately organized in connection with each science, such as economics, political science, etc. In Sweden the Academy of Sciences has a special economics section, and in Norway the Academy of Sciences has a section devoted to the legal and social sciences. In Denmark social scientists are not represented in the corresponding institution, which includes only a limited number of the "older" sciences.

The foundations which exclusively support research in the social sciences, e.g. the Fahlbeck Foundation at Lund, and the Aschehoug Foundation in Oslo, are small. Foundations for the advancement of scientific work in general are of course numerous, but some of the largest concentrate on subjects other than the social sciences. A notable exception is the Carlsberg Foundation in Copenhagen which has given large amounts to promote research in economic and social history. It also supports the Institute of Economics and History which, aided by grants from the Laura Spelman Rockefeller and the Rask-Örsted foundations, carries on research and teaching in connection with economics and economic and social history. The Commodity Insurance Foundation in Oslo gives

considerable amounts for research in economics.

The university and the University College of Commerce in Stockholm have joined in creating the Institute of Economic History. The Institute of Social Sciences is a part of the same university, and has received a grant from the Laura Spelman Rockefeller Foundation to be used in an intensive study of wage problems.

It is not difficult for young scientists to obtain grants from various foundations for defraying at least a part of the cost of printing their works. On the other hand scholarships for students of the social sciences abroad are rare, particularly in Denmark.

Among the publications devoted to the social sciences should be mentioned those edited by the Fahlbeck Foundation in Lund and by the economic section of the Academy of Science in Stockholm, both in Swedish, and the series published in English by the Stockholm Institute of Social Sciences. The most important scientific journals are: *Ekonomisk Tidskrift* (Uppsala), *Statsvetenskaplig Tidskrift* (Lund), *Nationalökonomisk Tidskrift* (Copenhagen), *Statsökonomisk Tidskrift* (Oslo) and *Nordisk Statistisk Tidskrift* (Stockholm). In each country a government department dealing with social affairs publishes a monthly or bi-weekly journal, which sometimes contains articles of scientific interest. Historical and legal periodicals which include articles of interest to students of the social sciences are numerous.

Before the war the place of the social sciences in Scandinavian culture was rather insignificant. Undoubtedly, however, the cultural influence of the social sciences is growing rapidly. Their point of view is permeating all related sciences. In this way students of history, archaeology, ethnology, psychology and law come into contact with the social science viewpoint. The average "educated" man or woman is forced to give much more attention to the subject matter of the social sciences than was the case a generation ago. Economics, in particular, is growing in importance. This is partly a result of the war and the post-war crisis, which raised so many economic problems. It is partly due, however, to the energetic work carried on through small books and newspaper articles by Scandinavian economists in behalf of the "popularization" of economics.

The social sciences have not yet come to be regarded as a unit or natural group, a fact which may have something to do with the neglect of the most comprehensive of them all, sociology. As interest in sociology is lively among students in every branch of the social sciences, efforts to remedy the existing state of affairs will probably be successful within a short time.

BERTIL OHLIN

VIII
Spain and Portugal

It would be difficult to say precisely when the social sciences became the subject of scientific study in Spain. Mediaeval philosophic thought differed considerably from the social sciences in the modern sense. It was complicated by its threefold division into the Jewish-Spanish, Hispanic-Arabic and Christian strains, by the vastness of the subjects which it treated, and by the intellectual boldness with which they were attacked. An arbitrary starting point can be made in the sixteenth century, the decisive moment in the European cultural renaissance.

The outstanding work of that time was done, as was natural from the institutional character of the period, in the field of ecclesiastical and political theory and law, and in colonial history and geography. We may mention first the works of Juan Luis Vives, *De subventione pauperum sive de humanis necessitatibus, libri ii* (Burgos 1526, tr. by M. M. Sherwood, New York 1917), and *De causis corruptarum artium* (Burgos 1531); *De rege et regis institutione* (Toledo 1599) of the famous Jesuit Mariana, which made such a marked impression on the theories of the monarchomachs; and the work which is now attracting the attention of internationalists, the *Relections* (Lyons 1557) by Francisco de Vitoria, professor in the University of Salamanca, an advocate of theological and legal reform. The social significance of Vitoria's contribution to the study of international problems eluded the appreciation of most of his contemporaries. As the first quarter of the seventeenth century was drawing to a close, Francisco Suarez published his *De legibus ac deo legislatore* (Antwerp 1613), which unequivocally proclaimed the doctrine of the solidarity of nations—the *mutua juvamine*—or the necessity of mutual support as the basis of international law. It has been disputed whether Vitoria or Suarez was responsible for the doctrine; Lange and Barthélemy credit Suarez, while James Brown Scott believes that Vitoria was the real creator of the idea. Historians of the West Indies also made valuable studies on the social conditions of the American aborigines which formed a basis for the more accurate work which followed. Especially important in this respect is the notable *Historia general y natural de las Indias* (Seville 1535–37) by Gonzalo Fernández de Oviedo y Valdés; the *Historia verdadera de la conquista de Nueva España* (first published Madrid 1632) written by Bernal Diaz del Castillo, a soldier who served under Cortes; and in addition the works published by Augustin de Zarato, Pedro de Cieza de León and Alvar Núñez Cabeza de Vaca, to cite only the most famous among these early writers. The geographers in their turn revealed new horizons in what is now called human geography, as was recognized by Pietro Martire d'Anghiera, a Milanese chaplain to the crown of Castile, in his *De orbe novo* (Alcalá de Henares 1530) and by the less known cosmographer of the Indies, Juan López de Velasco, who wrote the excellent *Geografía y descripción universal de las Indias* (1574, first published Madrid 1894) including a census, a description of the settlements, a study of customs and of Spanish colonization in general. A similar document for the English colonies is not found until the time of Chalmers.

But the general impoverishment of Spain and its political decadence could not fail to influence national thought. In the sixteenth century under Charles v and Philip ii, for religious as well as for economic reasons, a decided drift set in toward the "closed economic state." In fact the mercantilist tradition, as Schmoller has pointed out, was a growth of great antiquity in Spain, dating probably from the end of the reign of James i of Aragon in the fourteenth century. As national depression reached its maximum in the course of the seventeenth century, men appeared who gave voice to the national needs and formulated programs of economic reform in mercantilistic terms. This literature began with the *Restauración política de España* (Madrid 1619, reprinted 1746) of Sancho de Moncada, and continued down to the nineteenth century. Moncada favored an anti-export law for raw materials and metals in order to stimulate the industry of the country. Later Francisco Martinez de Mata published his *Memorial en razón de la despobla-*

ción, pobreza de España y su remedio (n. p. 1650), reprinted by P. R. de Campomanes in his *Apendice a la educación popular* (4 vols. Madrid 1775–77); in this work the problem centers more on protection and other means of encouraging manufactures, as the only way to produce wealth and bring about an increase of population. Meanwhile the economic-political decadence continued and when the house of Austria was superseded by the house of Bourbon (1701), the regeneration of the exhausted country was no longer merely a matter of academic discussion but the compulsory text for all thinkers. The man who knew how to give scientific form to the convictions of the cultured men of the time was Jeronimo de Uztariz, who marks the culmination of Spanish mercantilism. His famous *Teórica y práctica de comercio y de marina* appeared in 1724 in Madrid and spread rapidly through Europe; an English translation appeared as early as 1751 and a French translation by Forbonnais in 1753. His plea for "well protected and better regulated commerce" enjoyed the support of such statesmen as Patino, adviser to Philip v, who mentioned it in the memoir which he presented to the king in 1726.

The general national renaissance in industry and science under Charles III (1759–88) had particularly important consequences for the social sciences. In that period university studies were reformed and the modern viewpoint was introduced into the teaching of philosophy and law (which included the study of political economy). However, the reform of the economic and related disciplines did not take place in the universities, but outside them, in the Sociedades Económicas de Amigos del País founded in all the provinces of the peninsula as well as overseas. These societies promoted research, held prize contests for the best pieces of writing and by means of their publications spread throughout the country an interest in financial, commercial, industrial and agricultural problems. Although the societies still exist they have deteriorated during the past century; however, they still have valuable libraries which are open to the public and records which are of the greatest importance. These records, especially the publications of the Sociedad Económica Matritense (*Memorias*, 5 vols. 1780–95; *Anales*, 3 vols. 1852–54), are equaled by no other scientific source material in the light they shed on the situation in Spain and its colonies at the end of the eighteenth and the beginning of the nineteenth century.

The progress of Spain in the eighteenth century and the liberal movement symbolized by Charles III were interrupted, the latter by the fear which the French Revolution inspired, and the former by the Napoleonic invasion, the general uprising and the internecine wars in which Spain was involved for five years. Business was ruined. The constitutional regime which was established in 1810 attempted to reorganize the national administration, but was handicapped by the vicissitudes which beset it until its fall in 1834. Yet the social sciences did not cease to be an object of study. In 1794 the first translation of Adam Smith's *Wealth of Nations* had been made by A. Ortiz. Even though it was proscribed by the Inquisition on grounds of "low style and moral license," that did not affect its spread inside and outside the universities. In fact the proscription had earlier been an incentive to its diffusion, especially after the first years of the French Revolution had passed and the Inquisition had been weakened never to be restored, dying legally in the Cortes of Cadiz in 1810. The renown of Adam Smith was later shared by J. B. Say, the works of both enjoying the character of recognized texts.

This second period, which includes the eighteenth century and the beginning of the nineteenth, was marked by constructive programs and achievements in public affairs and by development in the social sciences. It was the period that began with the census of the Marqués de la Ensenada in 1748 and ended with the census of de la Riqueza of 1800, directed, it seems, by Campomanes. This period witnessed the projects of Campillo for the economic-commercial reorganization of Spain and its colonies, the founding of the San Carlos bank, the writings of Forner and Salazar on the political and economic reconstruction of Spain, and the publication of the voluminous work *Origen, progresos y estado de las rentas de la corona* (7 vols. Madrid 1805–08) of F. Gallardo y Fernandez, giving a history of taxes in force at the beginning of the nineteenth century and outlining the administrative organization of the treasury. It was a period further distinguished by the work of Aranda, Floridablanca, Cabarus, Jovellanos and Canga-Arguelles. In the period that followed—the first half of the nineteenth century—the chief economists were A. Florez Estrada, the author, among other works, of a *Curso de economía política* (first edition in London, 1828, the seventh and last edition in Oviedo, 1852; translated into French by Gali-

bert, Paris 1833) and Ramón de la Sagra, whose *Lecciones de economía sociala* were published in Madrid in 1840. Estrada was praised by Blanqui in his *Histoire de l'économie politique* (2 vols. Paris 1837, vol. ii, p. 300-02) while an interesting study of Sagra was written by Viscount Alban de Villeneuve-Bargemont in the *Journal des économistes* (vol. vii, 1844, 358–80). Both Estrada and Sagra are again being studied by the new generation of scholars. The first commercial code in Spain was published by Pedro Sainz de Andino in 1829, and in 1830 ex-Minister F. J. de Burgos delivered some *Lecciones de administración* in the Liceo of Granada, which form the basis of the subsequent development of the theory of public administration.

Two events must be stressed as fundamental in the present position of the social sciences in Spain: the Revolution of 1868 and the Spanish-American War of 1898. The first of these had as one of its antecedents the great university dispute which arose in 1866. The government representing the greatest power reached by the ultramontane forces, supported by Rome and by similar strong groups in Austria and France, demanded, because of political reasons in which it was deeply involved, a special oath of allegiance to the queen and to the official religion. The concordat between Spain and the Holy See, which was signed in 1851, had granted to the church the right to supervise instruction and gave a semblance of legality to the act of the government, although actually the arrangement was never put into practise in the university centers. A group of professors refusing to do what the government required resigned their posts only to resume them when the Revolution of 1868 proclaimed the principle of absolute academic freedom. From 1868 to 1876 the University of Madrid was the center of reform which found expression in liberal courses and in the university organ *Revista* (1869-77). In 1876 the monarchical restoration again raised the question that had been raised a decade earlier, although the government now asked only for inspection of the curricula in order to preserve purity of doctrine. A still greater number of professors refused. They were expelled and in 1876, under the leadership of Francisco Giner, founded the Institución Libre de Enseñanza, which is still in existence and which was the home of the Spanish intellectual revolution. Although this institution started as a liberal university, it later became a primary and a secondary school, the leader in pedagogical reform, and an advocate of coeducation and of religious neutrality. Its influence in the country has been enormous.

In 1881 the government receded from its position of 1876 and thenceforward the Spanish professor enjoyed as complete academic freedom as his English colleague. In Spanish universities today, professors in conflict with such institutions as the monarchy, the Catholic religion (and concretely with the church) and the capitalistic property system, are not as a rule hampered in their activities. But this struggle stimulated the doctrinal polarization of the social sciences in Spain, giving rise to what may be considered the two schools of Spanish thought around which the names of the principal social scientists may be grouped. On the one hand the traditional Catholic school was revivified with the sap of Christian socialism and gave place in our day to Christian democracy with its well-known influence on the life and legislation of the country. In this group the profound ideas of Donoso Cortes, the most celebrated of the Spanish ultramontanes, have ceased to hold sway and have been superseded by the social doctrines of Leo XIII; representative of this trend are Sanz y Escartin, Aznar y Embid, Sangro y Ros de Olano, Burgos Mazo and Ruiz del Castillo. On the other hand the liberal spirit of the Revolution of 1868 has descended upon the school that upholds the doctrine of the social organism as an ethical entity. The doctrine was inspired by German idealism, especially by Krause, and expounded and spread by Julian Sanz del Rio, professor at the University of Madrid. The real founder of this school was Francisco Giner de los Rios, professor at the University of Madrid, who founded the Institución Libre. He was the author of works on Spencer, Schäffle and Wundt which widely attracted the attention of scholars. His individual viewpoint appears most clearly in the *Resumen de filosofía del derecho* (Madrid 1898), *La persona social; estudios y fragmentos* (Madrid 1899), and in the work presented at the International Congress of Sociology in 1898, *La ciencia como función social.* Giner left a profound impression upon Altamira, Costa, Dorado Montero, Buylla, Bernaldo de Quirós and Posada. Positivism also found representatives in Sales and Ferrer (*Tratado de sociología* 1897) and the criminologist Salillas.

The defeat in the war with the United States in 1898 and the resulting loss of the last possessions of Spain in America had a cathartic or purifying effect on Spanish social thought. As

a result of the war there arose a historical literature in which the past and present were frankly analyzed; and extra-university institutions were created to cope with the pressing social problems. The new doctrines began to be discussed and new points of view put forward in the Ateneo Científico y Literario y Artístico at Madrid. Likewise the Real Academia de Ciencias Morales y Políticas took part in the new movement. It not only held discussions but organized scientific competitions, offering generous financial awards for the best monographs. As has happened at other times, the universities took no active part in developing the new social disciplines and comparatively little is being done there even at present. Sociology is represented by only one chair in the faculty of philosophy in the University of Madrid and by another one on "social policy" under the faculty of law. Under these faculties social studies are being made in connection with Roman law, politics, and commercial, administrative, criminal and international law. The study of economics and finance is also supervised by these faculties. Studies in anthropology, prehistory, ancient and mediaeval history are carried on under the faculties of history and science. Recently a new chair of municipal law was established, which is held by the scholar Posada.

In the Museo Pedagógico Nacional, officially established in Madrid in 1885–86, a corps of technicians, working until February, 1929, under the direction of Manuel B. Cossio, later professor of pedagogy in the University of Madrid, have effected fundamental pedagogic reforms involving the teacher, the school building, the methods of teaching the various disciplines and of maintaining contacts between the schools and their graduates and the graduates' families. The museum's investigations range from the study of the teaching problems in foreign countries or of some individual concrete subject to a survey of the condition of schools in Spain. Its publications are distributed free of charge.

But it was after 1898, after the campaign of Costa y Martínez in his *Reconstitución y europeización de España* (Madrid 1900) and after the appearance of such of Giner's works as the *Problemas urgentes de nuestra educación nacional*, that the country's reaction really set in. In the first years of this century (1903–04), the state founded the Instituto de Reformas Sociales for the purpose of investigating social problems. It was self-governing under a board of directors, and was divided into sections of which the principal ones were those for industrial technology, statistics, economics and legislation. There Christian democrats like Sanz y Escartin and Burgos Mazo collaborated in the same enterprise with Azcarate, Buylla and Posada, who might be called socialists of the chair, and soon even Marxian socialists joined the governing board. The institute made various studies of the problems confronting Spain, as a means of showing the application of their doctrines to objective situations. A monthly organ, *Boletín del instituto de reformas sociales* (1904–24), published the results of this work and additional monographs by specialists on such subjects as strikes, agricultural questions and labor contracts. In 1924 the institute lost its autonomous character and was incorporated in the labor ministry as a labor council. From its ashes and through the influence of one of its best specialists, Leopoldo Palacios, arose the Escuela Social, organized by the ministry itself. Its classes are attended chiefly by especially qualified workers, employers and ministry employees; its curriculum includes cultural history, social economics, industrial legislation, law, industrial technology and economic and human geography, in addition to modern languages and stenography. The labor ministry publishes the *Revista de política social* which deals not only with departmental activities but also with theoretical problems. The General Statistical Bureau under this same ministry publishes the *Boletín de estadística* (1918–) and the *Anuario* (1858–) furnishing statistical data on the economic and social life of the country.

The Instituto Nacional de Previsión, which was organized as a branch of the institute mentioned above, also independent of the labor ministry, deals with all problems relating to the establishment and administration of social insurance schemes. For instance, it has recently assisted in preparing a program of maternity insurance. Research in the institute is carried on by engineers, practical technicians and university professors; the administrative personnel is given special training at the institute. The Universidad Industrial of Barcelona also deserves mention in this connection, although it concentrates on the practical application of the results of its scientific research.

Investigations in the newer social sciences are conducted by members of the professorial ranks in centers that owe their origin, for the most part, to the Junta para Ampliación de Estudios é Investigaciones Científicas, founded by the state in 1907. This institution is the sig-

nificant instrument of reform in Spanish cultural life. It is autonomous, and sends students and professors to foreign countries in order to form international contacts. Upon their return they organize in groups called "research centers." In the research center which has been established by the historians and jurists, the new aspects of social history are receiving attention. This emphasis had previously appeared in such works as the *Historia de las instituciones sociales de la España goda* (4 vols., Valencia 1896) by E. Pérez Pujol; *El colectivismo agrario en España* (Madrid 1897) by J. Costa y Martínez; *El régimen señorial y la cuestión agraria en Cataluña durante la edad media* (Madrid 1906) and the valuable study *El elemento germánico en el derecho español* (Madrid 1915) by E. de Hinojosa de Naveros; *La enseñanza de la historia* (2nd ed. Madrid 1895) and the *Historia de España y de la civilización española* (4 vols., Barcelona 1900–11) by R. Altamira y Crevea, the only living member of this reform group. The group of historians and jurists who work within this institution publish the *Anales para la historia del derecho español*. The title gives an imperfect idea of the contents, for it includes profound studies on the history of Spanish economics and on social and legal institutions. Assiduous contributors to those annals are Sánchez Albornoz, Carando, Diez Canseco and Ots Capdequi, already real masters in their own fields. Unfortunately the Arabists have no organ in which to publish the results of their research on Hispanic-Arabic culture and there is no index to their writings. However, a useful bibliography accompanies the recent book by Professor C. A. González Palencia, *Historia de la España musulmana* (Barcelona 1925). The most significant contributions to the study of Hispanic-Arabic culture are the studies on the administration of justice and of teaching under the caliphate by Ribera Tarrago, the writings of M. Asin Palacios on the history of the Mussulmanic religions, and the work of Lafuente Alcántara, González Palencia and García Gómez on related topics.

Work in the anthropological and related sciences is being done in the Centro de Estudios Históricos of Madrid and at the Institut d'Estudios Catalans of Barcelona. Palaeontologists and ethnologists jointly are publishing the newest works on Spanish prehistory. The archaeologists such as Professors Obermaier, Hernandez Pacheco and Gomez Moreno are making valuable contributions by the study of art as a social phenomenon and as the expression of the cultural situation. The philologists under the great master Ramón Menéndez Pidal are making distinguished contributions to Romanic culture, throwing light on literary myths and analyzing the influences playing on the formation and degeneration of a language. In this group Professors Onis, Americo Castro, Navarro Tomas and Damaso Alonso are important.

Economics has been cultivated by writers like Borrego and professors like Conte, Colmeiro and Piernas Hurtado. The writings of Antonio Flores de Lemus, professor at the University of Madrid, symbolize the change which the study of economics has undergone by incorporating mathematical statistics. His works on the tariff, his unsigned essay on the abolition of consumption taxes in Spain, the plan for local taxation which he elaborated and published and which became the basis of the laws that reconstituted the local treasuries, another unsigned treatise, *Dirección general de contribuciones*, on administrative defects in tax collection, make him the recognized authority in these disciplines. His position as technical assessor in the ministry of finance converts that office into a real research center which is frequented by students and professors studying methodological problems in economics, mathematical statistics and finance. At present Flores de Lemus, assisted by his pupil Professor Viñuales has—at the government's request—proposed a plan for putting the Spanish currency on the gold standard basis. The Spanish banking association is already under the technical direction of an eminent Spanish economist, Bernis, formerly professor of the University of Salamanca, and author of many valuable works.

Political science is the object of special attention in non-university circles. The Escuela de Criminología, an official institution founded at almost the same time as the Junta de Ampliación de Estudios, has as its principal purpose the training of personnel for the handling of prisoners. The subjects to which it devotes particular attention are criminal sociology, corrective pedagogy, anthropology and physiological psychology. This institution was headed until his recent death by the penologist Rafael Salillas, author of *El delincuente español* (2 vols., Madrid 1896–98). International affairs have become a subject of study by organizations such as the Asociación para el Estudio del Derecho Internacional, the Asociación Francisco de Vitoria and the Seminario de Estudios

Internacionales, which has begun to publish a *Boletín de información internacional*. The schools of engineering and architecture are manifesting great interest in economics, contributing to the solution of the problems of scientific management. The Centro de Orientación Profesional, recently established by the state, is also studying questions of personnel management.

In Portugal the position of the social sciences in the universities is similar to that in Spain. The curriculum of the law faculties is with slight variations the same as in Spain and thus includes among other subjects economics, political science, finance and commercial law. In 1902 the University of Coimbra was reorganized and a chair of sociology established. However, the revolution that overthrew the monarchy did not expand the scope of the social sciences. But Portugal has had eminent historians and sociologists such as the great Herculano, an extraordinary mediaeval scholar who continues to exercise great influence, and Gama Barros, historian of administration in the Middle Ages and himself an innovator in this field in our own day. The greatest historian and sociologist on the peninsula is the Portuguese, J. P. Oliveira Martins, whose *Historia da civilisaçao iberica* (Lisbon 1879) is being continually reprinted in Portuguese and Spanish. Oliveira's anthropological works, *Quadro das instituçoes primitivas* (2nd ed. Lisbon 1893) and the *Systema dos mythos religiosos* (Lisbon 1882), are both of the highest order. In 1919 a decree was promulgated establishing the Instituto de Seguros Sociales which, like its counterpart in Spain, was to stimulate scientific investigation, but it has not begun to function. At present the younger scholars, whose organ is the review *Sara nova*, are taking a lively interest in the problems of social science.

FERNANDO DE LOS RIOS

IX

Latin America

The twenty Latin American republics conform essentially to the same cultural pattern in the matter of the social disciplines and may be considered together. Individual differences, due to variations in cultural development or in local needs, will be noted. The development of the social sciences in Latin America falls into three well marked periods.

I. THE COLONIAL PERIOD. The first generation of the Spanish conquest was devoted to the economic and religious exploitation of the Indians by the conquistadores, the priests and brotherhoods. As a consequence no literature of note was produced in the first generation by the invaders, and the already fairly well developed literatures of Mexico, Yucatan and Peru were practically destroyed. One priest and pacifier, Landa, boasted of having destroyed twenty-seven Maya manuscripts at one burning. The succeeding generations, however, brought forth several types of literature dealing with social subjects. Some of the more liberal spirits attempted to recover what they could of the rapidly vanishing indigenous civilizations. Fernando de Alva Ixtlilxochitl, a mestizo, descendant of the ancient kings of Texcuco, was able to make the largest contribution to this work because of his knowledge of the Indian tongues and his access to the confidence of the surviving literati. He translated some of the old manuscripts which had escaped the priestly ravages, due to the fear of the magic that both Indian and Spaniard supposed them to contain, and he also wrote several historical and anthropo-archaeological treatises on the indigenes. The best of these was *La historia chichimeca*. Many of the clergy and conquerors also included much material of an archaeological character in their early historical narratives.

These historical works fall into two classes: those written by the Spanish adventurers in their old age, recounting the exploits of the conquest, and more formal histories produced usually by the clergy with the intention of giving to Europeans and Americans comprehensive accounts of the history of the new world, or portions of it, in as much detail as was possible from the limited resources at their disposal. Perhaps among the best known of the former class were the *Historia verdadera de la conquista de la Nueva España* (Madrid 1632) of Bernal Díaz del Castillo (died 1560) and Juan de Castellanos' *Historia del nuevo reino de Granada* and *Elegías de varones ilustres de Indias* (Madrid 1589). Histories of the second type were relatively numerous and they were more definitely a Latin American product. These histories began to appear by the middle of the sixteenth century and continued throughout the colonial period. The more important of these works naturally appeared in the older portions of Latin America, some of them being printed in America and others in Spain. Among these early histories dealing with Mexico or New Spain were Fray Toribio de Motolinia's (died 1569) *Historia de los indios de Nueva España* (about 1536–41), generally regarded as the best review of the work of the conquerors and missionaries in Mexico, and Juan de Torquemada's *Monarquía indiana* (Seville 1615), a general account of political and ecclesiastical affairs in Mexico in the sixteenth century drawn in part from the preceding author and from Mendieta. To these should be added Bartolomé de las Casas' (1474–1566) *Brevísima relación de la destrucción de las Indias* (Seville 1552), and two large manuscript works, including an *Apologética historia sumaria cuanto á las calidades, disposición, descripción, cielo y suelo de estas tierras; y condiciones naturales, políticas, repúblicas, maneras de vivir y costumbres de estas gentes de las Indias occidentales y meridionales, cuyo imperio soberano pertenece á los reyes de Castilla*, written to prove that the Indians were not savages before the coming of the Spaniards and therefore without civil and moral rights according to the contemporaneous theories of the rights of savages, and a large three volume manuscript *Historia general de las Indias*, covering the period between 1492 and 1520. These works are among the greatest fulminations against greed and injustice in the service of power of all times. Antonio de Her-

rera y Tordesillas' *Historia general* (8 vols., Madrid 1601) is one of the best sources for Indian life and customs. Fray Agustín de Betancurt's (1620–1700) *Teatro mexicano, Descripción breve de los sucesos ejemplares, históricos, políticos, militares y religiosos* (4 vols., Mexico 1697–98), *Cronografía sacra* (Mexico 1696) and *Tratado de la ciudad de México*, and Jerónimo Mendieta's (1525–1604) *Historia eclesiástica indiana* (ms. 1596, published Mexico 1870), which laid bare the crimes, vices and oppressions of the conquerors, are other standard historical and archaeological works of the period. Quito (Ecuador), which occupied a position of marked importance in Spanish colonial culture, produced some important works, including Diego Rodríguez de Ocampo's *Relación de lo que era el reino de Quito al tiempo de la conquista y de su estado presente;* Miguel Uriarte y Herrera's *Representación sobre los adelantamientos de Quito y la opulencia de España* (1757); Juan de Velasco's *Historia del reino de Quito* (1789); and Jacinto Callahuazo's *Las guerras civiles del Inca Atahualpa*, which served as basis for the preceding work.

The historical treatises produced in Peru and in Chile (which in colonial times was a part of Peru) have been numerous. Some of the most important of these works were Cristóbal de Molina's *Conquista y población del Perú* (written about 1552); Alonso de Góngora y Marjalejo's *Historia del reino de Chile;* Alonso de Ovalle's (born 1601) *Histórica relación del reino de Chile* (Rome 1646), still an important authority; Diego de Rosales' (1605–77) *Historia general del reino de Chile* (3 vols., ms. until 1878), important for its archaeological materials, and his *Conquista espiritual del Chile;* and Miguel de Olivares' (born 1674) *Historia de la compañía de Jesús en Chile* (Santiago 1861) and *Historia militar, civil y sagrada del reino de Chile* (2 vols., begun 1736 and published Santiago 1864–1901). Two noteworthy early Peruvian historians were Pedro Cieza de León (1518–60), who wrote *Crónicas históricas del Perú y de las guerras civiles* (pt. i, Seville 1553, pt. ii, 1873) and Garcilaso de la Vega (born 1539), a mestizo, who produced *Comentarios reales*, one of the ablest books on the Indians and early Spanish events. Four early Cuban histories may be mentioned, the *Teatro histórico, jurídico, político, militar de la isla Fernandina de Cuba* (ms. 1791, Havana 1876) by Ignacio José de Urrutia (born 1730), *Historia de la isla de Cuba y en especial de la Habana* (1811) by Antonio José Valdés (born 1752), *Relación de lo espiritual y temporal del obispado de Cuba* by Fray Alonso Enríquez de Armendáriz, and *Llave del nuevo mundo y antemural de las Indias occidentales* (ms. 1761, Havana 1830–31) by José Martin Arrate (born 1697). The works cited above represent only a few of the many histories written in the colonial period, but they will serve to indicate the types of subjects treated and the character of the writing. Composed principally by the clergy, they divide their attention primarily among the curious heathen customs of the savages, the devout labors of the missionaries, and the remarkable secular events of the country, with varying degrees of approval of the deeds of the conquerors. These narratives do not differ markedly, except perhaps in their greater number, piety, and propagandistic spirit, from those of our own colonial period.

These colonial writers were also keenly interested in geography, since nature was not always easy to deal with in tropical America and distances were great. Pedro Vicente Maldonado's (1709–48) *Mapa del reino de Quito* (Paris 1747) and *Relación del camino de Esmeraldas* and Juan Romualdo Navarro y Montesín's *Descripción geográfica, política y civil del obispado de Quito* are typical examples from colonial Ecuador.

Since practically all of the teachers in the colonial universities were priests or members of religious orders it is not surprising that there was a large theological output, taking the place to a considerable extent of what became the social sciences in the nineteenth century. Three Jesuits—José de Acosta (born 1539), Blas Valera and Alfonso de Barzena (1528–78)—published the first book to be printed in Peru, *Doctrina cristiana* (1584). This book was translated into several Indian languages for missionary purposes. Acosta also wrote a *Historia natural y moral de las Indias* (1591) and *Fasti novi orbis de procuranda indorum salute* (Salamanca 1588). Ecuador, always noted for the theological spirit of its culture, is represented by Juan Bautista Aguirre's *Tratado polémico-dogmático*, Isidoro Gallegos' *Actibus humanis* (1677), *Perfectionibus Christi*, and *Curso de filosofía*, Antonio Ramón de Moncada's *Usu et abusu scientiae mediae*, Alonso Peñafiel's *Philosophia universa* (León 1653) and *Obligaciones y excelencia de las tres órdenes militares, Santiago, Calatrava, y Alcántara* (Madrid 1643), Baltasar Pinto's *Phylosophia* (ms.) and *Animástica* (ms.), and Francisco Rodríguez

Fernández' *Segundo pecado original del paraíso de las Indias* and *Colección de sermones*. To the above should be added various social, juristic and theological treatises of Bartolomé de las Casas, written in the sixteenth century in defense of the Indians, but of universal scope as far as fundamental principles are concerned, including *Tratado comprobatorio del imperio soberano y principado universal que los reyes de Castilla y León tienen sobre las Indias* (Seville 1553), *Tratado sobre la materia de los indios que se han hecho en ellos esclavos* (Seville 1552), *Avisos y reglas para los confesores q. oyeren confesiones de los Españoles que son, ó han sido en cargo á los indios de las Indias del mar oceano* (Seville 1552), and a voluminous unpublished work, *Sobre socorrer y fomentar los indios*.

The social sciences in the restricted sense had their development primarily through the universities. The very high culture of colonial Latin America is attested by the early establishment of her numerous universities, always under the patronage of the clergy and the king. The most famous of these, with the dates of their establishment, are as follows: The University of San Marcos (Lima, Peru), 1551; Mexico, 1553; Santo Domingo, 1558; Colombia (New Granada), 1572; Córdoba (Argentina), 1614; Chuquisaca or Charcas (Bolivia), 1623; Havana (Cuba), 1728; Santiago de Chile, 1747; Quito (Ecuador), 1787; and Buenos Aires, 1821 (with predecessors going back to 1763). All of these and various other universities taught one or more phases of the law and theology, including natural law and moral philosophy, which were in Latin America as in British America the true forerunners of the social sciences proper. In the ancient University of Mexico the chairs were, from its foundation, theology, sacred Scriptures (Bible), canon or ecclesiastical law, civil law, institutions and laws, arts, rhetoric and grammar. Some years later medicine and languages (including the Mexican) were added. In the University of San Marcos (Peru) in 1576 the chairs included, with the number of courses to each subject, grammar (two), native languages (one), theology (three), laws (three), canon law (two) and medicine (two). Part of the requirement for a degree from this institution was at that time to swear to defend the mystery of the immaculate conception. In 1770 the University of San Marcos was somewhat liberalized under the enlightened reign of Carlos III of Spain, but it was not until 1861 that it became a modern university. The other universities were organized in a manner similar to those of Mexico and Peru. They had been founded by the clergy primarily to train churchmen, particularly missionaries, and secondly to prepare men to administer the affairs of state. Most of the important government officials were, however, chosen from pure-bred Spaniards and sent out from Spain, having been previously trained at Salamanca, if they were trained at all in a university.

In the sixteenth century Spanish learning was a tradition, but in the seventeenth and eighteenth centuries, with the decline of Spain, the University of Salamanca and her American imitators became extremely conservative. This new spirit was felt particularly in law and theology. Spanish law practically ceased to be taught in the universities and the growing classicism and conservatism limited law instruction almost wholly to civil (Roman) and canon law. Also the clerical teachers in the Spanish-American universities did what they could to prevent the influx of the new ideas from Europe which began to appear about the middle of the eighteenth century. In 1767 Carlos III expelled the Jesuits from his dominions, including the American colonies, and the growing trade due to the rising commercial revolution brought in new ideas as well as more widely distributed commercial prosperity toward the end of the eighteenth century. The universities now came under the control of more liberal religious orders and the direction of the Spanish viceroys, who, like Vertiz at Buenos Aires and Juan Vicente de Guëmes Pacheco de Padilla of Mexico, were sometimes enlightened and liberal men. Under these circumstances some of the old universities expanded their curricula to include all three forms of private law (Roman, canon and Spanish), and especially to add the law of nature and nations, which in reality consisted of public law and political and social philosophy. It was the same sort of intellectual and university movement that was being developed at the same time and somewhat earlier, on a larger scale, in English North America by Franklin, Washington, Jefferson and others. One of these universities, Charcas or Chuquisaca, in Alto Peru (Bolivia) developed (largely clandestinely and in spite of the Inquisition) so far in these new directions that it became the political training center for the future leaders of the revolution in the southern half of the continent. Some of the northern universities, particularly in Venezuela, were also

carrying on a similar work. Then as now new and liberal doctrines found a congenial atmosphere in which to multiply and spread in the universities, although the teachers did not themselves openly, or perhaps even tacitly, espouse them.

The social science publications of this period were not numerous and were naturally largely colored by theology. Antonio López de Pinedo of Peru was the first of that country to achieve an international reputation in law. He made a collection of the laws of the Indies and wrote *Bulario índico*, dealing with the spiritual and ecclesiastical government of America. Gaspar de Escalona y Aguëro of Alto Peru (Bolivia) wrote *Gazofilacio regio perúvico* (Madrid 1647), a treatise on finance and administration celebrated in its time, and *Oficio del virrey*. Bishop Gaspar de Villaroël (born about 1587) of Ecuador became very famous for his *Tratado del gobierno eclesiástico* (1656). Another Ecuadorian writer, less well received at home, was Francisco Javier Santa Cruz y Espejo (born 1750). His writings on political and theological questions, especially his *Nuevo Luciano de Quito* (1779) and *Cartas riobambenses* (1788), as well as his periodical *Primicias de la cultura de Quito*, caused his exile to Bogotá, where he helped start the revolution of 1809. Most of the writings of this time were, however, perfectly safe. Another radical, Toribio Rodríguez de Mendoza of Peru, sometime rector of San Carlos, introduced toward the end of the eighteenth century the theories of Newton, Descartes, Bacon and Gassendi, and created chairs in the law of nature and nations and adopted the civil doctrines of Helvétius. Other Peruvian partisans of the new spirit in the social and legal philosophy of this time were Mariano Vivero, who taught the law of nature and made Spanish law independent of Roman law, Diego de Cisneros, Simón Cerdán and Vicente Morales, who became president of the court of Cadiz.

At the northern end of the continent of South America, in New Granada (Colombia) and in Venezuela, the reform movement in the social studies and in politics toward the close of the eighteenth century was perhaps strongest. In the former country Antonio Nariño (1765–1823) made a study of the United States government and organized a liberal group to study the French radicals. He translated the *Rights of Man* in 1794 and edited *La bagatela*, an advanced political magazine. He was imprisoned and sent to Spain, but escaped. The revolution having failed temporarily, he went to England in 1820, where he studied political theory, especially that of Destutt de Tracy. In 1821 he was back in Colombia and was made senator. Francisco Antonio Zea (1770–1822), also sent to Spain for circulating the *Rights of Man*, edited the *Correo del Orinoco* (1818–21), a medium for advanced political discussion, and was called the Franklin of his country. Camilo Torres (1766–1816), another reader of forbidden books, wrote on colonial government, was professor of civil law in the university and the leading jurist of the country. José Vargas (born 1786), a Venezuelan, translated the *Social Contract* in 1809. This book was thereupon widely distributed throughout Latin America, being republished in Buenos Aires and elsewhere. Miguel José Sans (born 1754) founded in 1790 the Colegio de Abogados (Law College) of Caracas and initiated the teaching of civil law in the country. Juan Germán Roscio (born 1769), of Caracas, was largely responsible for the Venezuelan manifesto, or declaration of independence. His *Triunfo de la libertad sobre el despotismo* (Philadelphia 1817) combatted the Spanish system. To these names should also be added that of Antonio José de Irisarri of Guatemala (1786–1868), who belongs in spirit to this period, although of a somewhat later date. He was a revolutionary political writer of some solidity, publishing *El semanario republicano de Chile* (1813) and *El duende de Santiago* (1818). He completed his education in London in 1820, where he published *El censor americano*. In the same class belongs Louis Fernando Vivero (died 1842), who promoted the revolution in Guayaquil and was the author of *Lecciones de política*.

II. THE NINETEENTH CENTURY. This period falls into two subdivisions, each occupying about half a century. These are the periods of revolution and reaction and of reconstruction. The revolution began at both ends of the continent—in Buenos Aires and in Venezuela—in 1810, under the leadership of Belgrano, Moreno and San Martín on the one hand, and of Bolivar and other men just mentioned on the other hand. These men had been educated in the new political philosophy and they seized upon the favorable circumstances of the conquest of Spain by Napoleon to strike for political independence. Although they were men equal in political theory and outlook to our own revolutionary leaders, such as Franklin, Washington,

Jefferson, Adams and Madison, whom they frequently emulated, they had a much more difficult task to perform. The masses of their followers were mestizos, without the barest rudiments of instruction, grossly superstitious and almost brutal in their interests and habits, taught to depend for absolute dictation and direction upon a hierarchical church and large landholders of an entirely different culture and social and political outlook. The Spanish system had created this division of classes to safeguard its dominance. The new republican order now had to make headway against this social dualism at home as well as against foreign domination. This is the explanation of that half a century and more of defeated ideals of the great patriotic statesmen and of anarchy and revolution so vividly described by Sarmiento (1811–88) in his *Facundo; o civilización i barbarie en las pampas arjentinas* (Santiago de Chile 1845) and *Conflicto y armonías de las razas en América* (Buenos Aires 1883). The struggle for intelligent self-government and against landed autocracy and privilege still continues in those countries where large numbers of native races have not yet been educated, as in Mexico and Venezuela.

It is significant of the changing balance of power in Latin America during the eighteenth and nineteenth centuries that the revolution sanctioned by the new political philosophy developed most effectively in the Rio de la Plata area, centering in Buenos Aires, the last of the great coastal regions to come under the Spanish type of civilization. In Brazil the revolution came much more normally, at first under the leadership of one of the princes of the house of Braganza, with a peaceful transition to local rule later. After the death of Mariano Moreno, the Rousseauan political philosopher of the revolution, in 1811, and following a period of shifting and uncertainty, Rivadavia came to the helm in 1821. Rivadavia was so like Jefferson in his basic political philosophy, although much less of an advocate of decentralization, that it should be noted that he spent the years 1816–21 in Europe, and especially in France and England, where he came into intimate contact with the liberal thinkers of the time, including Bentham and the elder Mill. He brought back with him the theories of these men as well as those in which Destutt de Tracy, Jefferson's friend, had restated the philosophy of the French political revolution and enlightenment. One of the first things Rivadavia did in Argentina was to establish the University of Buenos Aires (1821), in which he had James Mill's *Elements of Political Economy* and Bentham's theories of law and of government taught as the foundation principles by which he hoped to reconstruct the social philosophy of Spanish America. In less degree, and less consciously and less articulately in some cases, the same sort of movement for the reconstruction of the political theory basic to the revolution was going on in all Latin America. Although political economy was only secondary, Rivadavia had a lively appreciation of the fiscal needs of his country, and he had political economy taught in both its applied and theoretical aspects in the University of Buenos Aires as early as 1823. Under the leadership of Dean Gregorio Funes (1749–1830) something of this new outlook was creeping into the old conservative University of Córdoba, and like changes of viewpoint were being effected in the universities in Peru, Colombia, Venezuela and Mexico. It was at this time that the social sciences as such entered into the Latin American universities, at about the same time as, or a little later than, the establishment of chairs in these subjects in the colleges and universities of the United States.

But academic instruction in the social sciences could not save the revolution in Latin America. The uneducated, superstitious and unsocialized masses were too numerous in contrast to the few enlightened leaders. It was easy enough to control the masses, but it was just as easy, if not more so, for the self-seeking and relatively unenlightened leaders to control and direct them with motives of plunder as for the public spirited and educated leaders to direct them toward the support of civic ideals. Consequently, Rivadavia and San Martín went into exile before 1830, the better type of leaders in all countries were retired from power, frequently executed or exiled, and men like the bloody Rosas of Argentina, the conservative self-seeking Santa Anna of Mexico, or the autocratic Dr. Francia of Paraguay, came into power on the shoulders of the ignorant, turbulent masses. This period of reaction lasted until about the middle of the century—1852 in Argentina and 1857 in Mexico—or longer, according to the cultural development of the countries. In this period the universities were reduced to shadows and in Mexico actually abolished. The tyrants suppressed the teaching of the social sciences and historical and political

writings almost ceased to appear, except in the less turbulent states of the west coast, as will soon appear from citations of the writings of the time.

In Latin America there is a closer connection between government and the social sciences than in this country. Teaching the social sciences in the universities is incidental or secondary to the pursuit of governmental service or the legal profession. There are few if any full time professorships in the social sciences. The professor of the subject ordinarily has a single course or occasionally two or three courses in various social sciences, while his income is derived primarily from his law practise or from some governmental position. This arrangement comes down from colonial times when the clergy taught one or more courses largely incidentally, and it has been continued because there are not public funds available for the creation of large departments in the social sciences, outside of law. Even in law the different specialties are usually divided into single courses among several professional men. Throughout the nineteenth century the various social sciences, excepting law, were limited to one or two courses, and these were taught along with law in a faculty or school called variously juristic science or jurisprudence, law or law and the social sciences. The practise of law, which, as in North America, was not popular before the middle of the eighteenth century, became the leading profession at the time of the revolution and after. The other great profession, the clerical, then fell into relative disfavor and throughout most of the nineteenth century the profession of the priest was ordinarily shunned by the best minds, because the church had usually been on the side of Spain and the conservative and undemocratic leaders and tyrants in the period of struggle for self-government.

It is also important to note that the chief interest of the law profession throughout most of the nineteenth century was in public rather than in private law. This fact, so different from what we know to have been the case in the United States, was due to a number of circumstances. In the first place the harder struggle of the Latin Americans for self-government compelled greater interest in public law and the philosophy of law, just as in North America in the years immediately following our own revolution. At that time in our history and throughout most of the nineteenth century in Latin America there was a very strong interest in the philosophy of law and government as well as in specific legal rules. The subject of natural law, as well as that of canon law, was taught almost until 1900 in Latin American secular universities. Another reason for their great concern with public law is the fact that their legal heritage is from the Roman law, while ours is from the common law of England. Their law has for centuries been reduced to codes and principles and thus their legal system is a quasi-governmental system closely allied to their political and ecclesiastical principles and institutions. Court procedure is more like governmental or administrative procedure and their codes are similar to their constitutions, while our municipal and constitutional law belong to two very different categories. Their constitutions are simply great political codes, but somewhat less systematic and logically authoritative than their civil codes, although both are applied in actual practise in essentially the same way, i.e., by deduction from general principles.

Consequently, the Latin Americans have not in the past made any marked distinction between their law and the social sciences. For both they ordinarily use the same generic term—primarily ethical in significance—*derecho*, or right, in contrast to the more formal term, *ley*, or formal rule of action. Thus they speak of *derecho público*, *derecho político*, *derecho económico*, *derecho civil*, *derecho criminal*, etc. to cover such meaning as public (including constitutional), political, economic, civil and criminal law or right and policy. Furthermore, as has been intimated, their law schools have not been mere professionalized vocational schools, but have been schools of social science designed for the purpose of training governmental officials quite as much as private practitioners. There the students have pursued the subjects of government (*derecho público* and *político*), political economy (economics in our business sense is more recent with them) and sociology (which grew largely out of the old *derecho natural*), together with their *derecho civil*, *derecho comercial* and *derecho criminal*. Their constitutions are therefore in their minds in large degree political treatises, ordinarily formulated by their most learned professors of political science or *derecho político* and *derecho público*. Likewise their international treaties and documents, such as the Drago doctrine, have been produced by professors of *derecho público*

internacional and *político*, who were also employees of the state, possibly ministers of foreign relations or secretaries of state. In all Latin American countries the various forms of their private law (never as completely private or individualistic as ours) are, like their constitutions or public law, codified and fall into such divisions as civil, criminal, commercial, rural, mining and procedural codes. This codification began soon after the revolutions and has continued to the present day. It has a greater definiteness and certainty than our private law, is largely in the category of public law and saves much time, energy and expense in avoiding intricate technical trials in the courts.

Following the reestablishment and strengthening of the constitutional regimes after the middle of the century, the universities revived and began to pay more attention to the social sciences. By the end of the century canon law had practically disappeared from the curricula of the more progressive secular universities, which included all the old universities named above and the new national universities established, especially after 1860. Classical economics began to give way to a new and liberal functional economics by 1900, but in few institutions was more than one course taught; this might run throughout the year, and be followed the next year by a course in applied economics, which usually dealt especially with money, banking and public finance. International law, sometimes a double course (public and private), was taught in most of the universities in the latter half of the century and sometimes earlier. The courses in natural law began to be transformed into the philosophy of law early in the eighties. By the nineties the philosophy of law had split into two general types of courses, which tended in the direction of institutional history and general jurisprudence on the one hand, and of sociology and anthropology on the other hand, corresponding closely in each case to courses under these names given in our own universities and colleges at that time or a little earlier.

Perhaps the first course specifically called sociology in Latin America was given about 1900 by Dr. Ernesto Quesada of the University of Buenos Aires, although courses in the philosophy of law containing sections entitled sociology had been taught in the University of Buenos Aires by Antonio Dellepiane in the middle nineties, and possibly earlier in other universities. Although the Latin Americans have been somewhat slow to change the names or increase the number of their courses in the social sciences, the content has been much the same as in other countries. Even in history, which had been taught throughout the nineteenth century in Latin America in some form or other, few universities offered more than two or three courses at the end of the century; these consisted usually of ancient, modern and the national history. Sometimes the division was merely between national and European or general history. The history of institutions sometimes appeared as a separate course, but it was perhaps more often taught in connection with the philosophy of law and the several forms of law—civil, political, international, criminal, etc.

The nineteenth century in Latin America, particularly toward its close, was reminiscent. There was a serious stock taking, an attempt to explain historically the character of the civilizations which had developed. Only a few of the vast number of these histories can be mentioned to illustrate this increased activity in history writing which came with the establishment of relatively stable governments and the renaissance of the universities. In Mexico Lucas Alamán's (1797–1853) *Historia de Méjico desde 1808* (5 vols., Mexico 1843–52), and *Disertaciones sobre la historia de la República Mejicana* (3 vols., Mexico 1844–52) illustrate the more critical methods. Alamán also organized the general archives of Mexico and established the Museum of Antiquities and Natural History. He was a member of the Massachusetts Historical Society and the Philosophical Society of Philadelphia. Manuel Orozco y Berra's (1816–81) *Historia antigua y de la conquista de Méjico* (5 vols., Mexico 1880) is a review of early Mexican life and institutions. Orozco was one of several Mexican historians who were stimulated by Prescott's work on Aztec civilization. José M. Maroqui's *La ciudad de Méjico* (1900) is the work of an archaeologist reconstructing the history of the city, while Antonio García Cubas' *El libro de mis recuerdos* (Mexico 1905) tells the story of the American invasion and the Maximilian episode. Among many other Mexican historians of this period should also be mentioned Joaquín García Icazbalceta (1825–94), Francisco Pimentel and Agustín Rivera, who reviewed interestingly the history of colonial times. García Icazbalceta, besides translating Prescott's *History of the Conquest of Peru*, brought about the publication of many manu-

scripts of colonial historical writers. In 1858–66 his *Colección de documentos para la historia de México* appeared in two volumes; in 1866 his *Apuntes para un catálogo de escritores en lenguas indígenas de América*; in 1886 the famous *Bibliografía mexicana del siglo XVI*; and in 1886–91 the *Nueva colección de documentos para la historia de México*, in five volumes.

Peruvian historians especially have been active since the revolution. In the latter part of the century we find such productions as Manuel de Mendiburu's *Diccionario histórico y biográfico del Perú* (Lima 1874–86), a treasure house of early data in eight volumes, Pedro Paz Soldán's *Diccionario de peruanismos* (Lima 1882), Mariano Felipe Paz Soldán's (1821–86) able histories of the independence and its aftermath in Peru and of the War of the Pacific (*Historia del Perú independiente*, 2 vols., Lima 1868–70; *Narración histórica de la guerra de Chile contra el Perú y Bolivia*, Buenos Aires 1884), and Sebastián Lorente's *Historia del Perú* (6 vols., Lima 1860–76), and his valuable *Historia de la civilización del Perú*. Also Félix Cipriano Zegarra's literary history of Peru should not be omitted. In the documentary field Manuel A. Fuentes (born 1828) published *Memorias de los virreyes* (Lima 1859) in six volumes and *Historia sagrada*, while Ricardo Aranda edited *Tratados diplomáticos y actos internacionales y políticos del Perú* (14 vols., Lima 1890–1911). Other important documentary collections are E. Larrabure y Unanue's *Monografías histórico-americanas* (Lima 1893) and Manuel de Odriozola's *Documentos históricos del Perú* (5 vols., Lima 1863–77).

In Chile Juan Ignacio Molina's (1737–1829) *Compendio de la historia geográfica, natural y civil del reino de Chile* (2 vols., Madrid 1788–95) is an example of the earlier historical writing before independence. Claudio Gay (1800–72) wrote a *Historia física y política de Chile* to 1830 (26 vols., Paris and Santiago 1844–54). Late nineteenth century historical writing in Chile is represented by the *Historia general de Chile* (Santiago 1884–1902) in sixteen volumes, coming down to 1833, and the *Un decenio de la historia de Chile*, in two volumes, covering the years 1841–51 (Santiago 1905–06), both by Diego Barros Arana (1830–1907); by the history of the organization of Peru, 1831–41, by Ramón Sotomayor Valdés (1830–1904); by the numerous histories of periods and movements in Chile by Benjamín Vicuña Mackenna (1831–86); and by similar writings of Miguel Luis Amunátegui (1828–87) and the later historians, José Toribio Medina, Crecente Errázuriz (born 1839) and Gonzalo Bulnes (born 1851). Medina and Errázuriz wrote on colonial history, the latter producing *Los orígenes de la iglesia chilena* (Santiago 1873), as well as histories of the conquest and growth of Peru. In Bolivia Ramón Muñoz Cabrera (1819–69) wrote *La guerra de quince años en el Alto Perú*, and *Vida y escritos de Bernardo Monteagudo*. Jorge Mallo wrote on the administration of Sucre, Jenaro Sanpués on other important administrations; Modesto Omiste wrote *Crónicas potosinas* (4 vols., Potosi 1893–96) and other works; J. V. Ochoa and Eufronio Viscarra wrote on the War of the Pacific. The last named was also the author of a history of Cochabamba. Noteworthy Colombian historical works of the nineteenth century are Pedro María Ibañez' (born 1854) *Crónicas de Bogotá y del antiguo virreinato* (Bogotá 1891), José Manuel Groot's (1800–78) *Historia eclesiástica y civil de Nueva Granada* (3 vols., Bogotá 1869–70), a most valuable work on early social institutions, José Joaquín Borda's (1835–98) *Historia de la Compañía de Jesús en Nueva Granada* (Paris 1870), and José María Rivas Groot's *Páginas de la historia de Colombia* (1907) in two volumes, dealing largely with constitutional, fiscal and administrative matters. Cuba also was fertile in historical writing in the nineteenth century, producing among other works the *Ensayo histórico de la isla de Cuba* (New York 1842) by Jacobo de la Pezuela, the *Historia de la esclavitud* (3 vols., Paris 1875–77), and *La supresión del tráfico de esclavos en la isla de Cuba* by José Antonio Saco (1797–1879), the *Diccionario biográfico cubano* (New York 1878) by Francisco Calcagno, the *Primeros historiadores de Cuba* (1838) of José Antonio Echeverría (1815–85), *La abolición de la esclavitud* (Madrid 1869), *La cuestión colonial* (Madrid 1869), and *La pérdida de las Américas* (Madrid 1869) by Rafael María de Labra (born 1841), the histories of the cathedral of Cuba and of English interference in America by Pedro Agustín Morell, and finally the seven volume biography of the Cuban hero José Martí by González de Quesada (1900).

Historical writing in Argentina was also voluminous in the nineteenth century. The *Ensayo de la historia civil del Paraguay, Buenos Aires y Tucumán*, in two volumes (Buenos Aires 1816), by Dean Funes long remained the chief historical account of these provinces. The ten volume *Historia de la república argentina* (Bue-

nos Aires 1883–93) by V. F. López (1815–1903) brought the history of that country down to 1852. He was also the author of *Razas del Perú anteriores a la conquista*, written while in exile in Chile with Mitre, Alberdi and Sarmiento during the tyranny of Rosas. Manuel Bilbao's *Historia de Rosas* (Buenos Aires 1868), Bartolomé Mitre's *Belgrano* (4 vols., Buenos Aires 1858–59), and *San Martín* (4 vols., 2nd ed. Buenos Aires 1890), General José M. Paz' epic *Memorias póstumas* of his campaigns in the revolution, in the civil wars and against Rosas (Buenos Aires 1855), Antonio Zinny's (born 1821) *Historia de los gobernadores de las provincias argentinas* (5 vols., Buenos Aires 1879–83), Mariano Pelliza's (1837–1902) *Dorrego* (Buenos Aires 1878), *Dictadura de Rosas* (Buenos Aires 1894), *Historia argentina desde su origen hasta la organización nacional* (5 vols., Buenos Aires 1888–97), and *Organización nacional*, Vicente G. Quesada's (1830–1913) numerous histories of movements and periods and especially his *Vida intelectual en la América española* (Buenos Aires 1910), Julio Victorica's *Urquiza y Mitre* (Buenos Aires 1906), José Manuel Estrada's *La política liberal bajo la tiranía de Rosas* (Buenos Aires 1873) and his *Historia de la república argentina*, as well as the several important works of Adolfo Saldias (1850–1914) on national evolution in Argentina, will serve to indicate the type and quality of the later nineteenth century historical writing in Argentina. The Brazilian historians were almost as numerous; their works include the classic *Historia geral do Brasil* (vol. i, 1854) and the *Historia das lutas com os Hollandezes no Brasil* (Vienna 1871) by Varnhagen, viscount of Porto Seguro (1816–78), the *Plutarco brasileiro* (Rio de Janeiro 1847), published in English as *Illustrious Men of Brazil* (1858), and the *Historia da fundação do imperio brasileiro* (Rio de Janeiro 1864–68) by João Manoel Pereiro da Silva (born 1819), the national history of Joaquim Manoel de Macedo (died 1882), *O Brasil* (1889) of José da Silva Paranhos, baron of Rio Branco, the history of Brazilian poetry and literature by Silvio Romero, and the *Dom João* VI (2 vols., Rio de Janeiro 1908) of the celebrated Manoel de Oliveira Lima. In Uruguay the works of Andrés Lamas (1817–91), in particular his *Artigas, compilación de documentos para la historia del Rio de la Plata* (1849), were notable.

It will be observed from the representative titles here cited that Latin American historical writing in the nineteenth century centered almost wholly about nationalist themes. Furthermore—a fact that is not indicated so clearly by the titles—these histories are much more philosophic and explanatory, or sociological, than those of the United States or of Europe. The philosophy of history survived late into the nineteenth century, even into the twentieth, in Latin America and has had a strong influence on the historical writing of these countries. There has been an overwhelming impulse to explain as well as to recount. Nowhere else do mere dates and formal facts count for less and nowhere else is the meaning back of the facts of history so eagerly sought. No doubt this emphasis upon explanation has often led Latin American historians into unintentional bias and misinterpretation, but it is not clear that they are more subject to this failing than other historians. One can say with certainty that their histories are ordinarily most interesting reading and from them one can gather some organic notion of the various factors that have been active in their national development.

The Latin Americans have been especially attentive to the subject of geography, since it has been so constant and important a factor in the determination of their national destinies. In addition to the works of colonial times, a few of the chief nineteenth century products in this field may be noted. Manoel Ayres de Casal's *Corografía brazílica* (Rio de Janeiro 1817) attracted the favorable notice of Humboldt. Tranquilino Sandalio de Noda (1808–67) began a *Diccionario geográfico de Cuba* with José María de la Torre, and a fellow countryman of his, Esteban Pichardo y Tapia (1799–1879), composed a *Geografía de la isla de Cuba* (Havana 1854–55), which was generally highly regarded. Carlos de la Torre (born 1858) wrote *La geografía de Cuba*. Colombia produced at least two geographers of note in the nineteenth century, Simón de Lavalle, author of *Geografía universal* (1814), and Pedro Acevedo, who wrote *Noticia sobre la geografía política de Colombia* (Bogotá 1825). M. Díaz Memos also wrote several popular texts for schools. The Venezuelan, Feliciano Montenegro Colón, published a remarkable political, social and economic geography of Latin America, *Geografía general*, at Caracas (1833–37), in four large volumes. Mariano Felipe Paz Soldán's *Diccionario geográfico estadístico del Perú* (1877) has to do primarily with political geography. A distinguished Bolivian geographer was Ma-

nuel Vicente Ballivián, who produced several works on Bolivian geography between 1887 and 1894. To his name should also be added those of Daniel Campos and José Manuel Pando (1849–1917). Geography, it has been stated, is the most fertile field of Chilean science. Probably the greatest of these productions was the *Geografía política de Chile* (2 vols., Santiago 1888), of Aníbal Echeverría y Reyes. Important also is Francisco Solano Astaburuaga's *Diccionario geográfico de la república de Chile*. In Argentina Estanislao S. Zeballos promoted the organization of a geographical society and himself wrote a record of his explorations under the title *La conquista de quince mil leguas* (Buenos Aires 1878). Since then many geographical works have appeared, including the scholarly *Geografía general de América* by Juan G. Beltrán. In Uruguay, Orestes Araujo published about 1900 a *Diccionario geográfico del Uruguay* (2nd ed. Montevideo 1912), which was concerned largely with social and political geography.

Political economy was rather formal throughout the nineteenth century in Latin America. No general works or texts of distinction were produced, although there were a great many monographs of merit on finance, money, immigration and agriculture. The recurring financial difficulties of the republics stimulated teachers, government officials and publicists to constant attempts at the economic analysis of these practical problems. The relative poverty in general economic theory and in comprehensive special treatises on economic problems was due chiefly to the fact that the incidental character of this subject in the universities prevented any considerable degree of specialization in the field. Even the textbooks in economics were nearly always imported from Europe. After the long vogue of James Mill in the first half of the century, the French economist Courcelle Seneuil, an advocate of the Manchester school, had much influence in Latin America. He was a professor at the University of Chile from 1853 to 1863 and reorganized the Chilean banking system. He was followed at the university by Miguel Cruchaga (1842–87), who wrote *Elementos de economía política, Estudios sobre la organización económica y la hacienda pública de Chile* (2 vols., Santiago 1878–80), and *Tratado elemental de economía política* (2nd ed., Santiago 1870). This last was one of the most notable works of its day in economic theory in Latin America. Zorobabel Rodríguez, a pupil of Courcelle Seneuil, also continued his point of view. Other Chilean economists were Cristóbal Valdés, Manuel Miguel and Marcial González, author of *Estudios económicos* (1887). In Bolivia Pedro Terrazas' translation of Bastiat's *Harmonies économiques* and Samuel Oropeza's *Economía política* and *Finanzas bolivianas* (Sucre 1887) are also important. In 1891 José María Linares, who edited various economic and financial journals, was made professor of political economy in the law faculty of the University of San Francisco Xavier. Two Colombians, Juan B. Abello (1833–87) and Aníbal Galindo (born 1834), produced treatises on economics, *Lecciones de economía política*, and *Estudios económicos y fiscales* (1880) respectively. Rafael Nuñez (1825–94) wrote *La crisis económica* (1886). In Argentina in the nineteenth century there was no work of distinction on political economy after the publication of Juan B. Alberdi's (1810–84) *Sistema económico y rentístico de la confederación* (Valparaiso 1854), published soon after the reestablishment of constitutional government in the fifties. Most of this time the Argentines were content to use a translation of Joseph Garnier's *Eléments d'économie politique*. However, Amancio Alcorta (1805–62) and the historian V. F. López taught political economy very successfully for many years, and in 1890 the latter reorganized the badly shattered finances of the nation. Many good monographs on the fiscal situation also appeared between 1870 and 1900, some of them being prepared by López and Alcorta. In the eighties there was a revival of interest in economic subjects in Mexico. Then were published, all in the City of Mexico, Carlos Pacheco's *Informe sobre colonización y terrenos baldíos* (1885), J. C. Segura and M. D. Cordero's *Reseña sobre el cultivo de algunas plantas industriales* (1884), Santiago Ramirez' *Noticia histórica de la riqueza minera de México* (1884), and Ricardo de María Campos' *La crisis monetaria* (1886) and *Datos mercantiles* (1889). Francisco de Frías' *La cuestión del trabajo agrícola y de la población de la isla de Cuba* (1860) was largely responsible for the beginnings of scientific agriculture in that country. Tranquilino Sandalio de Noda (*Memoria sobre el cultivo del café*, 1828) and Desiderio Herrera y Cabrera (born 1792) were other agronomists and economists whose writings promoted the economic development of Cuba. The chief Cuban theoretical work in political economy was Tranquilino Sandalio de Noda's

I tratado de economía política con aplicación á la isla de Cuba.

Sociology, although it had no separate existence in the university curricula, was at least equally productive. There was not sufficient national motivation to produce original economists and the Latin Americans were content to imitate. But their social situation was their own and it was unique. As Sarmiento had said in 1845, they had on their hands a constant struggle between civilization and barbarism. This struggle existed everywhere in Latin America, but the Argentines were perhaps most keenly aware of it and they produced the largest amount of work in sociology. Sarmiento and Alberdi were early leaders in this field. Esteban Echeverría preceded both of them in his thinking and published his *Dogma socialista* and *Plan económico* in 1846. Alberdi contributed in addition to his *Estudios económicos*, which was very largely sociological, also *Luz del día*, *El crimen de la guerra*, *Ensayos sobre la sociedad*, and Sarmiento wrote also *Argirópolis* (Santiago de Chile 1850), *De la educación popular* (Santiago de Chile 1848), *Recuerdos de provincia* (Santiago de Chile 1850), and numerous other sociological works. José María Ramos Mejía took up the burden sociologically, following the lead of Maudsley, Bagehot, Tarde and Le Bon. He began with *Las neuroses de los hombres célebres en la historia argentina* (1876–78) and closed with *Rosas y su tiempo* (1907). In between came *La locura en la historia* (1895), *Los simuladores del talento* (1904) and *Las multitudes argentinas* (1899). Perhaps the most candid of the Argentine sociologists in an age of candor and self-criticism was Agustín Alvarez (1857–1914), whose work overlaps the following century but in technique belongs to the nineteenth. His *Sud América* (Buenos Aires 1894), *Manual de patología política* (Buenos Aires 1899), *Educación moral* (Buenos Aires 1901), *Adonde vamos?* (1904), *La transformación de las razas en América* (Barcelona 1906), *Historia de las instituciones libres* (Barcelona 1909) and *La creación del mundo moral* (Buenos Aires 1912) afford an excellent sociological picture of the nineteenth century in Latin America. Juan B. Justo (1865–1928) should also be mentioned. His leading sociological works were *El método científico* (1896) and *La teoría científico de la historia y la política argentina* (1898). Most of the sociological writing before 1900 was an attempt at the interpretation of Latin American history. It was a local sociology, although obviously and professedly it had been inspired by the work of Taine, Spencer and the French social psychologists. In Chile a similar sociological interpretation of history was undertaken by Simón Rodríguez (1771–1854), one of the inspirers of Sarmiento and Bilbao, as well as the teacher of Bolívar, in *Las sociedades americanas* (1828), and José Victorino Lastarria (1817–88), especially in his *Lecciones de política positiva* (1875) and his *Investigaciones sobre la influencia social de la conquista y sistema colonial de los españoles en Chile* (Santiago 1844), in which, according to Huneeus, he anticipated Buckle. Francisco Bilbao (1823–65), who wrote voluminously on American culture, must also be mentioned among Chilean sociologists of the time. But Chile also produced a more philosophic type of sociology, particularly in the early part of the century, as is evidenced by the work of Andrés Bello (1781–1865); José Miguel Varas (1807–33), a follower of Destutt de Tracy, in *Lecciones de filosofía moral*; Ventura Marín (born 1816), author of *Elementos de ideología*; and the *Tratado sobre las luces y las virtudes sociales* of Simón Rodriguez. José Gil Fortoul (born 1862) of Venezuela published in 1896 *El hombre y la historia*, and Rafael Nuñez of Colombia wrote *Ensayos de crítica social* (1860–74). Nuñez, who was president of Colombia, in 1883 introduced and expounded the philosophy of Spencer as a remedy for the prevalent political dogmatism fostered by his predecessors. Other Colombian sociological works of this period were *La iglesia y el estado en Colombia* (London 1885) by Juan Pablo Restrepo (1839–96), and *La educación de la mujer* by Medardo Rivas (1825–1901). Very early in the century a Peruvian, José Hipólito Unanue (1758–1833), produced *Ensayos sobre la educación de la juventud* and other works on the social aspects of education. An interesting sample of Cuban sociological writing, which quite generally has been more practical and concrete than that of the rest of Latin America, was the *Observaciones sobre la suerte de los negros en Africa, considerados en su propia patria y trasladados á las Antillas españolas*, by Juan Bernardo O'Graban (born 1782). Eugenio María de Hostos (1839–1903), a native of Porto Rico, published *Moral social* (Madrid 1901). Francisco García Calderón regards de Hostos as the most important Latin American philosopher after Bello. De Hostos long resided in Chile and taught there.

Throughout the nineteenth century the Latin

Americans made no clear distinction between political science and law, treating the former variously as *derecho público*, *derecho político*, *derecho constitucional* and *derecho internacional*. Courses in these subjects were given in the universities after the middle of the century, and in international law occasionally before that time. The term *derecho político* did not become common before the eighties or the nineties, when it had practically the same meaning we were beginning to apply to the theory of practical politics, or actual government. The early political leaders and philosophers drew largely from Rousseau; later they generally adopted the leadership of Bentham. The writings of de Tocqueville, Victor Hugo, Saint-Simon and Comte also had great influence. The noted Chilean lawyer and publicist, Francisco Bilbao, had studied under Lamennais in Paris. Lerminier's *Cours d'histoire des législations comparées, 1835–36* (Paris 1836) had great influence upon the young Alberdi and his contemporaries. Other Europeans who influenced the political and social philosophy of Latin America were Quinet, Michelet, Fourier, Proudhon, Ahrens, J. S. Mill, Adam Smith, Say, Bastiat, Laboulaye, Bryce and especially Duguit and Léon Bourgeois among the more recent writers. Writers in the United States, especially those dealing with its constitution, profoundly influenced the Latin Americans. The works of John C. Calhoun were translated and published in four octavo volumes at Caracas in 1879. The constitutional treatises of Story, Kent, Curtis, Cooley and others were familiar to them through translations and were much quoted by them. These writings strongly influenced their own constitutional development, and it is a commonplace that very frequently the judges of Latin American courts followed North American supreme court decisions on constitutional questions down to 1900 or later.

Only a brief mention can be afforded of the writings in political science of the nineteenth century, although they were very numerous. Andrés Bello, a Venezuelan naturalized in Chile, philosopher, philologist, historian, sociologist, political scientist and reorganizer of the university at Santiago, was the real founder of the nineteenth century social sciences in Chile. He had resided in England from 1810 to 1829, where he came under the influence of Bentham and James Mill, and had then gone to Chile where he founded the Colegio de Santiago, and had taught among other things Roman law, political and social science and international law. He was active in the preparation of the codes of the country and wrote *Principios de derecho internacional* (1840). He also supported José Joaquín de Mora in introducing the legal philosophy of Bentham into Chile, as earlier it had been introduced into Argentina through the instrumentality of Rivadavia. Other noteworthy Chilean productions were the constitutional works of Mariano Egaña (1793–1846), the *Elementos de derecho público constitucional* (2nd ed., Santiago 1848) by J. V. Lastarria, the founder of the faculty of law and political science at the University of Chile, and *La constitución ante el congreso* (2 vols., Santiago 1879–80), and *Estudios sobre derecho constitucional comparado* (Santiago 1889) by Jorge Huneeus Zegers (1835–89). The latter introduced the inductive method into the teaching of his subject and enjoyed a great reputation in Chile and elsewhere. His method was adopted and perpetuated by Valentín Letelier, who developed a new school in administrative law. In Bolivia the *Nociones de derecho público político* (La Paz 1898) and the *Nociones de derecho internacional moderno* of Federico Díez de Medina (1839–1904), the *Dogmas del derecho internacional* (New York 1870) of Agustín Aspiazu (born 1817), the *Derecho administrativo* (Sucre 1889) and *Derecho público constitucional* (1898) of José S. Quinteros, the *Derecho público* of J. M. Gutiérrez, the *Problemas políticos de la América del sud* (1895) and the *Derecho natural* of Luis Arce were important.

Colombian and Venezuelan writers on political science also have been numerous. J. M. Samper's (1830–88) *Derecho público interno de Colombia* (2 vols., Bogotá 1886); Federico C. Aguilar's *Colombia en presencia de las repúblicas hispano-americanas* (Bogotá 1884); Justo Arosemena's (1817–85) *Estudios constitucionales sobre los gobiernos de la América latina* (2 vols., 2nd ed. Paris 1878, first edition published in Paris 1870 as *Las constituciones de la América latina*), and *Apuntamientos para la introducción á las ciencias morales y políticas*; Rafael Nuñez' *La reforma política en Colombia* (Bogotá 1885); and the *Elementos de ciencia administrativa* (Bogotá 1840), the *Lecciones de derecho constitucional* (Buenos Aires 1869), *Las repúblicas sudamericanas y el "Uti rossidetis" de 1810* and *La libertad civil y el gobierno propio* (1872) of Florentino González (1806–75) are representative of Colombia. The last named work was a translation of Francis Lieber's *Civil Liberty and Self*

Government, published in 1853. He also translated J. S. Mill's *Representative Government* in 1865, and some of the state constitutions of the United States in 1870. His works were used widely throughout Latin America. Luis Sanojo's *Derecho político* (Caracas 1877) and José Gil Fortoul's *Filosofía penal* (1891) and *Filosofía constitucional* (1890) are fairly typical of Venezuela. Pablo V. Goyena's *Diccionario de la legislación rural de la república oriental del Uruguay* (Montevideo 1887) and his voluminous compilation of *La legislación vigente* (2nd ed. 1888) and Federico D. Acosta y Lara's *Los partidos políticos* (1885), one of the first works on this subject, *Filosofía del derecho* (2 vols., Montevideo 1890–94), and *Lecciones de derecho constitucional* may be cited for nineteenth century Uruguay. The *derecho público* of Argentina was comparable in development to that of Chile. In international law Carlos Calvo (1824–1906) and V. G. Quesada (1830–1913), voluminous and important writers and compilers of documents, Amancio Alcorta y Palacios (1842–1902), Luis M. Drago (1859–1921), author of the Drago doctrine, and Estanislao S. Zeballos were the outstanding figures. In constitutional law Alberdi, Sarmiento, V. F. López, J. M. Estrada, Francisco Ramos Mejía (1848–1900), in the latter half of the century, and Mariano Moreno, Bernardo Monteagudo, Rivadavia, Dean Funes and Dorrego in the early or revolutionary period, were the leaders. J. B. Alberdi, perhaps the greatest of the Latin American social scientists, was the author of the *Bases y puntos de partida para la organización política de la república argentina* (Valparaiso 1852), which served as the groundwork of the national constitution of 1853. The *Diccionario de legislación peruana* (Lima 1860) by Francisco García Calderón (1834–1905) of Peru has long been regarded as basic to public law studies in that country. Much the same may be said of the *Diccionario de legislación* of Germán Leguia y Martínez. The *Colección de los tratados* of Ricardo Aranda has already been mentioned. An early political philosopher and writer on public law was José María Pando (1787–1840) who wrote, among other things, *Pensamientos y apuntes sobre la moral y la política* (1837) and *Elementos de derecho internacional* (1843). Manuel Atanasio Fuentes (born 1828) wrote a *Derecho constitucional universal*. The Latin Americans have been much preoccupied with international relations because of their numerous boundary disputes and their financial difficulties with European governments, and more recently with the United States.

In the field of law there was little originality in Latin America in the nineteenth century, aside from the fact that the primary interest was in public law, for which the Latin Americans had unique materials and needs. Their greatest contribution, not wholly underived from Latin Europe, whose system of private law they took over almost entirely, was the sociological emphasis in law, which long antedated the somewhat similar recent movement in the United States. This sociological trend in law and legal theory was in part the logical consequence of the foundation principles of the Roman civil law, but especially of the Comtean or positivist spirit which reached Latin America, chiefly through Taine, Spencer and Buckle, and found a very ready response there. The newness of their culture and the relative directness of the response they found it necessary to make to their physical environment gave an excellent background for the reception of positivism. But particularly the reaction of the first two generations after independence against the church, which they found so largely in opposition to their republican principles, confirmed them in this new viewpoint. As Huneeus says of Chile, "modern positivistic science has delivered the study of legislation and law over to the dominion of sociology." The same might be said of other Latin American countries toward the close of the nineteenth century, although the transformation was wrought primarily through the subject called philosophy of law, which for half a century has been taught everywhere in their universities as an introduction to the study of law and legislation. But the content of this course has been primarily sociological and anthropological rather than legal and technical, as it has been in English speaking countries.

The law schools devoted their energies primarily to the study of principles and to the analysis of codes rather than to the study of the intricacies of judge made law, which is so necessary in common law countries like ours. They had records of cases; and important cases, with the arguments and opinions, were often published by the lawyers concerned. But case law never achieved anything like the overwhelming importance it has had among us. They were interested in the law largely as a social science and directed their efforts to its simplification and standardization. All forms of

the law were codified. These codes, quite naturally, were at first based on the Spanish codes, but later came to embody the best principles of the codes of other European countries, and showed an increasing tendency toward revision to fit local conditions as the demands of their development made this necessary. These codes and their frequent revisions were universally prepared by the law professors rather than by private practitioners and politicians. The law schools, after the decline in importance of theology with the successful issue of the revolution, assumed the most active educational leadership in all the countries and, with the exception of the state, became the most influential secular institutions.

We may summarize this very brief analysis of nineteenth century social science in Latin America by saying that the most significant developments were in history, political science and sociology. It was in these subjects and in geography, in which their own experiences counted for most, that they showed the greatest originality. Their peculiar practical political and social problems, especially intense during the first half of the century, placed a premium upon philosophic and sociological analysis and synthesis and made necessary the creation of a political science—*derecho político* and *público*—which would fit their own needs. The response in the social sciences, considering the poverty of their universities and the lack of opportunity for specialization, was highly creditable and significant. In the fields of law and economics, except for the socialization of their law and their work in those phases of applied economics which touched their own particular national problems, they were much less original. This was undoubtedly because of their retarded economic development and the inherited similarity of their domestic institutions to those of Latin Europe, from which they derived their law.

III. RECENT TRENDS. Many new developments were taking place in the social sciences in Latin America by 1900. The reorganization of the universities on a more modern basis began in the sixties and seventies and was becoming effective in the eighties. By 1900 the national universities—the best universities in Latin America are supported by the national governments—had become cosmopolitan in character and were beginning to take their place among the universities of the world. In 1910 Mexico reestablished her national university, and now every South American republic has one or more national universities. Argentina has five. The universities are also broadening their scope. The faculties of law and the social sciences, sometimes called law and the political sciences, continue to teach the social sciences, as they did throughout the nineteenth century. The national universities of Buenos Aires and Havana and the Catholic universities at Bogotá and Santiago have established faculties of philosophy and letters, in which history and the social sciences, including geography and archaeology, receive more adequate attention. The universities of Buenos Aires, the Littoral (Argentina), Uruguay, San Marcos (Peru), Chile and the National School of Finance and Commerce of Salvador have faculties of commerce and business administration built around economic studies. Chile has a Social Service School, the only one so far in Latin America, where scientific training for relief work has not been especially emphasized. This school issues a standard review, *Servicio social*. Venezuela has two schools of political science at Trujillo and Valencia. Rural economics and sociology are now being taught in most of the agricultural faculties to be found in all of the countries, and agricultural cooperation is being strongly promoted. In a number of countries, particularly in Colombia and Bolivia, there are separate schools of law in addition to those connected with the different universities. Generally only doctors and licentiates of the national or public institutions are licensed to practise the professions and are qualified to hold certain types of governmental positions. There have been some overt political conflicts of authority between church and papal representatives and the national governments, such as the recent one in Mexico and the famous expulsion of the papal nuncio from Argentina by President Roca in 1884, which help to explain these regulations. In addition to university instruction in the social sciences, these subjects are beginning to be included in the normal and secondary schools. Civics first followed history (an old subject) here, and now sociology and economics are being included in some places, notably in the Colegio Pedro II of Rio de Janeiro and various Argentinian schools. Accordingly, less emphasis is being placed upon the old classical studies. Educational reform, particularly of the universities, is much discussed and many volumes are issued dealing with this subject.

In some countries secular control of education has gone farther than in the United States. This theme is ably discussed in *Las dogmas, la enseñanza y el estado* (Montevideo 1927) by Professors J. C. Grauert and Pedro Ceruti Crosa of Uruguay.

Two leading trends in law have been manifest since 1900. One of these is toward a greater emphasis upon case law and less philosophic discussion of principles. This is due largely to the German and North American influence, especially in corporation law. On the other hand the philosophy of law has shown some tendency to become less positivistic and sociological and more neo-Hegelian and neo-Kantian. This second tendency is due largely to the influence of Bergson, Del Vecchio and Stammler, reenforced by the disillusionment regarding the omnipotence of science for good resulting from the late war. Law is the most prolific field of Latin American social science literature. Men like Alfredo Colmo and Alfredo L. Palacios (*El nuevo derecho*, Buenos Aires 1920) of the University of Buenos Aires are beginning to systematize and rewrite the principles of the civil law from a critical and sociologically constructive standpoint. International law perhaps still commands the strongest public interest. There have been numerous writers in this field, of whom Drago and Quintana of Argentina and Oliveira Lima of Brazil have perhaps been most outstanding. In constitutional law the large four volume work *Estudios constitucionales* (La Paz 1920) of José Carrasco of Bolivia and the works of José Matienzo of Buenos Aires deserve special notice.

The close relation between sociology and law is perhaps as well illustrated in *derecho criminal* (criminal law) as elsewhere. The subject is commonly divided in the universities into two fields or courses, general and special, which correspond pretty closely to our criminal law and our criminology and penology, respectively. Two interests have been active in criminology since the seventies. One has its source in the Italian school of criminal pseudo-psychiatry, only recently outgrown. The other derives from the North American school of penology, reenforced by modern European schools. The report and recommendations of the Cincinnati meeting of the National Prison Association of 1870, destined to be so influential in this country, were translated, published and disseminated throughout Latin America by a Colombian diplomat who attended the sessions. This document went far toward fixing penological practise. Enrico Ferri also has had great influence upon Latin American criminological theories, but more recently the German penal code has been much consulted, especially under the leadership of Juan P. Ramos, professor at Buenos Aires. Dr. Jorge E. Coll, of the same university, has been very influential in introducing modern methods of correctional treatment of juveniles, as has also Ernesto Nelson.

The work of Matienzo in *derecho político*, or actual government, resembles in many respects that of such northern scholars as Beard, Young, Holcombe and Merriam. The Cuban, Francisco Carrera Jústiz (born 1857), has done important work in municipal affairs, writing extensively on city government, utilities and administration. He also founded the *Revista municipal y de intereses económicas* in 1906. Another Cuban, Enrique Hernández Cartaya (born 1877), has specialized particularly on the primary and has published, among other works, *El régimen electoral de la república de Cuba*. Other Cubans working in the field of politics and international relations are Gustavo Gutiérrez y Sánchez, Fernando Sánchez de Fuentes and Salvador Salazar. Two Bolivians, Daniel S. Bustamante and Federico Díez de Medina, have done important work in international relations. In Uruguay Luis Alberto de Herrera (born 1873), in international law, Baltasar Brum (born 1883), in international politics, Justino Jiménez de Aréchaga (born 1882) and Juan Andrés Ramírez (born 1875), in constitutional government and law, are typical of the work now being done in all the more advanced Latin American countries, too vast to be mentioned in detail. All of these men are, of course, teachers of their subjects in their national universities.

In history, critical scientific investigation has increased steadily since 1900. The University of Buenos Aires has been perhaps the most prolific center of historical investigation, beginning with the too little appreciated work of Juan Agustín García, whose *Ciudad indiana* appeared in 1900. Some of his students, notably Roberto Levillier, Ricardo Levene and Emilio Ravignani, have made investigations of a very high grade. The first, besides producing an excellent work entitled *Les origines argentinos* (Paris 1912), has in recent years been editing the early national documents pertaining to Peru, Bolivia and Argentina. Levene has written a very modern history of Argentina and has

specialized in the economic history of the Rio de la Plata region. His *Historia económica del virreinato del Plata* (La Plata 1927–28) is the standard in this field. Ravignani is director of historical research in the University of Buenos Aires. It is an interesting indication of the close relation of history and sociology in Latin America that the latter two men at one time taught sociology. Levillier's *Nueva crónica de la conquista del Tucumán* (vol. i, Buenos Aires 1926) is as much sociological and archaeological as historical. The works of David Peña and Rodolfo Rivarola in Argentina, of Vicente Dávila and C. Parra-Pérez (*Miranda et la révolution française*, Paris 1925, and *Bolivar*, Paris 1928) of Venezuela, of Ramiro Guerra y Sánchez (*Historia de Cuba*, vol. i, Havana 1921), Francisco Carrera Jústiz (*Historia de las instituciones locales de Cuba*) and Jorge Le Roy Cassá (*La historia y la prensa médica de Cuba*, 1917) of Cuba, must be taken as representative of scores of other historians throughout Latin America of whom space forbids mention. Many of these countries, like Mexico in its *Archivo diplomático mexicano*, are publishing authoritative series of historical documents carefully edited and interpreted by well-trained scholars. Likewise historical investigation of an adequate character is now being financed by the government and undertaken by private initiative in the more progressive of these countries, especially in Argentina, Chile, Venezuela, Brazil, Peru and Mexico. Some of the leading writers of texts in history since 1900 are Carlos Navarro y Lamarca (Argentina), M. Ordóñez López and L. S. Crespo (Bolivia), João Ribeiro (Brazil), C. J. A. Villacorta (Central America), L. Galdames (Chile), J. M. Henáo and G. Arrubla (Colombia), Ramiro Guerra (Cuba), C. Destruge (Ecuador), Luis Pérez Verdia (Mexico), C. Bácz (Paraguay), C. Wiesse (Peru), Hermano Damascenas (Uruguay) and Felipe Tejera (Venezuela).

Archaeology has been cultivated largely in connection with history as well as independently, and much good work has been done. Florentino Ameghino's (1854–1910) *Filogenia* (Buenos Aires 1884) and *Antigüedad del hombre en el Plata* (2 vols., Paris 1880–81) have not withstood the test of time, although they are widely known. Arístides Mestre (born 1865) and José Varela Zequeira (born 1859), both Cubans, wrote works of an anthropological character, the former in his *El problema de la colonización* (1887) and the latter in his *Carácter actual de los estudios antropológicos* (1889). Mexico, Chile, Bolivia, Peru and Argentina have been most active in developing these fields of social science. There have been several prominent men in Mexico in this field, including Crescencio Carillo y Ancona, an early writer, Marcos E. Becarra, F. Belmar, Leopoldo Batres and Alfonso Caso. Other typical workers in this field are Luis Montané of Cuba, José Arrechavaleta of Uruguay, Ernesto Restrepo Tirado of Colombia, José Toribio Medina and Tomás Thayer Ojeda of Chile, Moises Bertoni, Carlos Fiebrig and Tomás Osuna of Paraguay, Arthur Posnansky of Bolivia and Juan B. Ambrosetti of Argentina. Two Germans who have done distinguished service in standardizing archaeological work in Latin America are Max Uhle, formerly of Lima and now at Quito, and Hermann Beyer, now at Tulane University. There is also an International School of Archaeology and Ethnology in Mexico. Professorships in archaeology and in anthropology have been established in the leading universities.

It was around 1900 that Ernesto Quesada added to the prevailing nationalistic sociology a more systematic theoretical treatment of sociology (*La sociología*, Buenos Aires 1904), which won the applause of Lester F. Ward. This lead was followed in Argentina by Alfredo Colmo (*Principios sociológicos*, Buenos Aires 1905), Enrique Martínez Paz (*Elementos de sociología*, Córdoba 1911), J. A. García (*Apuntes de sociología*, Buenos Aires 1909, 1912), Rául Orgaz (*Estudios de sociología*, Buenos Aires 1915) and José Oliva (*Sociología general*, vol. i, Santa Fé 1924) of the same country, and by Mariano H. Cornejo (born 1866), of Peru, who wrote *La sociología contemporánea* (revised and translated into French as *Sociologie générale*, 2 vols. Paris). The writers on general sociology in Latin America were influenced by Comte, Spencer, Tarde, Durkheim, and more recently by Prieto, Simmel and Spengler, and by North American writers through Spanish and French translations made by Adolfo Posada and others. L. F. Ward, Giddings and Ellwood have successively exercised much influence. Cornejo has been influenced mainly by the folk psychology of Wundt, Valentín Letelier by the positivism of Comte, Orgaz by Simmel. But general sociology as a basis for legal and legislative interpretation has suffered recently from competition with the neo-Kantian and neo-Hegelian spirit in the philosophy of law. Nationalistic sociology is still dominant in Latin America and will con-

tinue to be so for some time to come. Among the writers of this type since 1900 José Ingenieros (1877–1925) of Argentina, author of *Sociología argentina* (Valencia 1913), *Criminología* (Madrid 1913), *La evolución de las ideas argentinas* (vols. i and ii, Buenos Aires 1918–20), etc., was clearly preeminent. Other prominent sociological writers of this period are Daniel S. Bustamante (*Principios de sociología*), M. R. Paredes (*Política parlamentaria de Bolivia*), Alcidas Arguedas (*Pueblo enfermo*, Barcelona 1909), Bautista Saavedra (*El Ayllu*, Paris 1903), of Bolivia; F. J. Oliveira Vianna (*Psycologia social*, 1921, and *Populações meridionaes do Brasil*, 1920), of Brazil; Fernando Ortiz y Fernández (*El hampa afro-cubana*, Madrid 1906, *La reconquista de América*, Paris 1910, and numerous works on Negro and immigrant criminality, nationality, race, culture, etc.), Francisco Carrera Jústiz (*Sociología municipal*, *Estudios de economía social*, *Estudio de sociología política*, *Conservadores y liberales*, *Estudios político-sociales*, Havana 1911, *El socialismo municipal*, etc.), Pablo Desvernine y Galdós (born 1854) (*El derecho y la sociología*), Orestes Ferrara (*Machiavel*, Paris 1928), Ramiro Guerra (*Azúcar y población en las Antillas*, Havana 1927), of Cuba; Antonio and Alfonso Caso, Toribio Esquivel Obregón, Ezequiel Cháves, Vicente Lombardo Toledano, Norberto Domínguez and José Vasconcelos, of Mexico; Justo P. Prieto and Ignacio A. Pane (*Apuntes de sociología*, Madrid), of Paraguay; Carlos Vaz Ferreira, José Enrique Rodó, Emilio Frugoni and Alberto zum Felde of Uruguay; and A. L. Palacios (*La fatiga y sus proyecciones sociales*, Buenos Aires 1922), José M. Paz Anchorena (*La prevención de la delincuencia*, 1918) and Juan B. Justo (*Teoría y práctica de la historia*, Buenos Aires 1909), of Argentina. Much in applied sociology, in the fields of criminology, immigration, standards of living, juvenile welfare, etc., is also being written, especially in Cuba, Chile, Uruguay, Argentina and Brazil, but cannot be mentioned in detail. These fields of interest, excepting criminology and immigration, date almost wholly from 1900 or later. One of the most influential of the nationalistic and philosophico-ethical sociologists of the early twentieth century is Francisco García Calderón, the younger (born 1883). His *La creación de un continente* (Paris 1912) is one of the better surveys of the evolution of Latin American institutions. *Les démocraties latines de l'Amérique* (Paris 1912, translated into English as *Latin America*, London 1913) is perhaps the most telling of Latin American defenses of the Latin civilization against the Anglo-Saxon. *Le Pérou contemporain* (Paris 1907) is an analysis of Peruvian civilization, while his *Hombres é ideas de nuestro tiempo* (Madrid), *Profesores de idealismo* (Paris) and *Ideologías* (Paris) are studies and appreciations of leading European and American social thinkers and thought. *Los paises de la América latina* (Madrid 1915) of Alfredo Colmo of Argentina is one of the more dependable sociological analyses of Latin American civilization in some of its more fundamental aspects.

The development of economics since 1900 has been most striking both in the universities, as previously mentioned, where various faculties or schools of commerce and business have been established since 1903, and in journalism. Still, however, the economics treatises deal almost wholly with practical economic problems, and especially with finance. No first rate general work on economics has yet been written or published in Latin America. This is perhaps due largely to the fact that practical problems are too pressing and the professors still lack sufficient time for an adequate presentation of theory. This preoccupation with the practical problems of society is generally characteristic of sociology, political science and even history, as well as of economics. For their general theory they are usually content to depend largely upon writers in other countries.

It would, however, be a mistake to suppose that there are not able economists in Latin America. A few examples of such are Guillermo Subercaseaux (*Monetary and Banking Policy of Chile*, Oxford 1922), Santiago Marín Vicuña (*Los ferrocarriles de Chile*, 4th ed. Santiago 1916), Julio Zegers and Marcial Martínez, of Chile; Gutiérrez Darío (*Política económica*, 1910), Manuel A. Elías (*Finanzas prácticas de Bolivia*, La Paz 1915), José Gutiérrez Guerra (*Cuestiones bancarias*, La Paz 1910, and *La reforma bancaria*, La Paz 1913), Casto Rojas (*Cuestiones económicas y financieras*, La Paz 1909, *La moneda de oro en Bolivia*, Lima 1912, *Historia financiera de Bolivia*, La Paz 1916, etc.), of Bolivia; Leopoldo Cancio y Luna of Cuba; Eduardo Acevedo (*Economía política y finanzas*, 1903, *Historia económica y financiera de la República Oriental del Uruguay*, 2 vols., Montevideo 1903, *Legislación obrera*, Montevideo 1914, and *Temas de legislación financiera*, Montevideo 1915), Pedro Cosio (*Accidentes del*

trabajo, 1908, *Tarifas de aduana*, Montevideo 1910), Gabriel Terra (*Economía política*, *La industria lechera* and *Unificación de deudas del año* 1883), of Uruguay; Enrique Martínez Sobral and Carlos Díaz Dufoo, of Mexico; Lucas Caballero, Julio Caro, Alfonso López, Esteban Jaramillo, Simón Araujo, F. de P. Pérez and Enrique A. Gaviria, of Colombia; Eusebio and Elío Ayala and Rodolfo Ritter, of Paraguay; and Alberto B. Martínez and Maurice Lewandowski (*The Argentine in the Twentieth Century*, English translation, London 1911), Juan A. Alsina (*La inmigración europea en la república argentina*, *La inmigración en el primer siglo de la independencia*, Buenos Aires, 1910, *Población, tierras y producción*, Buenos Aires 1903, and *El obrero en la república argentina*, Buenos Aires 1905), Emilio Coni (in agricultural economics), Alejandro Bunge, Isidoro Ruiz Moreno, Juan B. Justo (translator of Marx and national senator from Buenos Aires), etc., in Argentina. The subject of statistics, although recognized throughout the nineteenth century, developed slowly until after the establishment of the schools of commerce and business, and it has not yet been applied to any considerable extent to the other social sciences.

Auxiliaries to the social sciences, such as public libraries, museums, professional periodicals and learned societies, have not been particularly well developed, owing to lack of financial resources, relatively small reading populations and insufficient specialization. Nearly all of the countries now have one or more historical reviews and economic journals. The law reviews are even more numerous. Practically all of the large national universities publish high grade journals to take care of the productions of their professors, and some of them issue series of research studies besides. There are also good journals in political science, but sociology, because it is more of a leavening spirit than an independent discipline, usually finds space in the other social science journals and in the philosophic reviews. Writers on archaeology, anthropology and geography depend largely upon the university reviews and studies, although some geographic societies have their own bulletins. The life of these journals is frequently precarious, for reasons mentioned, but when one disappears another, as a rule, soon takes its place. The scholars are not wholly dependent upon professional journals for publication, for the better dailies, such as *La Nación* and *La Prensa* of Buenos Aires, and the numerous general magazines of the better class, such as *Nosotros*, *Amauta*, *Mercurio Peruano*, *Revista do Brasil*, *Cuba contemporanea*, *Revista Chilena* and *Sagitario*, constantly carry high grade articles in all the social sciences. In no other part of the world, perhaps, does the general periodical press sustain such a heavy load of scholarly material. This capacity results in part from the great interest of Latin Americans in learning and also from the fact that universal literacy and commercial advertising have not yet combined to degrade the character of their publications. The retail business is still carried on in relatively small units. It should also be noted that most writers and teachers in the social sciences have or have had some connection with serious general journalism, either as contributors or as editors. Most of the leading general reviews are edited by university professors, and professors are very frequently employed on the staffs of the great dailies.

The public libraries have not until recently been adequate for research purposes. There are only twelve libraries in Latin America with 100,000 or more volumes each. These are the national libraries of Mexico, 800,000; Chile, 783,956; Buenos Aires, 425,000; Cuba, 207,423; Costa Rica, 100,617; Colombia, 100,000; Uruguay, 100,000; Library of the Brazilian Historical and Geographical Institute, 124,000; Portuguese Library, Rio de Janeiro, 100,000; Buenos Aires public municipal library, 100,900; the library of the University of La Plata (Argentina) 110,000; and the library of the Academy of Sciences, Havana, 101,000. Of these 3,052,000 volumes, approximately, in the twelve leading libraries of Latin America, 636,000 volumes, or more than one fifth, are in Argentina. This predominance in books is paralleled by her predominance in most other respects. It is to be noted that all of these twelve libraries combined have about as many volumes as the Harvard University library alone contains. Only one Latin American university library contains as many as 100,000 volumes. Other university libraries most nearly approaching this in size are those of the Catholic University of Chile, 50,000; University of Lima, 47,000; University of Córdoba (Argentina), 35,000; University of Havana, 30,000 volumes. The bar association of Buenos Aires has a library of 32,411 volumes and the faculty of economic sciences of the same city has 9030 volumes. The public library of the Sociedad

Económica de Amigos del País (Friends of the Country) of Havana contains 60,382 volumes. The largest public libraries are La Paz municipal, in Bolivia (30,000 volumes); Santo Domingo municipal, in the Dominican Republic (2014); Guayaquil municipal, in Ecuador (32,687); National, in Guatemala (24,000); National, in Honduras (15,000); Panama (10,500); National, in Paraguay (12,000); National, in Peru (62,000); National, in Salvador (14,500); and National, in Venezuela (60,000). Argentina, Peru, Mexico and Cuba are fairly well supplied with books accessible to the public. Not all of these of course are social science books. One of the best libraries specializing in social science in Latin America is that of the faculty of law and the social sciences of the University of Buenos Aires. In 1926 it contained 17,000 volumes. Many of these libraries are uncatalogued or very inadequately catalogued. The memory of the librarian is the chief aid to be sought in locating books in such cases.

Under the circumstances here mentioned it may seem remarkable that any considerable amount of research could be done in the social sciences in these countries. But a great deal of excellent research is carried on in those which are more advanced. Public libraries of any size are relatively recent and are still but little used, comparatively speaking. Deficiencies of this sort have been made up largely by the splendid private libraries of the leading scholars. Vicente and Ernesto Quesada (father and son) accumulated a library of some 75,000 volumes, which is now in Germany, and Oliveira Lima, of Brazil, a larger one, now at Washington. Felipe Paz Soldán (Peru), José Toribio Medina (Chile) and E. S. Zeballos (Argentina) also collected large private libraries. There are similar private libraries in these and other countries, many of which contain from ten to thirty thousand volumes. Some of these are now being sold to public libraries in Latin America and abroad. One of the results of the growth of public libraries is the democratization of research in the social sciences and the increase of proletarian literature in this field. It is to be noted that the production and publication of radical literature are much more flourishing in Latin America than in the United States. Publishing methods are still comparatively primitive and publication costs are relatively low. Cast plates are still the exception rather than the rule, but the volume of publication, especially in the social sciences, is surprisingly large. Books are ordinarily published in paper covers at the price of one dollar to a dollar and fifty cents, a fact which encourages a large circulation. Book stores, both new and second hand, in the larger Latin American cities are more numerous and usually larger than in this country. The greatest handicap to publication is the small size of most of the countries, providing an insufficient cultural base and consequent meager buying power for literature discussing the national questions which constitute their chief concern. But the possession of a common language and civilization does much to offset this difficulty. Latin Americans still publish many of their books in Spain and in France, because of better publication facilities there and because it is often easier to distribute them to other Latin American countries from these centers than from any of their own publishing centers. They are also great readers of Spanish and French books, less of Italian and German books, and very little of English and North American publications. After the revolutions in Latin America, French thinkers dominated Latin American thought for three quarters of a century. But North American thinkers also had much influence until near the end of the nineteenth century, and many of our books were translated into Spanish.

Historical societies exist in practically every country. In some countries there are several such societies, with considerable collections of documents, periodicals and books. This is particularly true in Mexico, Peru, Chile, Colombia, Bolivia, Argentina, Cuba and Uruguay. The National Archives at Buenos Aires, for example, occupy a large building, the former post office of the nation, and consist of a vast number of precious historical documents, which are being gradually worked over into monographs under government patronage and by private initiative. In other countries similar processes are being carried out in more than a score of centers. Latin America is now one of the richest fields for historical research and it is only beginning to be exploited adequately. Research facilities in the other social sciences are less developed. Archaeology comes next in point of development, then anthropology, economic history and conditions, political problems, and sociological and social welfare data, constituting about the order in which materials and data are being collected and

interpreted at the present time. The research technique itself has not always been perfected or employed by Latin American scholars. Users of their books and materials are sometimes disappointed in the lack of definiteness with regard to facts cited, the absence or uncertainty of dates and other guides necessary to an adequate picture, faulty and indefinite citations of sources, proof-reading, indexing and the like. But in such matters of scholarship technique there is a rapid improvement.

By way of general summary, it may be said that under the colonial rule and the dominance of the clergy social science was limited almost wholly to history, archaeology, law and such phases of political and social philosophy as could be covered in canonical law, natural law (*derecho natural*) and theology. With the coming of the national period in the nineteenth century, law and history shifted largely to a political and sociological interest. This was especially true after 1850. *Derecho público*, and later *derecho político*, or practical government, dominated law and sociological interpretation dominated historical writing and teaching. This in large measure still continues to be true, but as the democratic tradition weakens and as the commercial and financial preoccupation of the people becomes more marked, there is an increasing emphasis upon private, civil and international law, and upon economics to the disadvantage of *derecho político* and sociology. Never has there been wanting originality in the manner of handling characteristic Latin American problems in social science, but the fact that this civilization was less well developed than those of Europe and North America has made the Latin Americans in large measure dependent upon their distant neighbors for much of the method and content of that part of their social sciences which is not of indigenous origin.

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Consult: Azpurúa, Ramón, *Biografías de hombres notables de Hispano-América*, 4 vols. (Caracas 1877); Medina, J. T., *Diccionario biográfico colonial de Chile* (Santiago de Chile 1906); Fuenzalida, E. A., *Galería contemporánea de hombres notables de Chile (1850–1901)* (Valparaiso 1901); Paz-Soldán, J. P., *Diccionario biográfico de Peruanos contemporáneos* (Lima 1921); Gutiérrez, J. M., *El origen y desarrollo de la enseñanza pública superior en Buenos Aires* (2nd ed. Buenos Aires 1915); Pestalardo, Agustín, *Historia de la enseñanza de las ciencias jurídicas y sociales en la universidad de Buenos Aires* (Buenos Aires 1914); Medina, J. T., *La instrucción pública en Chile*, 2 vols. (Santiago de Chile 1905); Huneeus y Gana, Jorge, *Cuadro histórico de la producción intelectual de Chile* (Santiago de Chile 1910); *American Nation Series*, nos. 1–18, 20–21 (Washington 1926–28); Parker, W. B., *Argentines of Today*, 2 vols. (New York 1920), *Bolivians of Today* (2nd ed. London 1922), *Cubans of Today* (New York 1919), and *Uruguayans of Today* (London 1921); Leavitt, S. E., *Argentine Literature* (Chapel Hill 1924), "Chilean Literature" in *Hispanic American Historical Review*, vol. v (1922) 116–43, 274–97, 516–34, 760–76, and "Bibliography of Peruvian Literature" in *Romanic Review*, vol. xiii (1922) 151–94; Borchard, E. M., *Guide to the Law and Legal Literature of Argentina, Brazil and Chile* (Washington 1917); Bernard, L. L., "The Development and Present Tendencies of Sociology in Argentina" in *Social Forces*, vol. vi (1927) 13–27, and "Sociology in Argentina" in *American Journal of Sociology*, vol. xxxiii (1927–28) 110–17.

X

Japan

The teaching and dissemination of the social sciences in Japan began after the historic Restoration of 1868, which marks the rise of the Japanese people as a modern power under Emperor Meiji. This restoration ushered in an era of renaissance which destroyed feudalism and gave rise to liberalism. Japanese thought, which had long been confined to ancient lore and immemorial traditions, was suddenly flooded with new ideas from England, Germany France and the United States. For her revolutionary transformation, social, economic and political, and her astonishing progress in material civilization, Japan has been immeasurably indebted to the social sciences of the West.

The courses of instruction introduced into Tokyo Imperial University in 1871 included law, economics, political science and statistics. Since these subjects were hitherto unknown in Japan, the government invited instructors from France, England and the United States, and sent students to Europe and America who afterward returned to teach at the home university. Today the departments of social science in Japanese universities offer courses in law, political science, statistics, sociology, social politics, education, ethics, philosophy and philology. And in connection with all these branches of knowledge there are learned societies with official organs of publication (see appended list).

In the early years of Meiji Japan was in great need of legal advisers and legally trained government officials. Emphasis was therefore laid on the study of law, and a number of private law schools and colleges were established which even today occupy a prominent position among institutions of higher learning. With the advent of modern industrialism following the Sino-Japanese War of 1894–95, the importance of economics was recognized, and numerous public and private colleges and graduate schools came into existence for the purpose of giving instruction in economics and commercial science. At present, among social science publications, those on economics and social problems outnumber all the rest.

In the study of political science discussion during the seventies and eighties of last century centered on liberty and the rights of the people. The utilitarianism of Jeremy Bentham and John Stuart Mill was introduced by Yukichi Fukuzawa and Keiu Nakamura; the *Social Contract* of Rousseau and the philosophy of Montesquieu, by Chomin Nakai; the ideas of Herbert Spencer and of the German schools, by Hiroyuki Kato. Early students of political science and law, like Nobushige Hozumi, Kencho Suematsu, Kenjiro Ume and Nariaki Tomii, went to England or America; but later Germany attracted more Japanese scholars, and German schools began to acquire greater prestige.

The laws of Japan were drawn after European models. C. F. Boissanade, a Frenchman, and H. Rösler, a German, made respectively the first drafts of her criminal and her commercial codes. The constitution, promulgated in 1889, was based partly on the philosophies of Lorenz von Stein, Gneist and Spencer. At present, besides instruction in Japanese law, the universities offer as a rule courses in English, German and French law.

With the development of capitalism since the beginning of the present century, the idea of democracy, as propounded in America, has made a popular appeal. The peace movement and international questions are receiving more and more attention, and the League of Nations Association has branches in most of the universities and colleges.

Sociology, like other branches of the social sciences, developed under western tutelage. Shoichi Toyama, who went to England in 1876, occupied the chair of sociology at Tokyo Imperial University until 1897. He lectured principally on Herbert Spencer, and was an exponent of social evolution. Nagao Ariga was also a noted Spencerian in Japan. Tongo Takebe, who succeeded Toyama, was a follower of Comte and his positivism. It was Takebe who presided over the Japanese Institute of Social Science from 1912 to 1922, and published the ten volumes of its annuals. About that time,

at Waseda University, Riyukichi Endo held the chair of sociology, and delivered lectures which showed the influence of Giddings, Tarde, Durkheim and Simmel. Mention should also be made of Shotaro Yoneda, who studied personally under Giddings and Tarde and has been teaching sociology for the past twenty years at Kyoto University. He introduced into Japan various western schools of sociology, especially those of Germany and France, which command the largest following today.

The political economy of England and America was introduced into Japan during the period from 1860 to 1870 by Yukichi Fukuzawa, the founder of Keio University. A little later, Tameyuki Amano, a professor at Waseda University, appeared as a protagonist of the orthodox school of economics of John Stuart Mill. Still later, Kenzo Wadagaki and Nobu Kanai of Tokyo Imperial University introduced the new German methods of A. Wagner and von Schmoller. Then, in opposition to capitalistic economics, appeared socialistic economics. Hajima Kawakami, a professor at Kyoto University until 1928, lectured on Marxism. It may be noted that today a considerable amount of empirical study of Japanese economic history is being carried on.

The modern industrialism which followed the Sino-Japanese War, and the marked capitalistic tendency that developed after the war with Russia inevitably and rapidly widened the gap between rich and poor, occasioning frequent conflicts between the two classes. The situation caused a group of socialists to organize an Association for the Study of Social Problems in 1897, and an Association for the Study of Socialism in 1898, while at Tokyo Imperial University scholars of the German school preached state socialism and the need of social politics. Finally the leaders of different branches of the social sciences organized the Society of Social Politics in imitation of the Verein für Sozialpolitik of Germany. The society opposed the doctrines of both socialism and laissez-faire, and while upholding the principle of private ownership endeavored to find a means of preventing class conflicts and of effecting social equilibrium through individual initiative and governmental authority. With this object in view the society published, up to the year 1919, articles by various writers in its *Proceedings of the Society of Social Politics* (12 vols.). In 1919 the Ohara Institute of Social Research was founded by private donation. This is the largest institution of the kind in Japan; it issues the *Labor Year Book*, the *Year Book of Social Work* and other publications. Originally organized for the study of labor problems and social work, the institute of late seems more exclusively interested in Marxism.

In the field of social statistics Kyoji Sugi was a pioneer in Japan; he contributed greatly toward perfecting population statistics and the national census. Another scholar, Iwasaburo Takano, professor at Tokyo Imperial University until 1919, introduced the method of von Mayer; it is largely due to his work and teaching that the science has attained its present status. The names of A. Quetelet and Mayo-Smith may be mentioned among western scholars who have been influential in this connection.

Anthropology was introduced into Japan by an American, Edward S. Morse, who published an article in 1879 in the *Memoirs of the Science Department* (University of Tokyo, vol. i, pt. i) on his discovery of the shell mound of Omori, near Tokyo. Shogoro Tsuboi, who as a student assisted Morse in the excavation of the shell mound, was the first to occupy the chair of anthropology at the Imperial University, and it was he who founded the Anthropological Society of Tokyo in 1884. Léon de Rosny was the first man to make anatomical measurements of the Japanese as a racial stock, while E. Baelz made a detailed comparative study of the Japanese in relation with the Ainu, the Mongol, the Manchu, the Korean and other neighboring peoples. Anthropology during this period was largely based on Darwinian concepts, but later R. Martin's method of measurements was adopted, and also the sero-anthropological method. The study of physical anthropology is mainly connected with the department of science, and cultural anthropology with the department of letters. The most recent methods of approach are the psychological and the cultural-historical.

Adult education is being carried on by the central and local governments, as well as by private religious organizations and societies. They provide courses of lectures, utilizing evenings, holidays and vacation periods. These lectures correspond to the instruction given at continuation schools, and are also intended to give proper civic training. Occasional lectures and courses of lectures are given from time to time by various libraries and newspapers.

Heretofore the central government has done

practically nothing to promote labor education, although the Ministry of Education is now planning to conduct model workers' institutes once or twice a year. There are, however, a dozen or more labor schools in various cities conducted under the auspices of local governments, trade unions, the National Association of Manufacturing and Mining Labor Education, and the Tokyo Imperial University Settlement. The Cooperative Society of Labor and Capital is also engaged in labor education, and conducts at Tokyo an institution for that purpose called the School of Social Politics.

The principal societies concerned with the social sciences, and their publications, are as follows:

The Juridical Society, founded in 1884: *The Journal of the Juridical Society*, monthly.

The Association of Social and Political Science, 1869: *The Journal of the Association of Social and Political Science*, monthly.

The Kyoto Legal Society, 1906: *The Law Review*, monthly.

The Kyoto Economic Society, 1915: *The Economic Review*, monthly.

The Sociological Society of Japan, 1924: *The Japanese Journal of Sociology*, monthly.

The Anthropological Society of Tokyo, 1884: *The Journal of the Anthropological Society of Tokyo*, monthly.

The Statistical Society of Tokyo, 1878: *The Journal of Statistics*, monthly.

The Historical Society, 1890: *The Journal of History*, monthly.

The Kyoto Historical Society, 1916: *The Historical Review*, quarterly.

The Association of Municipal Research, 1922: *City Problems*, monthly.

The Teiyu Ethical Society, 1897: *The Journal of the Teiyu Ethical Society*, monthly.

The Ohara Institute of Social Research, 1919: *The Labor Year Book of Japan*, etc.

The Cooperative Society of Labor and Capital, 1919: *Social Reform*, monthly.

The Central Association of Social Work, 1908: *Social Work*, monthly.

The Faculty of Economics, Tokyo Imperial University: *The Journal of Economics*, quarterly.

The Faculty of Economics, University of Keio: *The Journal of Mita Society*, monthly.

The Department of Political Sciences, Waseda University: *The Waseda Political Science Review*. The Law Association, Waseda University: *The Law Review*.

The Kobe Commercial Institute: *The National Economic Review*, monthly.

The Tokyo Graduate School of Commerce: *The Study of Commerce*.

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XI

United States

The development of the social disciplines in the United States appears to fall into three fairly well defined periods: first, the formative period prior to 1860; second, the period of development and differentiation from 1865 to 1900 or later; and third, the period of maturation and synthesis, especially after 1900.

I. THE FORMATIVE PERIOD. Law and theology were the first of the social disciplines to secure constructive definition in the English North American colonies. Theology, although the most important college subject in this period—with possibly the exception of the classics—was only slightly and indirectly social in character, and may therefore be considered only incidentally in this article. Its primary aim was to provide formulae for the adjustment of man to the supernatural and only incidentally to secure a working adjustment of man to man. This latter function it early left to philosophy and, after the rise of the secular power in Europe, especially to law. Even in colonial Massachusetts, where theocracy held partial sway throughout the seventeenth and a portion of the eighteenth centuries, law was technically the basis of political control. By the end of the seventeenth century in Massachusetts the common law had definitely achieved the upper hand in political control, although it was well into the eighteenth century before the professional lawyer could claim any considerable respect and confidence from the people. The rule of the clergy during the first century or so was, however, aside from the strong personal influence they exerted, not so much through ecclesiastical law as through the common law. The clergy throughout the colonial period rivaled the lawyers themselves—still comparatively few in number—in their purchase and reading of law books.

At the time of the early English settlements Coke was expounding the common law in England, and at the period of the beginnings of a national spirit in the colonies, between 1750 and 1775, Blackstone brought forth his *Commentaries*. These were imported into this country and were republished in 1771 at Philadelphia. In 1803 the first of five volumes of an edition of Blackstone with American notes, edited by St. George Tucker, professor of law and politics at William and Mary College, appeared at Philadelphia. After 1800, and perhaps even before, the new legal problems and relationships in the colonies began to cause a considerable divergence from the content of the English common law, with the result that American textbooks and commentaries began to appear. This divergence was perhaps strongest in the middle colonies and in New England, where the economic organization differed most from that in England. In 1790 James Wilson, a member of the Supreme Court of the United States, began a course of lectures on law in the University of Pennsylvania which apparently involved an American and local reaction to the English common law system. In 1794 Chancellor Kent of New York began his famous lectures on law, which were finally issued in 1826–1830 in his *Commentaries* in four volumes, long the outstanding general treatise on American municipal law and frequently used (especially the first volume) as a text in public law. Kent was followed and preceded by a long list of textbook writers dealing with special phases of the law, the more outstanding of whom were, in this early period, perhaps Story, Choate, Greenleaf and Wheaton. As the law became more complex and as cases accumulated, the commentaries of Blackstone and Kent no longer sufficed as literary sources and guides to the study of the law, and special treatises or textbooks, as they were called, appeared in increasing numbers. Before 1800 all of these textbooks—very few at the best—were English. The first American textbook was Caine's *Lex mercatoria americana* (1802). Joseph Story's first text, on *Pleadings*, appeared in 1805. The growth of the law was particularly active in the period between 1830 and 1867, and the textbooks produced included the best works of Story, Angell on *Corporations*, Walker's *Introduction to American Law*, Bouvier's *Law Dictionary*, Greenleaf's *Evidence*, Sedgwick's *Dam-*

ages, Parsons' *Contracts* and Browne on *Statute of Frauds*. All of these treatises were still, in revised form, in use in the 1880's. Law periodicals also began to be published after 1830, but none of those established before 1860 now survives, at least in its old form. Before 1790 only four incomplete series of law reports were prepared, and only one of these was published before 1800. After 1825, and especially after 1840, the number of reports and digests and other aids to the practising lawyer, as well as to the student, increased rapidly, until by 1860 there were already signs that the wealth of such publications was becoming a burden. The economic development of the country had proved a great stimulus to the legal profession, and the indefiniteness of the common law, dependent, as it was, primarily upon precedent rather than principle, had served to increase the volume of litigation in a rapidly changing economic and social order.

The lawyer himself began to be a man of great public importance after 1750, when life in the colonies was rapidly making a transition from local and individual problems to those having national and social significance. In such a situation the theologian and preacher were no longer competent to serve effectively as leaders, and as yet there was no group or profession of men trained in political theory and administration. Consequently the mantle of leadership now fell upon the professional lawyer, who at one time, especially in New England, had been mistrusted and despised. When the colonists succeeded to the government after 1775, the lawyers were almost the only persons with sufficient training to act for the people. Accordingly, with the new emphasis upon education and especially upon secular education, after about 1730 and particularly after 1750, instruction in the law also became popular. Burke was able to say in 1775 that "in no country perhaps in the world is the law so general a study." But such study was carried on in the offices of successful lawyers and by clerks and apprentices in the courts. Apparently the first formal instruction in law was established by King's College in New York in 1755, where the fourth year of the curriculum was described as containing, among other things, "the Chief Principles of Law and Government, together with History, Sacred and Profane." The College of Philadelphia announced in 1756 instruction in law in practically the same words. In 1773 King's College established a professorship in natural law (which most probably included some instruction in municipal or civil law) with the Rev. John Vardill as professor. In 1779 William and Mary had a course on "Law and Police." Other colleges followed in the establishment of chairs in municipal law (frequently including government or public law), such as Pennsylvania (1790), Columbia (1794), Transylvania (1799), Middlebury (1806), Harvard (1817), Maryland (1823), Yale (1824) and Virginia (1826), with twenty-two additional colleges giving instruction in law before 1860. A number of private law schools, founded and taught usually by a single individual, also began to spring up, beginning with the Litchfield, Connecticut, school in 1782 or 1784. Altogether more than twenty of these were established in nine or more states before 1850. As the colleges and universities began to give more adequate attention to the professional training of lawyers after 1865, the relative importance of the private law schools declined, except possibly in large commercial centers where they still flourish primarily as short course night schools for students otherwise employed during the day.

But it was, after all, relatively a simple civilization in which the professional training of a lawyer could prepare adequately for political leadership. If legal training met the needs of the times better than theological training after 1750, a new sort of training in the social sciences became necessary for the guidance of the American people in their social development, especially after 1860. The beginnings of instruction in history and the social sciences are of course to be found much farther back. Ethics, politics, moral philosophy and history all appeared as separate subjects (although not as separate chairs or departments) in the Harvard curriculum for 1643, and American history was being offered at William and Mary as early as 1731. Languages themselves, to which so much emphasis was given until very recently, were not just a medium of instruction in grammar and syntax, as they finally came to be in their declining years, but embodied in the reading texts the best history and politics, and perhaps even economics, that had been written before the eighteenth century. Also, along with instruction in theology there was always teaching in the law of nature and of nations, which was more in the character of political philosophy and ethics than philosophy or metaphysics proper. The works of Aristotle, coming down from the

Middle Ages, and of Grotius, Pufendorf and, in the late eighteenth and early nineteenth centuries, of Vattel and Burlamequi, were in the curricula of the higher grade colleges. Especially after the first third of the eighteenth century, when secular philosophy began to have a place distinct and apart from theology in the curricula, was this social subject matter dealing with public affairs made available to young college students. In the College of Philadelphia in the 1750's all of these works, as well as the political and ethical writings of Locke, Hooker, Sidney, Harrington, Fortescue and Hutcheson, were listed in the course of study and, with individual variations, the same was true of the other colleges of the day and continued to be so until the social sciences proper entered their curricula about 1800.

Although the need for social sciences was felt before the middle of the eighteenth century they did not develop as separate disciplines with anything like the rapidity with which law developed. The reasons for this are clear. There was no outstanding profession to make these sciences their chief interest and occupation, as there was for law and theology. The governmental administrators who might have held this relation to social subjects were the "political" appointees of a "foreign" power which neither trusted the colonists nor was trusted by them, especially after 1750. Indeed it is only within the last half century that our governmental organizations have sought and established any considerable functional relationship with the social disciplines. Yet the Rev. Hugh Jones saw the need of such a connection in 1724 and proposed that William and Mary should be recognized as the training school for the civil service of the colony. Franklin also saw the importance of such a relationship and attempted to make provision for instruction in the social subjects in the College of Philadelphia, as is shown in his plan of 1749. In his plan these subjects were arranged principally under the generic curricular term "history." Other plans for national universities and research institutions, put forth by Washington in his will in 1789, by Benjamin Rush (1787), by "a private citizen of Pennsylvania" (1788), by Dupont de Nemours (1800) and by Joel Barlow (1806), emphasized without exception the necessity of giving instruction or of conducting research in politics, and most of them also emphasized the importance of political economy and history. This advocacy was further continued by Jefferson and Madison and their contemporaries, and the tireless energies of Jefferson in behalf of training in politics and political economy finally made these ideals realities, first at William and Mary College, and then at the University of Virginia and various other colleges and universities.

Another early obstacle to the adequate development of the social studies on an inductive and factual basis, as distinguished from the logical and aprioristic basis used by theology and the law of nature and of nations which afterwards gave way to moral philosophy, was the lack of an adequate documentary basis. The municipal or common law had this basis in the decisions of the courts, which had been collected and reduced to some sort of order in the commentaries of Coke and Blackstone, and later in those of Kent and in the textbooks. But politics and political economy had no comparable documents. There were the works of Plato, Aristotle, Grotius, Hobbes, Locke, Montesquieu and other writers, but when these were departed from, the meager facts of recorded history afforded little from which to generalize except hearsay and speculation. As yet there was no methodology for the collection of contemporaneous facts and their generalization statistically or otherwise, such as we now constantly make use of in the social sciences. Historical facts, then the only considerable reliance for induction in the social disciplines, were still very meager and not always well tested and verified. The eighteenth century indeed produced some outstanding historians, such as Gibbon, Robertson and Hume, with a new sense of responsibility for the accuracy of their data and for the reliability of their conclusions, but even these were far behind the critical school of historians of the nineteenth century in these very matters. Yet history had more data for inductive generalization and for the construction of descriptive narratives than any other social discipline, and it was history that first developed an independent position in the college curricula and as a social discipline.

History in some form was taught and written from the beginnings of collegiate and cultural activities in the colonies. The earliest record of courses at Harvard (1643) lists history for the winter term. It was probably taught at William and Mary from its opening as part of the dichotomy of *historia naturalis* and *historia civilis*. In 1722 the Hollis professorship of divinity was established at Harvard, including

church history and Jewish antiquities. A history professorship was proposed for William and Mary by the Rev. Hugh Jones in 1724, and in 1731 the Rev. William Stith was teaching American history there. King's College listed "geography and history" in 1754, and the College at Philadelphia taught civil history by 1756. The College of New Jersey was teaching "geography and chronology" by 1761. At Yale ecclesiastical history was taught by President Stiles by 1778. The Rev. John Gross at Columbia taught a very comprehensive course in history, based largely on geography, from 1784 to 1795. It was not until well after 1800, however, that history generally disentangled itself from the classics and theology (the Bible) and achieved an independent footing. Even Jefferson, in his plan for the University of Virginia, was content to leave history tied up with the classical and modern languages, since even in his time most of the historical source material still remained embedded in these languages. There were neither adequate translations nor textbooks prepared for classroom use. Jefferson, in outlining a course of reading in modern history soon after the opening of the nineteenth century, was forced to draw almost entirely upon the contents of such voluminous standard works as those of Hume (of which he did not think very highly), Robertson, Gibbon, Rapin, Millot, Hallam, Voltaire and Russell. The Bohn translations, which made available for general use the best classical and modern works, did not begin to appear until well after the opening of the century. It was also about the beginning of the second quarter of the nineteenth century that a series of historical textbooks especially prepared for and adapted to college instruction began to take the place of the longer general narratives and the largely philosophical and partisan treatises of Bossuet, Montesquieu and Ferguson. Even these last named treatises had appeared, for the most part, late in the eighteenth century.

Historical instruction was also closely associated with a number of other subjects in the eighteenth and early nineteenth centuries. Among the most important of these were the subjects of classical and Jewish antiquities. It is difficult to discover just when these subjects arrived at the status of separate courses and had independent textbooks prepared for them, but it appears to be evident that from an early date the teachers of Greek, Latin and Hebrew felt the necessity of presenting explanatory material regarding the geography, customs, institutions and history of the peoples whose language and literature they were teaching. They probably also realized the value of this means of giving a more formal instruction in those materials that we would now call the social sciences. Out of this movement doubtless came Fénelon's *Télémaque* and that very pretentious work on Greek civilization by J. J. Barthélemy entitled *Travels of Anacharsis*. The latter work appeared in France late in the eighteenth century, was well known in translation in America by 1804, and was intended to be used as a text on the institutions, laws, customs and history of the Greeks. Texts on classical and Jewish antiquities were very popular during the first half of the nineteenth century in the United States, Adam's *Roman Antiquities* (1791) and Nevin's *Summary of Biblical Antiquities* (1829–30) in particular having a wide circulation. For many students and general readers such works were practically the only sources of formal instruction in what we would now call politics, economics and sociology. History was also closely associated with geography throughout the colonial period, and indeed has not yet lost this connection. Franklin had emphasized this relationship in his plan of 1749, and the Rev. John Gross, professor of German and geography at Columbia College from 1784 to 1795, made it a living reality.

Ancient history was most emphasized in the eighteenth and early nineteenth centuries. Jefferson said as late as 1825 that only England and France among modern nations had histories worthy of study. Rome was still the great object of historical writing and teaching. Although before 1800 history was not much taught as a separate subject apart from the classics, theology and antiquities, it was appealed to by all of the leading statesmen and thinkers, such as John Adams, Hamilton, Madison and Jefferson, to justify their schemes and theories. Its prestige steadily increased as the spirit of inductive generalization, modeled after the growing work of the natural sciences, developed. Furthermore it represented the more democratic tendency in the college curriculum, while the classics stood for the aristocratic outlook, and theology was the embodiment of conservatism. History was at that time practically the only open door to an understanding of the thought and behavior of the modern world. In particular, American history was the only academic avenue to an understanding of

the American world in which the students and the general readers lived. Consequently practically all historical writing before 1825 had dealt with local American history, including an occasional excursion into United States history, after the national spirit had been formed by the republic. Among the more interesting of these were Winthrop's *History of New England trom 1630 to 1649* (1790), Bradford's *History of the Plimoth Plantation* (ms. 1856), Prince's *Chronological History of New-England* (1736–55), Stith's *History of the First Discovery and Settlement of Virginia* (1747), Hutchinson's *History of the Colony of Massachusetts Bay* (1764–67), Belknap's *History of New-Hampshire* (1784–92), Chalmers' *Political Annals of the Present United Colonies* (1780), Hazard's *Historical Collections* (1792–94), Cotton Mather's *Magnalia Christi Americana; or The Ecclesiastical History of New-England* (1702), and Beverley's *History and Present State of Virginia* (1705). It is interesting to note that most of these histories dealt with New England, where consciousness of social destiny and of aim was strongest, but Virginia also was well represented.

After 1825 separate historical instruction was given with increasing frequency in the colleges, and modern history rather than ancient history was the first to gain independent status. Ancient history in most cases continued to be associated with the classics until 1860 or later. American history in particular began to be stressed in the colleges, perhaps as an expression of the growing national spirit. Although American history had been taught at William and Mary in 1731, there were apparently no imitators among the colleges before 1800. The first separate chair in history was established at Harvard in 1839, with Jared Sparks as professor. Sparks was interested mainly in modern history and particularly in American history, in which field he did most of his writing. He also edited Smyth's *Lectures on Modern History*, thus greatly facilitating the study of modern history in this country. Two other men who greatly influenced the development of history teaching at this early date were Thomas R. Dew, professor at William and Mary between 1826 and 1846, and president from 1836 until 1846, and Francis Lieber of South Carolina College and Columbia. Dew's *Digest of the Laws, Customs, Manners, and Institutions of the Ancient and Modern Nations* (1851) placed historical study on a singularly modern basis. Teaching politics and political economy and philosophy as well as history, he was largely concerned with making the lessons of the past significant for modern students. This is a note in historical teaching that is apparent in much of the teaching of history in the second quarter of the nineteenth century and particularly in that of Lieber, Sparks and Bowen. Lieber, perhaps the greatest scholar in the social disciplines in the United States before 1865, was particularly interested in historical interpretation as a guide to social understanding. He became professor of history and political economy at South Carolina College in 1835, and transferred to Columbia College as professor of history and political science in 1857. Sparks' successors at Harvard, Bowen and Torrey, followed largely in his footsteps, with perhaps an increasing interest in modern European history; and other colleges, especially Yale, Michigan, Wisconsin, Virginia and Pennsylvania, instituted modern instruction in history, more or less completely divorced from the dominance of the classics and theology. In 1850 Pennsylvania established the first distinct chair in American history, under William B. Reed, and this chair continued its separate existence until 1856, when Reed retired.

After 1825 a new interest in the writing of history also developed. This interest was due in the main to two factors, rather distinct in their origins, but which fused and perhaps reenforced each other in the end. One of these was the rapidly developing nationalistic spirit, already mentioned; the other was the increasing contact of young university men with European universities where they came under the influence not only of the new critical spirit in historical writing, especially manifest in Heeren, but also of the enthusiasm for historical study then arising, especially in Germany. Irving and Prescott wrote extensively in the field of Spanish and Spanish American history, and Motley in a closely related field, that of the Netherlands when they were asserting their independence of Spanish rule. Not yet, in the first half of the nineteenth century, was the romantic tradition of the Spanish civilization dead in this country. Even after 1865 we find traces of it in the writings of E. G. Bourne and a few others. Francis Parkman caught the spirit of colonial emprise on the frontier and preserved to posterity in his remarkable series of histories this phase of our national civilization. But Bancroft, a student of Heeren, was the first to envisage in

its completeness the meaning of our national development and to reduce it to a historical picture. Whatever its errors of technique and of viewpoint and interpretation, Bancroft's history of the United States is a great monument to the new concept and understanding of our nationality, in this respect fully comparable to the more recent and more technically perfect works of McMaster, Rhodes and Channing. The histories of Tucker and Hildreth in this period are but weaker, and sometimes more sectional, negatives of the same general theme.

Interest in the social sciences was also strong in this period before 1860. In many respects, particularly in the colleges, it was keeping pace with interest in history. Already we have noted the strong interest of Franklin, Washington, Jefferson and Madison in instruction and investigation in practical politics. They realized that a self-governing people must also be highly self-conscious politically. But politics, in spite of this emphasis upon the subject by the early national leaders, found it very difficult to secure a separate foothold in the college curriculum. We have seen that ethics and politics were taught at Harvard in 1643, and the graduating theses of Harvard and other institutions in the early eighteenth century disclose a deep, if largely scholastic, interest in public questions. In 1754 King's College listed instruction in commerce and government. The College of Philadelphia had an introduction to laws and government in 1756. William and Mary introduced work in politics in 1779, and Yale sometime between 1777 and 1789. The widespread study of Grotius, Pufendorf, Hobbes, Locke, Burlamequi, Vattel and other political and natural law writers in this same century also testified to the interest of teachers and students in political philosophy.

The development of politics before 1860 occurred primarily in connection with moral philosophy, municipal or professional law, international law and history. Moral philosophy and international law were the successors of the old subject, the law of nature and nations, which began to break up into these two newer disciplines soon after 1750, when the impulse to realism coming from the new economic and political problems of the times was rendering the old metaphysical methods of the law of nature and nations school relatively obsolete. Political philosophy as such found a place in the new moral philosophy, while the data and rules of politics were best covered by international law, although this subject also for another hundred years carried a considerable, if decreasing, burden of speculation regarding the nature and sanctions of natural law. Local and national politics were as yet but poorly developed and could still be handled in connection with history, which was primarily political history, and municipal law. One of the phases of history, already mentioned in connection with Dew, Lieber, Sparks and Bowen, which began to obtain increasing recognition after 1825—the philosophic interpretation of history—had arisen in large measure as a means to the generalization of political, social and economic tendencies from the data of history. Consequently the philosophy of history was one of the avenues through which political philosophy was taught. The works of Montesquieu, Ferguson and Robertson, and even of Gibbon, well known in this country, emphasized this aspect. When Guizot's lectures on the *History of Civilization* appeared in the second quarter of the century, this work almost immediately became the vehicle for the political interpretation of European history. Hallam's *View of the State of Europe during the Middle Ages* also provided a similar, if somewhat less popular and less fascinating medium. Both of these books continued in frequent—Guizot's in almost universal—use until the eighties.

Politics also made another close contact with history through the development of constitutional history. Perhaps the earliest definite step in this direction was taken at Transylvania College. In 1813 an anonymously edited source book entitled *The Constitutions of the United States of America with the latest Amendments, also the Declaration of Independence, Articles of Confederation, with the Federal Constitution* was printed at Lexington, Kentucky, by Thomas T. Skillman. It was reprinted in 1825. Also Jefferson and Madison planned a course of readings in politics for the University of Virginia in 1825, including Sidney's *Discourses*, Locke's *Essay Concerning the true original Extent and End of Civil Government*, the *Declaration of Independence*, the *Federalist*, the *Virginia Report of 1799*, and the *Inaugural Speech* and the *Farewell Address* of George Washington. By 1854, when Bowen produced his *Documents of the Constitution of England and America*, even before the English work of Stubbs had appeared in the same field, the constitutional history approach to the study of American government had already become well established in our

colleges. The study of the constitution was in fact, aside from the study of international law, the chief content of courses in politics, until the nineties of the past century. On the one hand this formal approach through the constitution was historical, as already noted. On the other hand it was analytical and legalistic, or in the nature of public law. This approach was due to the influence of the instruction in law. The faculties of the early colleges were small, frequently limited to from three to five or six men. Also, the classics, mathematics, philosophy and theology were already firmly established. To add a new course was as a consequence a serious problem, if not actually prohibitive. As we have seen, the subject of law began to get a foothold in the more progressive institutions toward the end of the eighteenth century in response to popular demands and public needs. In a number of institutions, and particularly in those dominated by Jefferson—William and Mary, Transylvania and Virginia—and in Harvard and Columbia, professorships in law were established. Almost universally the professors of law also taught, as appendages, the social sciences. This was true at William and Mary as early as 1779, and St. George Tucker of William and Mary, who was the first to edit Blackstone for this country, carried on the teaching of politics as well as of Blackstone after his succession in 1789. Tucker himself wrote several treatises on politics, including *Of the Several Forms of Government*, *Of the Constitution of Virginia*, and *View of the Constitution of the United States*, aggregating 446 pages. He published these political writings as appendices to the first volume of Blackstone's *Commentaries* in 1803. When Kent's *Commentaries* appeared in 1826 the first volume immediately became a text in public law, especially in eastern colleges, where it was added to the *Federalist* in this capacity. The early lawyers had a strong political as well as legal interest, and it was not until near the middle of the century that instruction in law became so highly professionalized that its teachers and students lost contact with the governmental and public aspects of their subject. In the South, under Jefferson's influence, more attention was given to Rousseau's *Social Contract*, especially at William and Mary, and to Destutt de Tracy's interpretation of the political philosophy of Montesquieu, which was prepared at Jefferson's request. But, on the whole, the historical and public law aspects of politics won out in spite of the manifest wishes of Franklin, Washington, Jefferson and Madison, due to the more strategic position and greater influence of history and law in the colleges. International law developed as a separate discipline, partly under the tutelage of the law schools and partly within the liberal arts colleges. The works of Wheaton, especially his *Elements of International Law* (1836) and *History of the Law of Nations in Europe and America* (1845), gave to the United States a high position academically in this field.

That the study of practical politics was not entirely dead after 1825, although largely overshadowed by political philosophy and constitutional history and analysis, is evidenced by the work of Lieber, who published his *Manual of Political Ethics* in 1838–39 and *On Civil Liberty and Self Government* in 1853. There were also other outstanding writings in the field of politics, although fewer than in history. John Adams had presented his theory of the true nature of government in his *Defence of the Constitutions of Government of the United States of America* in 1787–88. John Taylor, senator from Virginia and philosophical expounder of the Jeffersonian democracy, had written several volumes in the first quarter of the century developing his theme. Calhoun's *Disquisition on Government* (1851) and *Discourse on the Constitution and Government of the United States* (1851), although decidedly academic and Aristotelian for a practical politician, were nevertheless masterly works. Mansfield's *Political Grammar of the United States* (1834), Beverley Tucker's *Series of Lectures on the Science of Government* (1845), Grimke's *Considerations upon the Nature and Tendencies of Free Institutions* (1848) and Hildredth's *Theory of Politics* (1853) also deserve mention in this connection. The courses in moral philosophy which flourished throughout the first half of the nineteenth century and discussed political as well as social questions, often in a very realistic manner, also helped to keep alive a considerable interest in practical politics in the colleges. In a number of chairs or "schools" or departments of moral philosophy separate courses with such titles as the "Science of Government" and "Civil Polity" were offered, as was the case at Wisconsin after 1851 and at Mississippi after 1854.

Political economy more readily received separate recognition in the curriculum, partly because it was a more practical subject, but especially because there were textbooks that

could be used for instruction, at least from the time of Adam Smith's *Inquiry into the Nature and Causes of the Wealth of Nations* (1776). Also, political economy did not so readily lend itself to the methods of historical treatment, since the business man and the statesman wished to know present and future economic trends rather than the history of economic movements. As early as 1754 King's College included commerce in its curriculum, and in 1756 the College of Philadelphia listed the subject, "Introduction to Trade and Commerce." In 1792 a professorship in "economics" under the direction of Samuel Latham Mitchill was founded in Columbia College, but the "economics" was apparently agronomy. As early as 1784 professorships in commerce and agriculture were planned at Columbia, but there was evidently no other issue than that mentioned above. The beginnings of political economy proper are quite uncertain. Bishop Madison may have used the *Wealth of Nations* at William and Mary in connection with his general work in moral philosophy as early as 1784, but this is mainly conjectural. John Gross seems to have been teaching some political economy in his course on moral philosophy at Columbia in the late eighties, or at least in the nineties. In any case it is pretty clear that the *Wealth of Nations* was used as a text at William and Mary by 1800 or before, and that it continued so to be used, with perhaps some intermissions, until Destutt de Tracy's *Treatise on Political Economy*, translated and published at the instance of Jefferson in 1817, was introduced at that institution. William and Mary held a very prominent position in the early teaching of political economy as well as of politics in general, due to the influence of Jefferson, and this position was perhaps augmented in the administration of President Dew.

Probably the first chair bearing the title "Political Economy" was that of moral philosophy and political economy at Columbia College, occupied by Professor McVickar from 1818 to 1859. Harvard established a course, although not a professorship, in political economy sometime between 1817 and 1820. Torrey, the successor of Jared Sparks, became tutor in history and political economy in that institution in 1844. Bowen became McLean Professor of Ancient and Modern History and Instructor in Political Economy in 1850, and in 1871 Charles F. Dunbar occupied at Harvard the first chair devoted exclusively to political economy in the United States. The second chair actually to include the title of political economy was that of chemistry and political economy organized at the College of South Carolina in 1824 and occupied by Thomas Cooper. Courses in political economy were established fairly rapidly in other colleges: at Princeton in 1819; at Dickinson in 1822, which organized a mixed chair in the subject in 1826; at Bowdoin in 1824, which had a lecturer in civil polity and political economy at that time; at Rutgers and Yale and Virginia in 1825; at Union in 1827; at Brown, Dartmouth and the College of Charleston in 1828; at Amherst in 1832; at Williams in 1836, where a chair in rhetoric and political economy was established; and at various other colleges thereafter. The subject was probably taught in every college of importance by 1860, although it achieved the status of a separate subject in the curriculum rather late in some of the colleges—as late as 1853, for example, at Pennsylvania. The first course in the economics of business, under the title of "Commerce, Political Economy and Statistics," was offered at the University of Louisiana (now Tulane) in 1849 by DeBow. But DeBow resigned in 1853 to become director of the census.

The literature of political economy, both of the academic and the non-academic type, in the period before the Civil War was much more voluminous than the literature of politics, especially if we eliminate political speeches and legislative addresses. Destutt de Tracy's *Treatise on Political Economy*, written by an immigrant, has been mentioned. McVickar's *Outlines of Political Economy*, adapted largely from McCulloch, appeared in 1825. That universal genius, Thomas Cooper of South Carolina College, published two closely related works on the subject: *Lectures on the Elements of Political Economy* (1826) and *Manual of Political Economy* (1833). Wayland's *Elements of Political Economy* (1837), Potter's *Political Economy* (1841), intended for his students at Union College, and Vethake's *Principles of Political Economy* (1838) were not very profound works, but were primarily the outcome of the attempts of the authors to teach a relatively new subject. Wayland at Brown and Vethake at Princeton, Dickinson and Pennsylvania successively did much to popularize the subject without themselves specializing in it to any considerable extent. The *Principles of Political Economy* of Henry C. Carey, published in 1837–40 at

Philadelphia, was a much more pretentious effort, although it did not wholly satisfy the teachers of his or of any generation. European texts were also largely used. Smith's *Wealth of Nations* was popular in Virginia and J. B. Say in the North. Bowen's *Principles of Political Economy* (1856), like Carey's later writings, defended the protective system.

This long formative period before 1860 may be characterized as one of emergence. History arose primarily out of theology, the classics and other foreign languages, where it had been a secondary interest, and it received separate integration as an academic subject by a process of separation from geography, antiquities, language and theology. As an academic subject it also had its origins in part in literary history, which had grown up from the chronicle and the narrative of adventures, arising from the almost universal desire to keep a record and to recall important events. Politics and political economy, on the other hand, sprang, academically speaking, in the main from the old law of nature and of nations and more immediately from moral philosophy. These subjects also had their foundations in the practical everyday interests and observations of people regarding their own world. In fact this practical contemporaneous basis of interest and stimulus became steadily stronger from 1750 to 1860 and served in an increasing degree to shape the content and method of the social disciplines. It transferred the emphasis from ancient to modern history, and especially to American history. It also made political economy largely a study of American questions, such as banking, currency, protection, credit and land systems, in spite of the strong European currents in theory in other directions. It could not, however, prevent politics from becoming largely formalized as the study of constitutional history and public law. The literary and controversial aspects of these two social disciplines, as distinguished from their purely academic aspects, were even more local and responsive to American issues and needs than their formal phases. And the same is true of literary history in the United States. Law, however, responded less markedly to the American environment, because it was based on the theory of precedent and had its origins in the English court decisions. But even law made a considerable response to local needs, especially after 1825, at first on its literary side and later on the side of juridical theory and practise. The most characteristic aspect of the law in this period, after the acquisition of its academic status, was its increasing professionalization. History, politics and political economy, however, did not develop in the direction of professionalization, with the possible exception of politics at the College of South Carolina after 1835, but together contributed a very large addition to the general cultural values of the college curricula in this period. They were highly symptomatic of the expanding range of vision with regard to the richness and meaning of life in the modern world and particularly in America. At the same time they were making marked contributions to an attempt at a more specialized and effective adjustment of people to that world. All aspects of life—economic, political and social—were expanding rapidly in richness and complexity in the period between 1750 and 1860, and the growth and establishment of the social disciplines in the colleges and in the literature represent a sort of collective response to that fact. Although all of these disciplines were strongly influenced by foreign models and content, the growth of American individuality and of local response to local needs was after all marked.

II. THE PERIOD OF GROWTH AND DIFFERENTIATION. From the close of the Civil War to the close of the century, and even later, the social disciplines underwent important transformations and enjoyed a remarkable period of growth. It was essentially a period of differentiation of subject matter and of definition of scope and method. The increased attention given to the social studies has been almost astounding, especially from 1880 to the present time, and perhaps increasingly since 1900. Until after the Civil War the classics had ruled the curriculum of the colleges, and the general idea of culture spread abroad among the educated classes was that of a literary and esoteric type. Theology had ruled the colleges down to the middle of the eighteenth century, because the colleges were originally founded primarily to teach the doctrines of particular denominations and to train young men for the ministry of those doctrines. But with the establishment of separate chairs in divinity at Harvard (1722) and at Yale (1755) theology began to be segregated from the curriculum as a whole, and by the end of this century the curricula were pretty well secularized. In the larger colleges of the central and

southern states this had occurred by the middle of the eighteenth century. Now the teaching of theology began to be segregated into separate theological schools. But the theological spirit did not disappear from the American colleges, especially in the social disciplines, until nearly the close of the nineteenth century, when the development of the spirit and content of science had become so marked that mystical and aprioristic interpretations were no longer good form. Cliffe Leslie remarked in 1880 that the theological outlook in political economy was still dominant in the United States, and the same might have been said of the other social disciplines. Bancroft, for example, frequently recognized the hand of God in history.

This development in the direction of a definite group of social sciences was apparently due to a number of factors. One of the most important of these was the growth in volume of science, and especially of the social sciences, relative to the classical, theological and literary elements of the curriculum. The maturing of the industrial revolution had its effect upon the colleges in a number of ways. It made a heavy demand upon them for the training of industrial, commercial and financial experts to serve the corporations. As a consequence technical schools were established, beginning with engineering and mining, and progressing up through the more material and exact sciences to agriculture, business, education, journalism and social work. Law, medicine and theology had already undergone professionalization. As the industrial complexity reacted upon the social life to increase its intricacy, the guidance of the expert and the delegation of all sorts of functions to those trained to perform them became a patent necessity, extending even into those relations of life which had previously been regarded as essentially personal. At first the tendency was to establish special professional schools for the provision of such technical training, thus leaving the colleges to pursue their traditional classical and literary interests. But this trend was practically reversed by an act of the federal government which had no such end in view. In the sixties the Morrill Act was passed by Congress providing subventions to the several states that would establish colleges giving training in agriculture and mechanic arts. The poor and needy state universities, which had been fighting a drawn—in some cases a losing—battle with the denominational schools eagerly seized upon this subvention. Its ultimate effect was to establish the practise of giving professional training in the colleges, which now rapidly expanded into universities. Even the private colleges now found it much easier to secure gifts from philanthropic persons, who had profited from the industrial and commercial development of the country, for technical training than for the expansion of the old classical curricula. The inevitable effect of all this was that the arts colleges, surrounded by the new spirit of scientific investigation and the emphasis upon the practical and the contemporaneous, found it necessary to expand their curricula if they wished to share in the growing prestige and prosperity of the universities. The universities had ceased to be cloisters and had suddenly become active, eager, functioning elements in the social order. The bold step of President Eliot in introducing and popularizing the elective system completed the conditions favorable to the growth of the social disciplines. The elective system gave them a chance to grow without establishing independent schools or colleges in the universities at a time when they were not ready for professionalization. The fact that the early development of the social disciplines, partially excepting law, occurred within the colleges of liberal arts undoubtedly had a most lasting effect upon these subjects. It prevented their premature professionalization and assured a marked theoretical and cultural development of their subject matter before this step was taken. It also gave them an opportunity to develop their content and subject matter when funds could not yet have been obtained for the establishment of separate divisions in the universities.

The new expansion first occurred in the subject of history. In 1857 the greatest teacher and writer in the social subjects in the United States, Francis Lieber, had been brought from South Carolina to Columbia, but his primary interest in history did not get full scope for its development, due to his preoccupation with political science and even with law in the latter institution. It was in 1857 also that Torrey succeeded Sparks at Harvard. By 1870 Torrey and Bowen, who taught political economy as well as moral philosophy, etc., had come to dominate the senior year at Harvard. After 1870 Torrey continued to develop in the direction of constitutional history and politics, and by 1884 there were no fewer than seventeen courses in these two subjects, and three more in Roman law, offered by eight teachers in this

institution. After 1883, when A. B. Hart and Edward Channing joined the department of history, the subject developed rapidly. Perhaps it was the brilliant leadership of Henry Adams, who taught at Harvard from 1870 to 1877, that gave the necessary impulse to expansion in the new history for which Torrey had laid the foundations. Since the nineties Harvard has been one of the leading centers for the training of instructors in history and politics or government in this country. What was happening at Harvard in the seventies and eighties was also occurring at Michigan, Cornell and Johns Hopkins, although in slightly different ways and with somewhat different emphases. In 1857 Andrew D. White had gone to a chair at Michigan, in which history was the leading subject taught. He had studied in France and Germany and had brought back with him a strong passion for the historical viewpoint and the scientific method of historical investigation. He introduced this new attitude at Michigan and imparted it to one of his students, Charles Kendall Adams, who also studied in Germany and later became White's successor when the latter left Michigan to enter politics in New York state in 1863, and later to become president of Cornell in 1867. Under these two men the work in history at Michigan was greatly expanded. In 1878 there were at least four instructors in the various phases of the subject. Until C. K. Adams went to Cornell the department at Michigan ranked among the four most important in the country in this field. What White and his successor had done at Michigan, White and an able group of men he gathered about him at Cornell did for that institution. At the opening in 1868 White organized a college of history and political science and associated with himself such men as Goldwin Smith, Theodore Dwight, W. C. Russel and W. D. Wilson (professor of moral and intellectual philosophy and teacher of the philosophy of history). In 1881 Moses Coit Tyler, C. K. Adams, Herbert Tuttle and Edward A. Freeman (as lecturer) were added to the staff of the college, which had by this time become somewhat depleted. The eighties marked the golden age of history at Cornell, for after that decade White's stimulating influence was removed.

The last example of the "big four" in history in the seventies and eighties was Johns Hopkins. This university had opened its doors in 1876, pledged to the German ideal of scholarship and investigation, but it was not until 1880 that Herbert B. Adams became leader of the famous Hopkins seminar in history. He was almost as much political scientist and sociologist as historian, and Richard T. Ely was associated with him in the field of political economy. This seminar had perhaps the most brilliant group of students, destined later largely to dominate the academic situation in the social disciplines, to be found in the United States in the eighties. The work of a few other men in history should also be mentioned in this period of differentiation and growth. Frederick J. Turner, who received his early training under W. F. Allen, himself an able immigrant from the classics into the social studies, and his graduate training at Johns Hopkins, was added to the Wisconsin staff in 1889. His work in the history of the West amounts to the creation of a new field and a new method which has profoundly affected historiography in this country. E. G. Bourne's work in southwestern history at Yale and the work of McMaster and Thorpe at Pennsylvania indicated new paths of interest in these decades of expansion and differentiation. The literary work of Van Holst, although nominally in constitutional history, should not be neglected, since its departure in the use of informal documents of all types and its emphasis upon the life and action of the people had most important consequences, particularly upon McMaster and Woodrow Wilson. Burgess at Columbia, although primarily interested in political science, had considerable effect upon the development of the study and writing of American constitutional history and the history of reconstruction.

These were the men and the institutions that in the main shaped the development of historical study and teaching before 1890. They were inspired mainly from Germany, although the influence of Hallam, Freeman, Maine, Buckle and Greene in England and of Guizot in France was by no means inconspicuous. In fact no other historians exerted so profound an influence upon the teaching of history in the United States in the nineteenth century as Guizot and Freeman. But the broad, seductive generalizations of Guizot had already lost most of their charm for the more critical historians in the seventies. The famous dictum of Freeman that history is past politics and politics present history then began to take the field and held it until well into the nineties. History meant something much more inclusive to the first

generation of history teachers after the Civil War than it did to the succeeding generation. For them the world of ideas and of political action was in process of profound change, and they were not yet so detached by scholarly isolation that they were not profoundly and personally interested in this change and in its outcome. For the method of Guizot the scholarly German method was substituted, but the themes remained pretty much the same. The serious direct influence of Guizot may be said to have ceased with the publication of White's *History of the Warfare of Science with Theology in Christendom* in 1896. The interest in free political institutions, however, was dominant throughout this period before 1890. The favorite courses in history were constitutional history, and under the influence of the English constitutional historians it was the custom to trace the origins of American constitutional history back to English institutions. The disproportionate emphasis upon constitutional history did not diminish until politics began to differentiate from history in the nineties and particularly after 1900. In the seventies and eighties, under the influence of Freeman and Maine and the German institutional historians, institutional history other than constitutional began to be developed. Henry Adams at Harvard and Herbert B. Adams at Johns Hopkins perhaps best represent this trend. Henry Adams' seminar, consisting of Edward Young, Henry Cabot Lodge and J. Laurence Laughlin, produced as the result of their labors in this field an important piece of work to which they gave the title *Essays in Anglo-Saxon Law* (1876). All of the members of this seminar later became teachers at Harvard. H. B. Adams at Hopkins directed his students largely to the study of education in the South and of local institutions, with the result that a series of monographs of great value was produced. Burgess accomplished a similar work for the period of reconstruction.

The German influence was exerted primarily in the field of method, and it is here that the greatest transformation took place. History became critical in a degree not before achieved in this country, and more and more of the historians' attention was given, especially after the eighties, to the sources and dependability of their data and less to the meaning or interpretation of the facts. In this way history became much more accurate, but also perhaps less satisfying to those who wished to find in it an explanation and a guide. This increasing technicalism in history was compensated for by some writers and teachers by a greater emphasis upon the value of literary style. This growing interest in method early manifested itself in the organization of historical seminars. The first of these was established in 1869 by C. K. Adams at Michigan and the second by Henry Adams at Harvard in 1871. The most celebrated was that of H. B. Adams at Johns Hopkins. The seminar soon became the accepted method of teaching graduate students, who worked on individual problems in their fields and brought their results to the seminar, where methods and problems of procedure were also discussed. The leader of the seminar might himself work on a special problem or occupy his time with lectures on methodology and sources. Some leaders did both. C. K. Adams' *Manual of Historical Literature* (1882) was obviously the outgrowth of his seminar lectures. Most of the leading teachers and directors of research in history gave some attention to the subject of methodology and bibliography. The finished products of the seminar were in the form of monographs and served usually as PH.D. theses. Preferably they were integrated about some central theme, as was the case at Harvard, Johns Hopkins and Columbia in the instances mentioned. The field of history itself began early in this period to be differentiated into a number of subdisciplines or ramifications. In almost every institution of considerable size there early arose divisions between American, European and ancient history. To these were added in various institutions such categories as ecclesiastical, constitutional, institutional, economic, modern, intellectual, oriental and social history. Although separate administrative divisions were not usually made for these, sometimes distinct chairs were given some such title as here mentioned. European history especially grew in importance in this period, due largely to increased contacts of American scholars with Europe.

In the field of politics there was not much obvious development or growth in this second period. The subject had as yet scarcely emerged as a separate discipline. Where courses were given they were primarily devoted to constitutional history and constitutional analysis. It was politics as Freeman used the term. At Yale President Woolsey was, however, treating the subject with more academic respect and was offering courses in political theory and, in 1849, international law from the political science

standpoint. In 1860 he published his *Introduction to the Study of International Law* and in 1878 his *Political Science*. He also edited the second edition of the *Political Ethics* and the *Civil Liberty and Self Government* of Francis Lieber in 1874. But the only outstanding collegiate development of political science in this whole period, as distinguished from history to which it was everywhere else subordinated, was at Columbia. Burgess went to Columbia from Amherst, where he had already discovered Mayo-Smith and Munroe Smith whom, in 1876, he had sent from there to Germany for advanced study. But it was not until 1880 that he organized his School of Political Science and gathered into his faculty as his associates Munroe Smith in history and Roman law and Mayo-Smith in social science and political economy, with C. R. Bateman in administrative law and Archibald Alexander in political philosophy. Before 1890 F. J. Goodnow had been added in administrative law, E. R. A. Seligman in political economy, W. A. Dunning in political theory, and H. L. Osgood in history. This was a remarkably strong department, and the work in this field stood out far above that in any other institution in the country at that time. The school bent heavily in the direction of history, as was the custom of the time, each teaching member through the eighties giving at least one course with a historical emphasis. It also included such work, then slight, as was given at Columbia in political economy and social science. The School of Political Science at Columbia became the fostering spirit and largely set the mode for later more extensive developments in history, economics, sociology and anthropology in that institution and many others. Other universities began to give more specific attention to political science soon after 1890. In the early nineties A. B. Hart was giving a course at Harvard on American government in practise, a departure which later led to his work on *Actual Government*, first published in 1903. W. W. Willoughby was added in political science at Johns Hopkins in 1897. The University of Chicago gave some attention to the present aspects of government from the time of its opening in 1892, but development in this subject was slow until after 1900. Goldwin Smith continued his work at Cornell through the nineties, but his interest was primarily in the historical aspects of his subject. Other universities were picking up the thread of a growing interest in actual government and present political problems, but in 1900 public law and constitutional history were still the dominant emphases in political science in practically every institution of the country and the number of separate departments of political science was exceedingly small. For the most part the subject was still under the wing of history.

Political economy was never as thoroughly under the influence of history as politics, although the titles presented above show that the historical approach was not an infrequent one. The German-trained leaders in this period, especially H. C. Adams, R. T. Ely, Edwin R. A. Seligman, Henry W. Farnam and Simon N. Patten, had a strong historical bias which was shown in their writing and teaching, but perhaps none of these men could be said to be exclusively or even primarily committed to this method. The best efforts of all of them, including even Patten whose major interest was in the theory of welfare, went into the solution of practical economic and social problems. The others did distinguished work on government commissions and influenced important phases of social and economic legislation. Before these men, and other prominent teachers and writers such as Laughlin, Taussig, Seager and Veblen, came to dominate the development of political economy, the contemporary and practical side of economics had been stressed effectively by such men as David A. Wells, Horace White, Edward Atkinson, W. M. Grosvenor, and Francis A. Walker, who were active from 1865 until 1890 or 1900. Walker was statistician, theorist and practical economist. His *The Wages Question* (1876) and *Money* (1878), White's *Money and Banking* (1895), and Wells' *Recent Economic Changes* (1889) were the ripe product of much keen observation in the field of applied economics and exerted great influence. Walker's *Political Economy* (1883) was the legitimate successor of Bowen's and Carey's works and the able competitor of Mill and Marshall. It, more than any other American work, served to bridge the transition from the old classical aprioristic economics to the newer and more inductive factual treatises of Ely, Fetter, Seligman, Seager, Johnson, Taussig and other contemporaneous writers that came to appropriate the field of university instruction about the beginning of the present century. By the time these newer texts were before the public the historical interests of the authors were capable of being compressed into a few introductory chapters, and the statistical approach was in

most cases as strongly emphasized, if not more so, than the historical. By 1890 the historical treatment had been standardized and segregated into economic history, under various titles, such as financial, commercial, tariff and economic history. One of the earlier outstanding writers in this field, especially as it related to finance and industry, was A. S. Bolles of the University of Pennsylvania, author of *Financial History of the United States* in three volumes (1879–86) and *Industrial History of the United States* (1878). Harvard University also early developed this middle ground between history and economics, at first under the leadership of Taussig and later of William Ashley, who became professor of economic history at Harvard in 1892. More recently Harvard has again taken the lead in this general field by emphasizing in the Graduate School of Business Administration the field of business history and by launching the *Journal of Economic and Business History*. At Yale Callender was also a pioneer in the subject of American economic history.

In 1876, according to Laughlin's study, made in 1892, of the teaching of political economy, there were thirty-eight colleges and universities teaching political economy, of which only three colleges offered as many as two courses in the subject, and these in each case consisted of an elementary and an advanced course. In 1892 Michigan was offering twenty courses, Chicago seventeen, Pennsylvania sixteen, Columbia thirteen, Harvard eleven, Wisconsin and Massachusetts Institute of Technology each nine, and Yale, Oberlin and University of Iowa six each. The growth was even more rapid in the following decades. The expansion in subject matter, students and teachers was equally marked. By the end of the century the subdivisions of theory, economic history, money and banking, public finance and taxation, labor, industrial and business organization, and transportation were well developed and various other subdivisions largely of a business character, such as agricultural economics, insurance, credit, factory organization and management, and advertising were in process of being launched. Statistics was a subject much broader, of course, than economics. It is a method applicable to the inductive study of all fields of science, but particularly of the social sciences. We find occasional evidences throughout the century that its possibilities were appealing to the best minds. We have already referred to the work of DeBow. The American Statistical Association was founded in 1839. It fell, however, to the lot of political economy, as the social subject dealing most actively with current phenomena which must be generalized for guidance in practical affairs and policy, to do most in the actual application of this method. The work of Walker was outstanding in this connection, and that of Carroll D. Wright, who divided his attention between economic history and applied sociology and put the Massachusetts and the federal bureaus of labor statistics on a scientific basis, was perhaps even more influential. Wright and Walker made the statistical method a reality in governmental investigation, and they and Mayo-Smith dignified the subject with respectable college standing.

This period of growth and differentiation also gave rise to a number of new social sciences, theoretical and applied. Among these anthropology and sociology were the most striking examples. Although the origins of these two disciplines were not identical, their fields for a long time were closely related and only recently have they come to be fairly well differentiated administratively. Both grew out of a desire to apprehend the meaning of human behavior as a whole and to integrate human relationships rather than to atomize them. As anthropology—earlier called ethnology, because it was commonly believed in the nineteenth century that there could be a science of race on the social side—developed, it was concerned primarily with the data of primitive peoples, and sociology came more and more to deal with the data of advanced peoples. This distinction, at times quite uncertain, has been the main line of cleavage between the two disciplines. Despite the European origins of the concepts of these subjects and the strong early influence of such men as Tylor and Lubbock upon anthropology in this country and of Comte and Spencer upon sociology, both of these subjects had early beginnings in the United States. The slavery controversy appears to have been very important in both cases, and in that of anthropology the Indians—still exercising their traditional customs with but little interference from white civilization—were another important factor. From the thirties to the fifties, when the slavery controversy was at its height, a very considerable literature arose in the lower South, centering around Charleston in particular, dealing with the physical anthropology and ethnology of the Negro. The southern standard periodicals, of which there were then several of

high grade, carried this discussion, and a considerable number of books were published, the more outstanding of these being J. C. Nott's *Two Lectures on the Natural History of the Caucasian and Negro Races* (1844), *Types of Mankind* (1854), *Indigenous Races of the Earth* (1857)—the last two written in collaboration with G. R. Gliddon—John Bachman's *Doctrine of Unity of the Human Race* (1850), Thomas Smyth's *The Unity of the Human Races Proved* (1850), and S. D. Baldwin's *Dominion; or The Unity and Trinity of the Human Race* (1857). These works were often very scholarly, drawing as they did upon the latest European investigations in physical anthropology, but science was also mixed inextricably with appeal to theological authority, with here and there a direct refutation of Biblical authority when it appeared to conflict with the findings of scientific investigators. Nott and Bachman, in particular, were men of learning who made some original studies in the field. The Negro question was, however, settled by war instead of by argument, and the next outstanding work in anthropology was done by L. H. Morgan in connection with his field studies of the Iroquois Indians of New York. His *Ancient Society* (1877) and his *Systems of Consanguinity* (1869) had great influence upon the development of anthropological theory throughout the world, possibly more in Europe than in America. It is now recognized that *Ancient Society* was inadequately inductive, especially in its assumptions of uniformity and universality of culture patterns, but Morgan shares with Tylor the honor of having done more than any other men to lay the foundations of cultural anthropology.

Fortunately for the future inductive development of the subject, the United States Geological Survey became interested in 1876 in studying the archaeology of the Indians and organized an ethnological survey under J. W. Powell. This work grew into the Bureau of American Ethnology, which expanded its interests to embrace the cultural aspects of the subject and resulted in a large number of field studies of great importance. The founding of the American Museum of Natural History (1869) with its close connections with the teaching of anthropology through some of its leading curators, such as Putnam, Boas and Wissler, and the organization of other museums, such as the Field and Peabody, have also contributed greatly to an inductive basis for the subject. As Wissler has pointed out, anthropology was long primarily a museum and field subject instead of a college discipline. Furthermore the earlier stress in college curricula was primarily upon physical anthropology and archaeology, as it was in the museums. The first actual professorship in the subject was established at Harvard under F. W. Putnam in 1885, but it does not appear to have been active before 1887, and thereafter it developed slowly. In 1886 D. G. Brinton became professor of American archaeology and linguistics at Pennsylvania. Even today anthropology has not a very strong foothold in the universities, although it is growing rapidly. Chicago had a professor in the subject (Frederick Starr) from its opening (1892), and courses were given at Columbia from about the same time by W. Z. Ripley and F. H. Giddings, and after 1896 by Franz Boas. Under the stimulus of Stanley Hall, Clark University had been giving instruction in anthropology since the eighties, and Sumner at Yale had instituted courses in the cultural side of anthropology in 1885. But Sumner was a "book" anthropologist, and modern anthropology prides itself on being a field subject with a very accurate technique of description and analysis. Under the influence of Boas, who has dominated the teaching of the subject for a quarter of a century, analysis has been much more important than synthesis, but recently interest in synthesis and in inductive generalization has revived, especially under the leadership of Wissler, Kroeber, Goldenweiser, Tozzer, Dixon and others. Certainly the primary interest is now in cultural anthropology, and increasingly in non-material culture. Already strong departments have been established at Harvard, Chicago, Columbia, Yale and California, and there are few of the larger universities without a chair in the subject.

Perhaps the first treatise on sociology ever written was that by a Mississippian, Henry Hughes, entitled *A Treatise on Sociology, Theoretical and Applied* (1854). In 1854 also George Fitzhugh of Virginia wrote *Sociology for the South; or The Failure of Free Society*. Both of these volumes bear obvious internal indications of a theoretical reaction to Comte, and equally as obviously they reveal the slavery controversy as the immediate occasion for their production. At that time the South was in intimate contact with the main thought currents of the world. But there were also several other sources for the new subject of sociology, which began to appear in the college curricula in the seventies

and had its first outstanding literary formulation in this country in Ward's *Dynamic Sociology* in 1883. Most of these were academic, or at least systematic. Moral philosophy, which was closely related to the early development of politics and political economy, was especially antecedent to sociology. An examination of such a textbook as Combe's *Moral Philosophy* (1840), long popular in this country, or of Wayland's *Elements of Moral Science* (1835), written to replace Paley's *Principles of Moral and Political Philosophy* (1785), or Paley's work itself, reveals the fact that perhaps the larger portions of these works were sociological in fact and principle. It was only a step to the academic detachment of this material and the separate pedagogic organization of it. This step was apparently first taken definitely by Robert Hamilton Bishop at Miami University, where he gave a course in the "Philosophy of Social Relations" from 1834 to 1836. He had been trained at Edinburgh, where he may have been influenced by Chalmers, and had taught at Transylvania before going to Miami. In 1850 W. H. M'Guffey, famous for his Readers, a former associate of Bishop at Miami and then professor of moral philosophy at the University of Virginia, offered a course entitled "Philosophy of Social Relations, or Ethics of Society" and continued it until 1858. As early as 1754, however, the College of Philadelphia gave instruction in "The Ends and Uses of Society," and in 1794 the professor of Greek at Columbia College offered a course in "Humanity," the description of which reads much like the sociology of a hundred years later. The sociological character of much of the content of textbooks on classical and Jewish antiquities has already been mentioned.

But perhaps the most significant antecedent to sociology, after moral philosophy, was a new subject entitled "Social Science." The first work in this field was that by Henry C. Carey, entitled *The Principles of Social Science*, published in three rather rambling and repetitious volumes in 1858–60. Carey's object was to bring together in a single treatise a discussion of the significant factors molding society and social policy. To him these were of course largely economic, but his treatise was much more general and inclusive than a technical treatise in economics. In 1865 the American Social Science Association was organized to promote much the same synthetic viewpoint. In that year also A. L. Perry began to give instruction in social science in his course in economics at Williams College. In 1868 R. E. Thompson, a disciple of Carey, offered an independent course in social science at Pennsylvania, and other courses were established by Sumner at Yale (1872), Laws at Missouri (1876), Mayo-Smith at Columbia (1878), Dunster at Michigan (1880) and Sanborn at Cornell (1885). Other courses followed, and in some institutions, such as Columbia, Brown and Baylor, the term still persists, although it is generally more inclusive than sociology. It has also become a generic term including all of the social sciences, a result which perhaps its early sponsors consciously desired. Most of these early courses dealt with what we now call social problems, such as race, immigration, divorce, intemperance, labor, education, poverty and crime, but Sumner and Laws used the works of Spencer as reading materials. This departure, in the trail of Spencer, was soon to prove the dominant trend in sociology. Spencer not only contributed the subject matter but he also, following Comte, gave the name which soon displaced that of social science as the specific characterization of this new movement toward a synthetic viewpoint in the generalization of social data. Perhaps this was unfortunate, for it narrowed the field of the data included in the synthesis primarily to that of anthropology.

From the seventies there were a number of more or less synthetic social science trends running largely parallel with each other for nearly two decades, destined about 1890 to unite under the single administrative leadership of sociology, at the time when this subject received academic recognition. These parallel trends were the anthropological sociology of Spencer as taught by Sumner and Laws, and later in a separate course called "Sociology" at Indiana in 1885. Until 1900 this was probably the dominant content of sociology courses. Giddings' early courses show strong traces of it, although he was also much influenced by the demographic work of C. D. Wright and by the French social psychology of the nineties. A second parallel trend was the social problems courses which grew out of the social science courses in the eighties and found final expression especially in the courses on charities and criminology, as represented by Amos G. Warner, F. H. Wines and H. M. Boies, and in the courses on labor, immigration, race and population which appeared in considerable numbers in the nineties and were usually

inco.porated with sociology when departments in this subject were organized. The old subject of moral philosophy was transformed in the eighties into ethics, Christian ethics, social ethics and Christian sociology. For the most part the last three were taught in the divinity schools and the first in the new departments of philosophy, but Christian sociology was often found in the denominational colleges in the nineties, and Small began his sociological career from this point of view. Both Ely and Commons dabbled in this field in the nineties, and F. G. Peabody and Graham Taylor largely standardized it in the theological schools in the direction of social problems, later to be known as "Christian Ethics" at Union, Chicago and other seminaries. Peabody introduced it as practical ethics at Harvard in 1881, where now, as social ethics, it still divides the field with sociology. A fourth parallel was the surviving interest in the philosophy of history, which was taken over from history in one form or another by practically all of the leading theoretical sociologists of the nineties, but was gradually eliminated after 1900. As sociology stood in the standard colleges in 1900, it was very largely a synthesis of all of these contributing viewpoints as well as of some minor ones not mentioned. These were not always thoroughly assimilated one to another. They were primarily secular in viewpoint, and gave evidence of a growing interest in the study and inductive generalization of contemporaneous data and a corresponding diminution of interest in anthropological or ethnological materials. These last were now beginning to receive a separate academic integration in the degree to which sociology withdrew its interest and placed it elsewhere.

A number of other subjects, not particularly social in their original subject matter, were integrated more or less to the social disciplines in this period. This was particularly true of education, biology, geography and theology. Law, on the other hand, diminished in its social synthetic outlook during this period. Constantly it became more traditional, technical and formal, emphasizing precedent at the expense of the demands of common sense and social justice. This displacement of justice by formality was variously due to the growing uncertainty of the content of the law arising out of the accumulation of great masses of contradictory decisions; to the conflict between new times and new needs and the old content and procedures of the law; to the impact of economic interests, desirous of maintaining a status quo or of securing special favors of interpretation, upon the legal profession and judges taken from among the lawyers; to the inertia which a highly integrated and closed system, whether legal, religious or other, is likely to acquire when it insulates itself from a functional philosophy of life and environment; and finally to the over-professionalization of the law and its isolation from the other social disciplines in the colleges. Several men of great ability perceived these evils and sought to remedy them in one way or another. Langdell's case method of teaching the law, introduced at Harvard in 1870, and adopted practically universally in the better law schools by 1900, was calculated to minimize uncertainty and to train in the inductive approach to general principles. Dudley D. Field made a long and earnest fight for codification with the same end in view, especially in the seventies and eighties. About all that was accomplished here, however, was a practical movement in the direction of uniform legislation. Something also was achieved in the direction of the simplification of procedure, in the improvement of the sources of the law, in textbook making and in instruction, and latterly in the movement for social legislation and a more ethical interpretation of evidence and of past decisions. The growth of the historical viewpoint in the law in this period was of undoubted value in stimulating a constructive criticism of legal subject matter and procedure. But at the end of the century not a great deal of progress had yet been made in the direction of an adequate socialization or humanization of the law.

Geography, as we have seen, had always maintained close contacts with the social disciplines in this country. Special textbooks began to appear in geography about 1800, Jedidiah Morse's *American Geography* (1789) and Parish's *New System of Modern Geography* (1810) being the most outstanding. About the middle of the century the subject was extended from the colleges to the public schools so largely that several public school texts of all grades appeared, including among others those by Colton, Cornell, Mitchell, Monteith and Warren. In the seventies, eighties and nineties there was an increasing emphasis upon physiography, perhaps as a result of the spread of geological instruction in the colleges; but, beginning in the eighties and nineties, there was a revival of interest in social or human geography. Pre-

viously social geography had been primarily political, with some emphasis upon anthropogeography, after the tradition of Montesquieu and Buckle. Now the maturing of economics as a subject in the colleges called for a rapid development of economic and commercial geography, which gradually expanded in the direction of a social geography descriptive of the customs and institutions of peoples. This aspect of geography was largely popularized by travel books and by geographical readers such as those by Frank G. Carpenter.

The first volume dealing with education in this country was the Rev. Samuel R. Hall's *Lectures on School-Keeping* (1829). Later in the century several universities introduced courses in the theory and practise of teaching: New York University in 1832, Brown in 1850–55, Michigan in 1860 and the University of Iowa in 1873. Iowa's was the first permanent chair and was called "Philosophy and Education." Other chairs followed: at Michigan, in the science and art of teaching, in 1879; at Wisconsin, in pedagogy, in 1881; and at North Carolina and Johns Hopkins in 1884. Teachers College was incorporated in 1889 and affiliated with Columbia in 1890. In 1920 over four hundred colleges and universities were giving courses in education for prospective teachers. In 1901 Tolman listed six courses in the sociology of education, the forerunner of modern educational sociology, which is now to be found in a very large number of colleges and universities. Furthermore the whole subject matter of education as a discipline is moving toward a social, and even a sociological emphasis, although formerly in this field the psychological emphasis was most prominent, and perhaps still is. In the theological seminary the social emphasis is also growing rapidly, until advanced institutions of this type, like Union and the University of Chicago Divinity School, are becoming largely schools of sociology, anthropology, psychology of religion, religious education and social (Christian) ethics. Ethics in the departments of philosophy is also becoming increasingly social in content.

III. THE PERIOD OF MATURATION AND SYNTHESIS. The growth of the social disciplines has been very marked since 1890. In 1884 there were about twenty full time men of professorial rank teaching history in the colleges. In 1895, according to Jameson, this number had grown to approximately one hundred, almost half of whom had studied in German universities. The recent growth has also been great, but less marked relatively than that of the social sciences. Between 1876 and 1892 (16 years) courses in economics multiplied 5.8 times; between 1892 and 1910 (18 years), 8.6 times; and between 1910 and 1925 (15 years), 4.6 times. The peak of growth in this subject was apparently reached around 1900. Few departments of political science were established independent of history before 1900, those of Wisconsin and Harvard, for example, dating respectively from 1901 and 1909. In 1913 there were 336 colleges and universities, out of a total of 546 for which data were obtained, offering political science, and in thirty-eight of these there were separate departments of political science. In 1889 there were only four institutions offering sociology by name. In 1901 there were 132 institutions with 399 courses. In 1909 the number of collegiate institutions teaching sociology had increased to 337 and the number of courses to 1044, a growth of 155 percent of institutions and of 162 percent of courses in the intervening eight years. Since this period the rate of growth has probably been slower. Between 1865 and 1920 a total of 142 new law schools affiliated with other educational institutions and fifty-four independent law schools were established. Fifty-four of the former type and twenty-four of the latter ceased to operate. In 1925–26 the total number of degree conferring law schools was 168 and the total student attendance upon these was 44,273. In 1897 there were only three distinct chairs in geography, although many more men gave part of their time to the subject. In 1920, 170 colleges and universities offered geography, and in 1924 there were 494 college courses and 15,004 college students in the subject. The majority of the courses dealt primarily with human geography. The growth of other social subjects has already been noted.

Beginning with the nineties of the last century, and especially after 1900, new trends became manifest in the social disciplines. The period of experimentation in the selection of a workable method was drawing to a close, and the various fields settled down to productive work largely to the exclusion of methodological discussions. Another important trend, especially after 1900, has been that toward synthesis. The border lines between the social disciplines began to disappear and overlappings became more numerous. The problem of jurisdiction,

so absorbing in the nineties, has ceased to concern the investigator and student in any vital manner and is being left more and more to the administrator. The result is that all of the social disciplines have come to be largely synthetic, as was sociology in the last quarter of the nineteenth century. Also, there has been a marked increase of emphasis upon contemporaneous data as the subject matter of investigation in the social disciplines. This is indicative of the growing emphasis upon the use of science to interpret the world in which we live. In a static world tradition is perhaps the best interpreter, but in a highly dynamic world, like ours, contemporaneous facts and generalizations from them are necessary to give perspective and to make clear our adjustment needs. Other trends are toward practicality and the application of facts to problems, toward a growing emphasis upon professionalization and the training of experts in the social sciences, and likewise toward an increasing importance assigned to the social subjects not only in the college curricula but also in public opinion and behavior as a whole. Finally there has been a vast corresponding increase in investigation and publication, especially in recent years. All of this indicates that the social disciplines are now reaching that degree of maturity which will permit them to be characterized as sciences, and in their professionalized aspects as applied sciences.

The central phase of this struggle to become sciences has been to develop a dependable method of gathering and generalizing data. At the beginning of the nineteenth century the social disciplines, with the partial exception of law and history, were primarily social philosophies. Even in law philosophic speculation was frequently mixed with deductions from precedent and categorical dicta. Law was largely authoritarian and to a nominal degree scientific. History also largely depended upon authority for its facts and not infrequently interpreted these with an *a priori* laxity that called forth the strong disapproval of the critical historical school, whose primary concern it was to develop a method of finding and testing historical facts. Beyond the collection and evaluation of data the historians were not at first concerned. Political economy and politics were not insensible to objective data, but the work of the classical economists and of the political philosophers gives abundant evidences that generalizations did not always await the accumulation of large masses of verified data. Moral philosophy was professedly speculative, although it did not go so far in the disregard of observation in its preference for *a priori* logic as had its predecessor, the natural law school of philosophy. These conditions could not well have been otherwise in the first half of the nineteenth century. There had not yet been developed an inductive method for the social sciences, although the philosophers of history had attempted it and Comte and others had written about it. The leaders of the social disciplines after 1865, and especially those who had been to Germany, saw the weaknesses of the speculative approach and of the pseudo-inductive method of the philosophy of history school. To many of them it seemed that the remedy lay in the application of the critical methods of history to the other social disciplines, and for some three decades this was attempted, with the results noted in the preceding section. They did get valuable perspectives upon the origin and growth of their problems, but in a rapidly changing world such historical perspectives are inadequate guides to the present and the future. Above all, the historical method, however well tested the facts may be, does not give an adequate basis for generalizing regarding the present. In very few fields are there sufficient comparable data to afford a dependable sample for statistical generalization, and reasoning by analogy is particularly dangerous with respect to historical data, because each period of history involves different conditioning factors. The historians themselves realized this limitation and largely abstained from generalization. But the social sciences cannot be so abstemious if they are to be sciences rather than history.

The use of anthropological data for generalization, which appealed so strongly to Spencer and to Americans like Morgan, Sumner, Veblen and most of the early sociologists, proved of little more value. While these data were not taken from such a wide range of historical periods, they were abstracted from a vast number of space environments. This fact gave the anthropological or ethnological data almost as great a diversity of meaning as the dissimilarity of the time environments gave to historical data. If the anthropological data had any superiority as bases for social science generalizations it was largely due to the fact that the samples in any one field were usually more numerous. Driven largely to abandon

both of these attempts at securing an inductive basis for the social disciplines, the leaders turned with more success to the statistical method, the virtues of which had been more or less recognized throughout the century. The thing most needful in connection with this method was an abundance of facts capable of being used as samples. In vital statistics the problem of collection was solved gradually by governmental agencies. Business also was able to assemble certain types of data necessary to statistical generalization. But in some other fields the problem was not so easily solved and had to await the appearance of private endowments for the encouragement of research. Various governmental bureaus and divisions, and especially the census, have also shown a disposition in recent decades to recognize the nature of the problem involved. On the other hand, the problem of developing statistical methods, as distinguished from the collection of data to be handled statistically, is largely the task of the scholar and the methodologist. It is his task also to work out the technique of the collection and classification of data. In this connection the case method has come recently to have an increased importance. The case study has two functions. As description and analysis of a specific situation or problem it is a very old technique, known to history, medicine, law and many other fields, and it has recently been elaborated and perfected on this side into the survey, the life history, family history, etc. But there is also another function for the case analysis, that of definition and standardization of data to be used as materials for statistical generalization. The case analysis itself gives only a specific description. It can be utilized as a means to a more general and inclusive perspective only by subjecting it or its defined and standardized elements to statistical manipulation and generalization. The one method gives concreteness and the other perspective. Both are being rapidly perfected by the social sciences.

One of the most marked present trends is toward synthesis and accommodation in the social disciplines. In the nineties many leaders spoke and wrote as if they believed that the boundaries of the social subjects had been predetermined from the foundation of the world. It is doubtful if any one would do that now. The problem is the important thing today, and it is regarded as the property of any person or department that is competent or equipped to handle it. Each of the social subjects now takes material from the others quite freely. There is no copyright on facts, but only on the organization or use made of the facts. The same intellectual need for perspective and reasonable completeness of view which brought sociology into existence is now bringing all of the social studies into a more harmonious cooperation and adjustment. The present emphases upon contemporaneity and functionality have had much to do with this synthetic trend. In a century history has completely reversed its major emphasis from ancient to modern, and even to current or contemporaneous, history. And at the same time it has expanded the range of its subject matter from politics to include all phases of human action and thought. Its content is no longer merely past politics but it includes all past social subjects. The only distinctions left between history and the other social disciplines are that it covers more than just the data of social relationships and relates to the past instead of the present. But as history comes more to emphasize the contemporaneous and resumes its old habit of generalizing, even this major distinction largely disappears.

Nor is one social science able longer to build up its data and principles without giving due regard to those of the other social disciplines. This is particularly noticeable in connection with law and religion, although excellent examples might also be taken from economics, political science or sociology, not to mention other subjects. Sociology has been compelled to give due cognizance to economic and other cultural factors in developing its findings. Economics is today in process of reorientation toward an institutional economics, because of the necessity of recognizing the findings of social psychology, sociology, politics and anthropology. Political science within two or three decades has, under the spur of economic and sociological analysis, turned from the formal analysis and history of constitutions to the study of governmental and political practises. It was E. J. James of Pennsylvania who first, in the late eighties, struck the modern practical note in political science. A. B. Hart followed at Harvard in the early nineties. His *Actual Government* (1903) has since been supplemented by many other studies, such as the works of Lowell, Beard, Brooks, Munro, Merriam, Young and Holcombe, going much farther in the same general direction. The work of Beard has been particularly outstanding for its recog-

nition of the influence of the economic factor as a psycho-social background to political motivation and action. This has also been emphasized by Merriam and his school at Chicago, and in addition this school has undertaken with success to analyze the various social and economic currents which condition public opinion. Political psychology, as a phase of social psychology, is a recognized and important phase of the science of politics in every progressive school, and it is even more a part of the general literature of the subject.

On the practical side political science has increasingly turned its attention to problems of administration and control. Goodnow and Fairlie, especially, have emphasized repeatedly in the last three decades the importance of administration, and the newer tendency in this field is to discover the practical material and psycho-social obstacles and aids to successful governmental administration. International law, once a matter largely of logic, and later of history and formal documents, has now come to be more particularly an analysis, on the one hand, of international practises and relations, including informal diplomacy, and on the other, of international opinion and affairs (primarily economic). Publication in this field is moving in the same direction. In all of the social subjects the emphasis is increasingly upon the analysis of the informal backgrounds and conditioning factors, for it is recognized that the formal relations and facts but imperfectly represent the actual situation and are usually results rather than causes. Thus economic, social and psychical factors are often of more significance as explanatory categories than is mere logic. This fact has brought the new science of social psychology into existence and has made it largely basic to all of the other social disciplines. In the new orientation of the social disciplines toward contemporaneity and synthesis it has largely taken the place of formal logic as an aid to the explanation of social processes.

Sociology and anthropology also have been greatly influenced by the other social studies. Being largely a synthetic discipline, sociology has been under the necessity of collecting for itself a body of dependable data. These have been borrowed largely from history, economics, political science, anthropology, psychology and biology. This fact has resulted in the establishment of numerous filiations between sociology and the other social subjects, which have not infrequently eventuated into new connecting social disciplines, such as social biology, social history, social economics, social politics, social or cultural anthropology and social psychology. Thus the synthetic and largely derivative character of sociology, for which it was formerly much blamed, has proved to be one of its strongest points, enabling it to perform largely the function of filling out the unoccupied spaces between the social disciplines and thus to synthesize their methods and viewpoints. But sociology has not been alone in this work. The other social disciplines have also been active in pushing out their borders to make contacts with the other disciplines. Likewise anthropology has moved largely in the direction of sociology on the side of interpretation of its data. The result is an interesting rapprochement between the two subjects after almost a generation of increasing separation. Sociology is again drawing considerable data from the field of anthropology and is incorporating it as cultural sociology. Anthropology, on the other hand, in generalizing its cultural data finds it difficult to avoid becoming cultural sociology. The new relations between the two disciplines present an interesting academic problem in the scope of the various social sciences.

Recently law has been undergoing an evolution in the direction of a synthetic viewpoint. The historical approach to law gradually emancipated it from the condition of a closed system and demonstrated the relativity of its principles, based so largely on tradition. This made it necessary for students of law to find some sanction for it other than that of precedent. In earlier times the continental legal systems sought this wider sanction in the principles of natural law, which reduced essentially to intuitional and *a priori* judgments of justice. A similar appeal to an ethical philosophy of law was made by some of the critics of our own legal system in the second half of the nineteenth century. But it remained for a group of men who had caught the new synthetic spirit in the social sciences to see that the new sanctions of the law must be found in science instead of in philosophy. Roscoe Pound has been the leader in this reorientation of the law, which he has called the sociological theory of jurisprudence. He attributes the inspiration of his theories in large measure to his contacts with George E. Howard, E. A. Ross and A. W. Small, but the general trend of the time toward synthesis has also been largely responsible for this new

humanistic emphasis in law. As the result of a long campaign through articles, books, addresses and especially his teaching in the very influential Harvard Law School, Dean Pound has been able to popularize this viewpoint in his own generation. Harvard has furnished a very large number of the law teachers of other universities, and practically all of the recent Harvard law men are enthusiastic promulgators of the sociological theory of jurisprudence. The central conception of the theory is that law is an instrument for the better adjustment of human relations of whatever character, traditionally called into requisition when these relationships become unbearably pathological, but perhaps also to be used constructively and preventively with discrimination. Thus law is increasingly regarded as a public service rather than as merely a source of private profit. It is also recognized that law can satisfactorily perform its function of securing a normal adjustment only if it takes adequate cognizance of the social and personal factors involved in the situation, which means that the lawyer as well as the law must become increasingly informed and molded by the other sciences, and especially by the social sciences. This is essentially the synthetic viewpoint.

This viewpoint in law has made considerable headway in its academic form at Harvard, Columbia, Yale and Northwestern, and perhaps at some other institutions. Harvard has become noted for its studies in the social aspects of law. Since 1928 the Columbia Law School has been engaged in such studies as familial law (undertaken jointly by a lawyer and a sociologist), recent trends in corporate law, the psychological and logical foundations of the rules of evidence in Anglo-American law, research in the field of commercial bank credit, the administration of prosecutions in American cities and methods of formal accusation in criminal prosecutions. Thus law is making contacts with all of the social sciences. Concerning the new Institute of Human Relations at Yale, so far as it applies to law, President Hutchins of the University of Chicago and formerly dean of the Yale Law School, says: "In planning the institute we have had constantly in mind the need for the cooperation of lawyers and social scientists in the study of the group aspects of human behavior. . . . The attempt in the institute will be to study the rules of law in relation to life as it is being lived in the United States today, in the light of all the data that economists, political scientists, psychologists and psychiatrists can bring to bear upon them." What the Yale Institute of Human Relations is expected to do for law it will also attempt to do for medicine, business, politics, etc. Nothing could be more typical of the new synthetic spirit in the social sciences than that exhibited by this new research institute at Yale. So far, however, this new sociological and humanistic jurisprudence is primarily in the research and publicity stage. It will be perhaps a generation or more before it actually transforms the teaching and the practise and the making of the law.

The trend toward professionalization in the social disciplines, noted earlier in the case of law, also began in earnest for political economy, or economics, before the close of the nineteenth century. The industrial system had reached such a degree of complexity and of perfection of technique that it was calling for experts. The Wharton School of Finance and Economy (now Finance and Commerce) of the University of Pennsylvania was the first to respond to this demand, in 1881, following the short-lived attempt at the University of Louisiana in 1849–53. Other schools of similar nature followed. The first of the state universities to institute a school of commerce of university grade was the Louisiana State University in 1899. The period after 1910 was especially prolific in the development of schools of commerce and business administration. Marshall found that 175 schools or courses (curricula) in business administration were established between 1910 and 1925. The courses in these schools have multiplied at a very rapid rate and cover a great variety of subjects, from commercial geography to factory management and air transportation. Most of these schools aim primarily at training in commercial and business technique with a fundamental informational background, but a few, of which the Harvard Graduate School of Business Administration is the most outstanding example, are interested largely or primarily in research and in a fundamental analysis of the subject matter. The field of education has also been professionalized in much the same way. In the nineties the normal schools began to become primarily institutions for the training of teachers in the technique of teaching, and soon after 1900 most of the larger universities established schools or colleges of education to carry on the same training work for the higher grade of

teachers. Later the colleges adopted the same system in so far as they were able, until now over four hundred institutions have professionalized courses for the training of teachers. The subjects thus professionalized are chiefly psychology, sociology, biology and the common school branches.

Sociology, psychology, biology and to some extent other social sciences have also been professionalized in the schools of social work. The beginnings of this movement go back to the American Social Science Association, founded in 1865 to promote the study of the social sciences and especially their application to social problems. This association furthered the organization of the National Prison Association (1870) and the National Conference of Charities and Correction (1879). This latter organization was also instrumental in the promotion of social work training. Dunster's and Sanborn's courses in social science at Michigan and Cornell in the eighties began such instruction, but largely in a theoretical way. In 1894 Ely at Wisconsin and P. W. Ayres, secretary of the Cincinnati Associated Charities, promoted a combined theory and field training scheme, but this was given up the following year. In 1898 Ayres was more successful in starting a six weeks training course for social workers through the New York Charity Organization Society. This gradually grew into the New York School of Philanthropy. In 1899 S. M. Lindsay and S. N. Patten of Pennsylvania initiated a training course within the university. Within the next decade training schools were established at Boston in connection with Simmons College and Harvard University, and at St. Louis. Thereafter the growth was more rapid, until in 1928 there were thirty-five schools of social work of college grade in the United States and Canada, thirty of which were affiliated with, or were integral parts of, universities. There was also a much larger number of colleges and universities offering part time training in social work. Professional training in political science subjects has not reached the same degree of separate development as in business and social work, although in some schools, like the Wharton at Pennsylvania, training of an effective character, especially in consular service and municipal administration, has been developed. The chief reason for the underdevelopment of professional training in political science is perhaps the "political" character of our governmental system. Journalism has had a much larger development as a professional or vocational subject, but its trend has been primarily technological and very little toward the synthetic viewpoint of the social sciences.

The increased professionalization of the social sciences in response to the demand for technical training of various types of experts has raised some serious problems about the future of the social disciplines. Having in mind perhaps the effect of professionalization upon law, many have feared that the spread of the movement would lead to a decrease in attention to the theoretical aspects of the social sciences. This is not, perhaps, as imminent a danger as that the findings of social investigation may be perverted in behalf of the interests of the new professions and of their commercial patrons. As yet it is not possible to predict ultimate results along these lines. More optimistic social scientists point to the stimulus which industry gave to the physical and biological sciences, claiming that the same result will follow in the case of the social sciences. There is, however, a different factor involved in connection with the social sciences—the fact that they are with difficulty protected from prejudice and propaganda. For example, will the profession of advertising not only make use of the data of psychology and sociology, but also attempt through propaganda to pervert the findings of these subjects with regard to the social significance of the products or commodities advertised? Another contingency often urged is that the overemphasis of the private business man's point of view, especially in business economics, which is developed primarily in the service of private entrepreneurs, may lead to the magnification of an individualistic viewpoint and practically to the suppression of the social or public viewpoint in economics. There also seems to be some danger that the technique of administration may crowd out an adequate consideration of the wider aspects of social policy in social work and in public administration. It is always characteristic of the professional training school that it has little time for "theory" due to the heavy load of "practical" courses, and thus its technique, like that of the law, becomes an end in itself, a ritual, not subjected to criticism from within. One attempt to meet this difficulty has been the elevation of the professional schools into graduate and semi-graduate status, with the requirement of a general non-technical course as prerequisite to matriculation. This

solution is largely invalidated in many institutions by the fact that the withdrawal of most of the social disciplines into professional schools has resulted largely in returning the control of the colleges of liberal arts to the more reactionary subjects, which impose so many "requirements" that, as at the University of North Carolina, it is impossible to elect more than a smattering of the social sciences. At the University of Minnesota, for example, in 1920 a rule was passed requiring students of the prelegal course to take Latin, but giving them no opportunity to elect psychology or sociology.

We have already seen that research in the field of history was not unknown in colonial times. In the national period before 1860 a number of men, including Sparks, Clarke and Force, were able to interest the federal government in doing something toward the preservation of important documents and the publication of *Diplomatic Correspondence* (1829–30) by Sparks and *American Archives* (1837–53) by Force, and other works. We have already noted the leading histories and other writings of this early period, some of them representing trustworthy research. After 1865 the various state historical societies, especially those of Wisconsin and Massachusetts, sponsored important historical investigations. The work of Justin Winsor and R. G. Thwaites in connection with the former merits especial mention. The United States government also made collections of the Civil War records, and began to publish valuable researches in American ethnology and archaeology after 1879. The Massachusetts Bureau of Labor Statistics and the United States Bureau of Labor, the Federal Census Bureau and other governmental research and publication bureaus did increasingly important work of a social science character, especially in statistics, after the eighties. Gradually similar state bureaus fell in line and added their quota to research and publication. Especially since 1900 there has been a large expansion and a considerable improvement in the quality of the social research undertaken by federal and state departments, such as the immigration, children's, women's, agricultural, commerce, education and public health agencies. These have come increasingly under the direction of men trained in research by the universities. But governmental research in the social sciences is likely to be cast along rather general lines, with an eye to popular rather than professional consumption. It is rarely pathfinding. This latter need has been filled by the universities as adequately as their resources would permit.

Starting in the seventies with the monographs of graduate students and the work of a few professors, usually German trained and especially interested in research, the universities expanded their research programs as their funds increased, until they came to include research fellowships and assistantships, research professorships, laboratories and publications. Chicago is now building a million dollar research laboratory for the social sciences alone and publishes more than a dozen research periodicals. Yale has just received a $7,500,000 endowment for a research institute for the study of human relations. Columbia, Harvard and Johns Hopkins have long maintained excellent series of research publications, which several other universities have imitated in the last two or three decades. There are also almost a score of university presses designed particularly to publish research work that the commercial publishers find unprofitable or difficult to handle. Aside from these channels for research publication the various social sciences have their national professional associations, which publish journals and usually have an official annual publication besides. The Archaeological Institute of America was organized in 1879, the American Historical Association in 1884, the American Economic Association in 1885, the American Folk-Lore Society in 1888, the American Anthropological Association in 1902, the American Political Science Association in 1903, the American Sociological Society in 1905, the American Association for Labor Legislation in 1906, the American Farm Economic Association in 1909 and various other social science associations of national and local scope at earlier and later dates. According to *Bulletin No. 8* of the American Council of Learned Societies (1928), anthropology now has four standard journals, archaeology four, economics eleven, geography five, history sixty, international law and relations two, law forty-three, political science six, religion seven and sociology nine. Libraries and museums have also multiplied. Every large city in the United States now has a library supplied with hundreds of thousands of volumes, and a few of these with more than a million books. There are also forty-one university libraries possessing more than 100,000 volumes each; the libraries of California, Chicago, Cornell, Illinois, Michigan, Minnesota, Pennsylvania and Princeton have

each more than 500,000 volumes; Columbia has more than a million books, Yale approximately two million and Harvard almost three million. Working museums are practically as numerous. In addition to these agencies of research and publication various private associations and foundations, too numerous to mention in detail here but described at length by Ogg (1928), have been established since 1900. As Ogg says, we no longer suffer from a paucity of research. Our next concern is with its quality, which perhaps is as good as can be expected at the present stage of development. Another problem, which belongs less to pure science than to the applied sciences of education and administration, is that of procuring as wide a dissemination as possible of this research among the masses and its application to the solution of our social adjustment problems. There are also important problems connected with the administration of research funds and of research itself which must be worked out before research can achieve its maximum results.

The control and formulation of the social disciplines, as well as of publication, has come in recent decades to be overwhelmingly in the hands of the universities. This fact renders the organization of the universities and the relations of teachers and researchers to the institutions matters of great public moment. Salaries are probably fairly adequate at the present time, being sufficiently low to place more of a premium upon work than upon golf and social life, and not sufficiently low actually to prevent productive labor. Also, the spirit in most American universities is decidedly favorable to productive labor instead of to brilliant conversation and elegant leisure. The matter of academic freedom perhaps leaves more to be desired. Historically there have been two great obstacles to academic freedom in this country—theological and politico-economic irregularity. Cooper, one of the ablest scholars of the first half of the nineteenth century, was forced to resign from the College of South Carolina in 1834 because he would not accept the Pentateuch. His heresy so frightened the good people everywhere that a large number of denominational colleges were established during the next two decades to compete with the state universities, and they succeeded in keeping the latter on the verge of starvation by denying them state appropriations until the new era in education in the eighties and the nineties gave them a fresh lease on life. Few professors outside of denominational colleges and theological seminaries are now dismissed on theological grounds, and then usually with great reluctance. Some of the more advanced seminaries even, such as Union and Chicago, now refuse to dismiss a professor on merely doctrinal grounds. Religion has come to be something more than theology and along with its socialization it has achieved a certain degree of tolerance.

On the other hand, political and economic limitations upon freedom of teaching and expression appear to have tightened. Even Jefferson felt it desirable to choose a "regular" professor of politics for his University of Virginia and carefully to supervise the political reading matter of the courses in this field. It would be impossible to include here a list of the men who have been dismissed from their academic positions because of their political and economic views in the last fifty years, but the following are rather typical. Repeatedly the protectionists attempted to oust Sumner from Yale and almost worried him into a resignation in 1880 on the charge of using Spencer's work on sociology as a text. In 1886 H. C. Adams was forced to leave Cornell at the instance of Henry Sage, who had been offended by the former's remarks on the Gould strike. In 1894 Ely was up before the trustees at Wisconsin on the charge of radicalism. In 1895 E. W. Bemis resigned from Chicago, stating that his economic views made the step necessary. The resignation of E. Benjamin Andrews from Brown in 1897 and his transfer to Nebraska in 1898 are well known, as is also the dismissal of E. A. Ross from Stanford in 1899, because of his views on the immigration question. In 1911 E. M. Banks was forced to resign at Florida because of his too liberal views with reference to the North. In 1917 William Schaper was dismissed at Minnesota after a controversy with a British subject teaching in his department (political science), and the daily papers announced soon after the close of the war that the governor of the state would in the future attend the sessions of the board of university regents to make sure that no undesirable radicals were appointed on the faculty. These instances are perhaps typical of the present trend. University administrations avoid the dismissal of men on direct political and economic grounds when possible, since such action brings unfavorable publicity and results in their institutions being boycotted by the ablest individuals. Men are much more frequently forced

out by a denial of advancement, of research funds and other aids to effective work, and by administrative discourtesy. It is impossible to estimate the number of men who are eliminated in this way, but it is unquestionably large. The Association of American University Professors has not been able to solve the problem of academic freedom, although it has ameliorated conditions. A greater need is that of an intelligent public opinion which will support the social scientist in stating his findings when they have been arrived at by scientific methods.

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AARONSON, AARON (1876–1919), Palestinian agricultural pioneer and Zionist leader. An agronomist of international reputation, he obtained the collaboration of the United States Department of Agriculture in establishing in Palestine an agricultural experiment station patterned after similar American institutions, and was an active promoter of Jewish colonization in that country before the war. He saw great possibilities in the agricultural development of Palestine, and considered an agriculture diversified and adapted to the local climatic and economic conditions an essential factor in the permanent success of colonization.

The outbreak of the war put an end to his agricultural work, and after an adventurous escape from the Turkish lines Aaronson transferred his activities to helping the British win Palestine and to obtaining political recognition for the Zionist cause. He took part in the negotiations with Balfour which resulted in the famous declaration promising "Palestine as a home land for the Jews," and was a member of the Weizmann commission which went to Palestine in 1918. The restoration of peace found him making plans for putting in new crops and starting a new agriculture on a quarter of a million acres in Palestine, when suddenly his career was cut short by death in an aeroplane accident as he was flying from London to Paris.

DAVID FAIRCHILD

Consult: Fairchild, David, "The Dramatic Career of Two Plantsmen" in *Journal of Heredity*, vol. x (1919) 276–80; Ormsby-Gore, W., "Aaron Aaronson" in *Zionist Review*, vol. iii (1919) 35–36.

AARUM, PETTER THORVALD (1867–1926), Norwegian economist, held several administrative positions and, after 1917, was professor of economics at the university in Oslo. His earliest writings dealt with cooperation. In his chief work *Arbeidets økonomiske værdi* (The Economic Value of Labor), published in Christiania in 1908, he follows closely the theory of marginal productivity. Developing wholly deductively the laws regarding the determination of wages in a static community, he does not enter into any discussion of the applicability of these laws to real life. Aarum revised the second edition of Aschehoug's large work on economics and in his later years wrote an economics textbook, *Læren om samfundets økonomi* (2 vols., Oslo 1924–28), the second part of which treats of the practical side of the science. This part was, however, not published until after his death, and was completed by Oskar Jaeger and Ingvar Wedervang. Aarum was the first opponent of the inflation of Norwegian currency during the war, but was not so fortunate as to win the support of the politicians. With the exception of a short article on Scandinavian economists in *Die Wirtschaftstheorie der Gegenwart* (4 vols., Vienna 1927–28, vol. i, p. 122-41) all Aarum's works are published in Norwegian.

WILHELM KEILHAU

AASEN, IVAR ANDREAS (1813–96), grammarian, folklorist and lexicographer, was born on a farm in western Norway and was largely self-educated. He showed from the first a keen interest in grammar, not only in Latin and Greek but also in the modern Scandinavian and in the dialects of Norway. He was one of the first to maintain that the local dialects of Norway were not debased and corrupted forms of Norwegian but had a continuous linguistic development from Old Norse which could be traced through recognized linguistic processes. Through the generosity of the Academy of Sciences of Trondhjem he was able to travel through Norway, particularly western Norway, gathering material in substantiation of his theory. The result of this was the *Landsmaal*, a very careful synthesis of those dialects which were recognized as purely Norwegian, and the publication of a grammar in 1848 (*Det norske Folkesprogs Grammatik*, expanded in 1864 as *Norske Grammatik*), followed by a dictionary in 1850 (*Ordbog over det norsk Folkesprog*; enlarged edition *Norsk Ordbog*, 1873). Aasen also showed the literary value of the new language in poems and stories (*Ervingen* and *Symra*).

Aasen is of great importance in the history of Norwegian nationalism. The *Landsmaal* became a cause which attracted many vigorous champions, who were quick to recognize Aasen's claim for it as the way to the development of nationality and the spread of popular education. Foremost among these were Arne Garborg, the realistic novelist and dramatist, and Aasmund Vinje, the journalist, and they became the leaders with Aasen in the long and bitter fight against the *Riksmaal* (Danish with a Norwegian pronunciation) which had become the "Norwegian" language. This struggle had as its first victory the decree of the Storting in 1896 that *Landsmaal* was to be taught all children in the grade schools, and today it enjoys equal rights with the *Riksmaal*. The struggle (*maalstraev*) has heightened the appreciation of the cultural value of the old Norwegian folksongs, traditions and customs, and has had a profound effect on popular education. It has raised the self-respect of the country people as perpetuators of the native Norwegian culture and has strengthened the whole nation's love for everything of pure national origin.

OTTAR TINGLUM

Works: *Udvalgte Skrifter* (Christiania 1896).

Consult: Garborg, A., Hovden, A., and Koht, H., *Ivar Aasen, Granskaren, Maalreisaren, Diktaren* (Christiania 1913); Moe, Molkte, "Ivar Aasen" in *Nordmaend i det 19de Aarhundrede*, ed. by Gerhard Gran, 3 vols. (Christiania 1914) vol. ii, p. 277–326; Bugge, A., and others, *Norges Historie*, 6 vols. (Christiania 1909–17) vol. vi, pt. i, sect. ii.

ABANDONMENT. *See* EXPOSURE; OLD AGE.

ABBE, ERNST (1840–1905), model employer, the son of a spinning-mill foreman. He understood in youth the hardship of a fourteen to sixteen-hour working day, and accordingly when he was an employer he could see matters through the eyes of the employed. He studied physics and became an outstanding figure in the field of optics. In the Zeiss plant at Jena, which manufactured optical instruments and employed fifteen hundred persons, he became partner and later sole owner, and introduced model working regulations. He converted it into a foundation in 1896, thus expropriating himself without compensation. Although politically a liberal he advocated restriction of the power of the employer and improvement in the legal status of the worker. He opposed welfare work as mere stage trappings. "Welfare" firms required compulsory contributions to pension funds which, through fear of loss on discharge, increased the dependence of the employed, but Abbe established a non-contributory pension fund and even introduced a system of compensation to employees discharged through no fault of their own. He also committed his concern to a system of profit sharing (which excluded the management) and to consultation with a freely elected labor committee on all labor questions except those concerning commercial management. In 1900 he proposed to this committee that the hours of labor, which had been gradually reduced to nine, be cut to eight. The workmen agreed and tried to accomplish just as much as before, but then declared the strain too great. By Abbe's orders the former pace was resumed, and it was found that without conscious effort more work was done than formerly in a nine-hour day. This led him to his famous theory of the reduction of working hours for specialized factory labor. This theory, with the by-laws for his foundation, is to be found in his *Sozialpolitische Schriften* (vol. iii of his *Gesammelte Abhandlungen*, 3 vols., Jena 1904–06). The German shop committee law (*Betriebsrätegesetz*) of 1919 incorporates both Abbe's idea of discharge compensation and his principle that in the employment of the executive, clerical or labor force there must be no discrimination based on race, class, religion or party affiliation.

ROBERT WILBRANDT

Consult: Auerbach, Felix, *Ernst Abbe* (2nd ed. Leipsic 1922), and *Das Zeisswerk und die Carl-Zeiss-Stiftung* (5th ed. Jena 1925), tr. by R. Kanthack (London 1927); Weiss, Hilde, *Abbe und Ford, kapitalistische Utopien* (Berlin 1927); Wilbrandt, Robert, *Sozialismus* (Jena 1919) p. 153–58.

ABBOT, CHARLES, BARON COLCHESTER (1757–1829), English political figure, was born at Abingdon, but later lived at Colchester. After studying at Oxford (Christ Church) he joined the bar, then turned to politics and entered the House of Commons in 1795. He showed at once that rarest qualification of the parliamentarian, an understanding of finance; he became chairman of Pitt's Finance Committee of 1797 and wrote most of its reports. In 1802 he received the office of speaker of the house, retaining it until 1817, when he became a peer. His principal parliamentary achievement was the passing in 1800 of the Census Act. He had to face strong opposition, but at a time when vague fears of overpopulation and undersubsistence were current, the importance of

having accurate facts furnished a powerful argument in his favor. The act was passed, therefore, and it was put in force the following year. Another valuable public service was the appointment of committees to report on the arrangements made in connection with temporary and expiring laws and on improved methods of making new statutes known to the public. He also reformed the system under which public accountants held custody of government funds.

W. H. DAWSON

ABBOTT, CHARLES CONRAD (1843–1919), a physician noted for his contributions to archaeology, whose name is associated with the problem of man's antiquity in America. He was connected with the Peabody Museum at Harvard, 1876–89, and was curator of archaeology in the University Museum, Philadelphia, 1889–93. About the year 1876, on his ancestral homestead near Trenton, New Jersey, he discovered stone implements in such associations as to suggest to him three culture horizons—inter-glacial man, an intermediate culture and, finally, the relatively recent pre-Columbian American Indian. These conclusions were stoutly defended in a number of publications ranging in date from 1872 to 1907. He was convinced that palaeolithic man existed in America, and carried on a sharp controversy with his opponents, leaving to others the systematic study of the site. These investigations confirmed Abbott's conception of the intermediate post-glacial horizon, which he called "the argillite culture," but did not corroborate his claims for the earlier glacial horizon. Abbott's chief contribution, therefore, was the discovery of the Trenton site, with its two culture horizons. The term "argillite culture," however, proves to have local significance only, and does not designate a continental culture horizon as Abbott assumed.

CLARK WISSLER

Important works: *Primitive Industry* (Salem 1881); *Ten Years' Diggings in Lenâpè Land* (Trenton 1912).

ABBOTT, FRANK FROST (1860–1924), historian and philologist, was graduated from Yale in 1882, and continued his studies at Yale, Bonn, Berlin and the American Classical School at Rome. He taught at Yale (1884–91) and also, for sixteen years, at the University of Chicago, which he helped to organize. His last professorship was at Princeton (1908–24). His *History and Description of Roman Political Institutions* (Boston 1901) is still, because of its soundness and precision, a standard work. Three books of wider interest, *Society and Politics of Ancient Rome* (New York 1909), *The Common People of Ancient Rome* (New York 1911), and *Roman Politics* (Boston 1923) contain, among popular essays, the fruits of several penetrating epigraphical studies. His last work, *Municipal Administration in the Roman Empire* (Princeton 1926), written with the collaboration of Professor A. C. Johnson, was at once accepted as the outstanding work in its field. Although Professor Abbott always held chairs in the classics and devoted much of his time to the interpretation of Latin authors, his graduate courses usually lay in the field of epigraphy and history. To the great amount of excellent dissertational work done under his supervision classical studies in America owed much in enlargement, and work in every phase of Roman history much of its scope and thoroughness.

TENNEY FRANK

ABBOTT, LYMAN (1835–1922), American journalist, religious leader and writer on social problems. Abbott began studying the industrial situation in America as early as 1870; in 1876 he became associated with Henry Ward Beecher on the *Christian Union* (later the *Outlook*), and in 1881 was made editor-in-chief. This journal under his editorship was the first religious periodical of wide circulation to open its pages to a general discussion of labor problems, carried on in editorials and in contributions from such economists as R. T. Ely and such ministers as Washington Gladden. In sociology as in religion Abbott sought to maintain a middle-of-the-road position, opposing socialism but persistently arguing against laissez-faire economics. He recommended the democratization of industry, urging that the "tool-users" should become "tool-owners." The church, he believed, should interpret and state the teachings and spirit of Jesus in such a way as to show their application to industrial problems. Although editorial and pastoral duties prevented him from making thorough studies, his interest in the subject and his editorial policy were influential in creating a new attitude toward labor on the part of the churches and in developing what is called "the social gospel." Abbott's sociological interests were not confined to labor problems.

Although he discussed them less frequently, he was also concerned with other social questions.

GRANVILLE HICKS

Important works: His sociological views are found in *Christianity and Social Problems* (Boston 1897); *The Rights of Man* (Boston 1901); *The Industrial Problem* (Philadelphia 1905); *America in the Making* (New Haven 1911). *Reminiscences* (Boston 1915) ch. xvii, describes the genesis of his attitude toward industry.

ABBOTT, SAMUEL WARREN (1837–1904), American vital statistician, was interested chiefly in the promotion of public health and in the compilation of comparable mortality statistics. In 1886 Abbott was elected secretary and executive officer of the reestablished Massachusetts State Board of Health, a position which he held until his death. He supervised the preparation of the annual reports of the board and edited the *Massachusetts Registry and Return of Births, Marriages and Deaths* (vols. xiv–xlix, 1886–90). These reports, together with his *Summary of the Vital Statistics of the New England States for the Year 1892* (Boston 1895) long served as models for similar statistical studies. "The Vital Statistics of Massachusetts for 1897 with a Life Table," published in the Massachusetts State Board of Health, *Annual Report* (vol. xxx, 1898, p. 799–830) and one of Abbott's most important contributions, was perhaps the first significant life table prepared in this country for the whole population of a state. Abbott was chairman of a committee on vital statistics of the American Public Health Association from 1893 to 1897, and a member of the commission appointed by the same association, in 1900, to draft suggestions for the revision of the International Classification of Causes of Death. Perhaps his best known work is *Past and Present Condition of Public Hygiene and State Medicine in the United States* (Boston 1900) published by the Statistical Association. Some of his other contributions are: "Influenza Epidemic of 1889–90" in Massachusetts State Board of Health, *Annual Report* (vol. xxi, 1889, p. 305–84); "Infant Mortality in Massachusetts" in Massachusetts Association of Boards of Health, *Journal* (vol. viii, 1898, p. 134–52); "The Decrease of Consumption in New England" in American Statistical Association, *Publications* (vol. ix, 1904–05, p. 1–20).

WILLIAM R. LEONARD

Consult: Whipple, G. C., *State Sanitation*, vols. i–ii (Cambridge, Mass. 1917–) vol. i, p. 206–09; "Samuel W. Abbott, M.D." in *Boston Medical and Surgical Journal*, vol. cli (1904) 502–03; "Death of Dr. Samuel W. Abbott" in *Michigan Monthly Bulletin of Vital Statistics*, vol. vii (1904) 77, and in American Statistical Association, *Publications*, vol. ix (1904–05) 148–49.

ABDICATION, in earlier usages, was a technical legal word. *Abdicatio*, in Roman law, denoted the act whereby a father disowned his son, expelling him from his family or depriving him of rights of inheritance; it was also the name for the act of a magistrate in quitting office (because of unfavorable auspices or for other reasons) before the usual term had expired.

In later and present usage abdication is a word of semi-technical significance, denoting the act whereby a person in high office renounces his office, either formally or virtually. Generally the term is applied only to such an act by a "sovereign" ruler—such as an emperor, king, queen, dictator, sultan or pope—and is not used to designate a surrender of office by an elected head of a republic; thus we speak not of abdication but of resignation of office by President MacMahon of France, or President Diaz of Mexico. The term implies, moreover, that the abandonment of office is voluntary—to be distinguished from deposition or dethronement. However, in a majority of familiar instances recorded as abdications, the decision to relinquish office, though nominally spontaneous, was not actually so; the abdication being in such cases a final and formal renunciation of an authority which events beyond the control of the ruler had already taken from him. Some abdications, of course, have been apparently as free as any important decision can be. For abdications have been induced by a sovereign's weariness of rule, or by his physical ailments, or by his disgust or despondency over failure of projects upon which he had set great store. Involuntary abdications have sometimes been the results of defeat by foreign enemies, as in the case of the eighteenth century abdications of Polish kings under compulsion from Russia, Prussia and Austria, and the abdications forced upon lesser European monarchs by Napoleon, and in turn upon him by his victorious enemies in 1814 and 1815. More frequently abdications have been the consequence of domestic uprising. The abdications, in November, 1918, by Emperor William II of Germany, Emperor Charles of Austria, and the thirteen German state monarchs, were the result of both foreign defeat and domestic insurrection.

Abdication in Roman Catholic law is the

renunciation of a benefice or clerical office. The law of the Roman church lays down certain rules of abdication, such as that the renunciation of office must be voluntary, for a just cause, and made into the hands of the proper ecclesiastical superior; except that a pope, having no earthly superior, resigns his office into the hands of the cardinals.

There are no general legal principles governing the manner and conditions of abdication. The throne of England can, since the Revolution of 1688, be lawfully abdicated only with consent of Parliament. In the case of James II, Parliament after a debate comprising probably the most lengthy and learned discussion ever devoted to abdication, declared that James had, by his actions subversive of the constitution and by his flight from the kingdom, "abdicated the government" and "the throne is thereby become vacant." The House of Lords preferred to designate the king's action as a "desertion"; the Commons, however, desiring a more comprehensive term which would preclude any idea that James would be free to return to the throne, insisted upon the word "abdication," to which the Lords finally assented. Only a very few written constitutions have any reference whatever to abdication. The constitution of Spain provides that a special law is required to authorize the monarch to "abdicate the crown in favor of the heir presumptive"; and the constitution of Jugoslavia provides for succession "in case of death or abdication of the king."

Abdication in Japan has had an unusual history and significance. A general practise of retirement from active life may be traced back many centuries. After the advent of Buddhism into Japan (in the seventh century), with its practise of retirement by high priests into a life of religious contemplation, it became customary for emperors to abdicate after short reigns and retire to a monastic sort of life. By the twelfth century the custom had spread to other high governmental officers; and soon afterwards it became a practise in private life for a person in early middle age to withdraw from his business and his position as head of his family and to devote his remaining years to rest and study. The politically powerful families of Japan had encouraged the practise among sovereigns; for such families made themselves more thoroughly dominant by seeing that only young emperors reigned, and by having these abdicate before they reached an age when they might prove themselves too independent. The effects of the early political abdications (a practise which continued until well into the nineteenth century) are revealed in the shortness of the reigns and the frequency of rule by minors in Japan.

FRANCIS W. COKER

See: MONARCHY; PAPACY; REVOLUTION; COUP D'ETAT.

Consult: FOR ABDICATION IN ROMAN LAW: Corpus juris civilis, *Codex Iustinianus* (Berlin 1877) bk. vi., chs. xxviii and xxxi; Mommsen, Theodor, *Romisches Staatsrecht*, 3 vols. (2nd ed. Leipsic 1876–77) vol. i, p. 603–9.

FOR ABDICATIONS BY POLITICAL RULERS: the histories of the several states. Most encyclopaedias give lists of important abdications; the most extensive list is that in the article "Abdication" in *La Grande Encyclopédie*, vol. i, p. 57–59, recording 65 instances, from the fifth century B.C. to 1879 A.D. On the abdication of James II, see Blackstone, William, *Commentaries*, bk. i, ch. iii, sect. 211 and bk. iv, ch. vi, sect. 78; Great Britain, Parliament, *Cobbett's Parliamentary History of England*, 36 vols. (London 1806–20) vol. v, cols. 36–50, 58–108.

FOR PAPAL ABDICATIONS: Hefele, Joseph, *Conciliengeschichte*, 9 vols. (Freiburg 1869–90) Eng. ed. to A.D. 787 only, 5 vols. (Edinburgh 1883–96); Milman, H. H., *History of Latin Christianity*, 4 vols. (New York 1903).

FOR ABDICATION AS A JAPANESE CUSTOM: Shigeno An-eki, "The Evils of Abdication, Heirship and Adoption" in Asiatic Society of Japan, *Transactions*, vol. xv (1887) 74–85; Chamberlain, B. H., *Things Japanese* (5th ed. London 1905) p. 13–14, 231, 246–47.

ABDUCTION. The view that the carrying off of women was originally the general mode of obtaining wives was held by many of the earlier anthropologists, and the development of marriage institutions, as also the rule of exogamy, was traced to "marriage by capture." The theory is now discarded by most authorities. In spite of the fact that the capture of women in wars and raids is found to have been very prevalent in all parts of the world, there are strong reasons against regarding this as having ever been the usual and general mode of obtaining wives. The women so captured occupy in most instances a status different from that of regular wives. The choice of wives is largely regulated by custom, in which tribal endogamy plays hardly less important a part than clan exogamy. Marriage is, in lower cultures, frequently matrilocal, the women never leaving their clan, and their husbands joining them; and this was, in the writer's view, originally the general custom Whenever the reverse usage obtains, some consideration is exacted before the husband is per-

mitted to remove the woman. When this is effected furtively or by violence, the proceeding is resented, both as an offense against the older usage and as an attempt to evade payment of the bride-price. Abduction is, in part, often resorted to as a means of bargaining from a coign of vantage. The removal may take place with the connivance of the woman, thus constituting elopement rather than abduction. It may be connived at, after payment has been made, by the girl's relatives, but without her consent. Genuine abduction thus merges by imperceptible degrees into the widespread usages in which simulated violence on the part of the bridegroom and his friends and resistance on the part of the bride's people form part of the marriage procedure. The violence may, with the same people, be ceremonial or real according as the bride-price has, or has not, been paid. These usages are most satisfactorily explained with reference to the change from matrilocal to patrilocal customs rather than as evidencing an original stage of marriage by capture. The abduction of women is, in lower cultures, one of the commonest causes of tribal warfare, and is often formally discountenanced on that account.

To a different class of offenses belongs the abduction of married women by a member of the same tribe, which is exceedingly prevalent in lower cultures and is commonly confounded in ethnological reports and discussions with simple adultery. But by many peoples who resent fiercely the abduction of a wife, adultery without abduction is regarded with indifference. The injury is usually held, as it was in Anglo-Saxon law, to be compensated by supplying another woman. The claim of a husband whose wife has been abducted is commonly regarded by tribal law as having lapsed after a given period, after which he is restrained from taking further steps to regain possession of her.

Attic law required the abductor of a free-born unmarried woman to marry her, as did also early Roman law. The edicts of Constantine and of Justinian, however, pronounced such marriages null and void, sanctioned revenge to the extent of homicide, and disallowed the petition of the victim in favor of the raptor. Ecclesiastical law, down to the ninth century, recognized the marriages as valid in such cases, but afterwards conformed to the Justinian code. After the twelfth century marriage was again allowed, with strict provisions to secure the freedom of action of the woman. The abduction of heiresses was very prevalent throughout the Middle Ages and down to the eighteenth century, and early English law had mainly such cases in view. Under the Criminal Law Amendment Act, 1885, mere abduction is a felony if the victim be under sixteen; abduction with intent to seduce, if she be under eighteen, and the procuring of any female under twenty one, misdemeanors. Modern American state statutes penalize abduction generally under the same circumstances and, as far as federal law is concerned, the Mann Act may be said to operate as a restraint upon the crime.

ROBERT BRIFFAULT

See: MARRIAGE; ANTHROPOLOGY; SEDUCTION; PROSTITUTION; CHILD MARRIAGE.

Consult: Westermarck, E., *The History of Human Marriage*, 3 vols. (5th ed. London 1921) vol. i, ch. xxi, p. 240–77; Howard, G. E., *A History of Matrimonial Institutions*, 3 vols. (Chicago 1904) vol. i, p. 156–71; Briffault, R., *The Mothers*, 3 vols. (London 1927) vol. ii, p. 98–108, 230–50; Bishop, J. P., *Commentaries on the Law of Statutory Crimes* (3rd ed. Chicago 1901) p. 449–52.

ABEILLE, LOUIS PAUL (1719–1807), was one of the eclectic and practical publicists who served as a link between the two principal schools of French economists in the second half of the eighteenth century. He was a friend of Vincent de Gournay and when, at the instigation of the latter, the Société d'Agriculture, du Commerce, et des Arts de Bretagne was founded (1757), he became its secretary and published its *Corps d'observations* (Rennes 1761–62). His *Lettres d'un négociant sur la nature du commerce des grains* (Marseilles 1763) permits us to range him among the disciples of Quesnay. Nevertheless in his *Réflexions sur la police des grains en France et en Angleterre* (Paris 1764) he returned to a semi-neutrality between the physiocratic school and its adversaries. He frankly adhered to the former in his *Principes sur la liberté du commerce des grains* (Amsterdam 1768); but the following year he separated himself again from these doctrines, and later supported Necker's policy of regulation.

G. WEULERSSE

Consult: Weulersse, G., *Le Mouvement physiocratique en France (de 1756 à 1770)* (Paris 1910).

ABELARD, PETER (1079–1142), mediaeval philosopher, theologian and educator. Abélard, the son of an obscure Breton noble, left his home at Pallet at the age of fifteen to become a wandering scholar. He studied in Paris at the

episcopal school under William of Champeaux and soon gained so wide a reputation by the brilliance of his attack on his master's philosophy of realism that he was induced to set up a lay school. At the age of thirty-four Abélard withdrew to study theology under Anselm of Laon, and in 1118, equipped in every branch of mediaeval learning, he returned to Paris to become master of the episcopal school. His learning and brilliant dialectic, which made him famous throughout Europe, were the chief agencies in converting the episcopal school, with a few hundred pupils, into what was soon to become the University of Paris. But his career was interrupted by his love affair with his pupil Héloïse. In spite of their subsequent marriage her family vented their anger on Abélard by mutilating him. This outrage and the change in psychology which followed it, as described in his *Historia calamitatum*, led him to retire to the abbey of St. Denis. The worldly life of the monks did not suit his new mood, and he was permitted to set up a chair in one of the dependent houses of the abbey, to which his thousands of pupils followed him. Here he wrote his boldest works, *A Dialogue between a Philosopher, a Jew, and a Christian* and *Sic et non* (a collection of contradictory theological opinions). He was accused of heresy and convicted by a synod at Soissons. During the rest of his life, both while he was teaching and while he was abbot of a wild and irregular abbey on the coast of Brittany, he was harassed by enemies. After he had returned to his chair in Paris in 1136, Bernard of Clairvaux preferred a second charge of heresy against him and he was condemned at Sens. The charge, which resulted from the anger of the episcopal and monastic authorities at Abélard's claim of greater intellectual vitality in speculation, was strained and was never seriously regarded at Rome. But Abélard, broken by this last blow, retired to the abbey of Cluny and died in the following year.

The significance of Abélard in the development of European thought is found mainly in the impetus he gave to independent thinking in place of the repetition of earlier writers on theology. Of his actual contributions to thought hardly any were accepted. In his writing he was occupied entirely with theology. The little secular knowledge which he had derived in his youth from Martianus Capella or Isidore he ignored, and the condemnation for heresy prevented the use of his works by later scholars. They are in any case chiefly concerned with refinements of theological expression. But his general trend was to make doctrine rational, and he thus anticipated later schoolmen like Aquinas. Culture was in Abélard's time too scanty to give a proper opportunity to his brilliant intellect, and his force was spent in dialectical encounters over the phrasing of theological propositions. Abélard's chief service was his unique share in the popularization of school life which led to the founding of the universities.

JOSEPH MCCABE

Works: "Opera omnia" in Migne, J. P., *Patrologiae cursus completus . . . . series latina*, vol. clxxviii; *Peter Abaelards philosophische Schriften*, ed. by Bernhard Geyer, vols. i–iii (Munster 1919–).

Consult: Remusat, F. M. C., *Abélard*, 2 vols. (Paris 1845); Compayré, Gabriel, *Abélard and the Origin and Early History of Universities* (New York 1893) p. 1–23; Hausrath, Adolph, *Peter Abalard* (Leipsic 1893); McCabe, Joseph, *Peter Abélard* (New York 1901). For a partly imaginative treatment of Abélard's personal life see Moore, George, *Héloise and Abélard*, 2 vols. (London 1921).

ABELL, ARUNAH S. (1806–88), American journalist and founder of the Baltimore *Sun*. Abell worked as compositor on a penny journal in New York City with W. M. Swain and Azariah H. Simmons. The three later moved on to Philadelphia where they established the *Public Ledger*, but it was not long before Abell decided to try his fortune in Baltimore. On May 17, 1837, he and Swain founded the Baltimore *Sun*, which was one of the early penny papers in the United States and the first in Maryland. The city then had nothing but six-cent papers, but the profound business depression then prevalent made it a bad time for starting this new venture. His paper prospered, however, and before his death he purchased "Guilford," a half-million-dollar estate near Baltimore.

Abell and Swain were supporters of the Morse "magnetic" telegraph and helped apply its uses to speedy news service. The combined circulation of the penny press in Boston, New York, Philadelphia and Baltimore was then rated at 96,000, a large figure in that day. De Tocqueville noted, when traveling in this country, that whenever a laborer, maid or truck driver had a few minutes to spare, one of these journals was likely to be found at hand. Highly sensational in their news columns, these papers —and the Baltimore *Sun* was conspicuous in

this regard—insisted that the conservative higher priced papers should subordinate partisanship to the more important function of distributing news and commenting on current events. Abell was thus a forerunner of a type of journalism which now generally prevails in the United States. However, the editors of some penny papers, notably Abell, exhibited courage and intelligence, captured new audiences, and were the greatest single force of their time in educating their readers in politics, economics and democratic processes.

SILAS BENT

Consult: Hudson, Frederick, *Journalism in the United States from 1690 to 1872* (New York 1873) ch. xxxi; Payne, George Henry, *History of Journalism in the United States* (New York 1920) ch. xviii.

ABERDARE, LORD. *See* BRUCE, HENRY AUSTIN.

ABERDEEN, EARL OF. *See* HAMILTON, GEORGE GORDON.

ABNORMAL PSYCHOLOGY is the study of mental behavior that deviates from the standard set by the normal, of whatever form and however conditioned the abnormal behavior may be. Historically the recognition of mental disorders developed a psychiatry long before psychology became an established discipline. Insanity, for instance, has always attracted attention. But psychology developed as an offshoot of philosophy concerned primarily with the nature of abstract intellectual processes, and with slight reference to the emotional basis and the types and varieties of human behavior. It was therefore only with the growth of the conception of psychology as a guide to the understanding and control of individual and social conduct that abnormal psychology came into its own. Psychiatry has now become one of its several applications, continuing to furnish abnormal psychology with important data and clues arising from clinical experience, and using in turn the psychological principles thus brought to light. Modern insight traces the play of mental abnormality in the entire range of human conduct, especially conduct of social importance.

Many significant abnormal phenomena are open to general observation. The most common is sleep, which involves a lowering and an altering of pattern of the mental activity of waking life, and which gives rise to the abnormal mental products of dreams. Familiar also are trance, somnambulism and delirium, all of which exhibit characteristics of both dreaming and waking activity. Natural and artificial intoxication, whether in the form of stupor, agitation or ecstasy, are even more common. The search for an earthly paradise by the drug route is ancient and widespread. Equally well recognized and again occurring both spontaneously and by way of drugs, fasting or prayer, have been visions and hallucinations, or motor spasms such as the contortions of the epileptic fit or the fixed posture of the religious ascetic. The ensuing failure to recall in the normal state what was done in these conditions (amnesia), the gap or lapse in the mental life, the altered orientation or failure to recognize surroundings, the occupation with fantasies and delusions, are as striking as the original change of behavior. Possession by an alien spirit was for long the most common explanation of the changed mental condition. The belief reflected the religious doctrine of inspiration or ecstasy, or of demon possession by spirits of evil. The patient was beside himself (ecstasy); an older name for the psychiatrist was "alienist."

From such common observations can be discovered the essential respects in which the abnormal mind behaves differently from the normal. It may develop sensory disorders, including insensibility to pain; distorted sensations, such as illusory visions and voices; strange sensations from within the body; or changes of taste and mood. There may be motor symptoms—convulsions, contortions, tremors and paralyses, or inability to control muscles. A second group of symptoms consists in changes in emotional behavior, notably the dominance of anger and violence in mania. The maniac has always been the typical madman. Equally deviating from the normal are the posture and mood of depression, the immobility of despair and silent brooding. As readily observed are failures in comprehension, strange beliefs or delusions, ravings, incoherence, the mistaking of fantasy for reality—variations in the thought processes that have given to "insanity" the dominant meaning of mental disorder, which involves failure to orient, to understand and to distinguish.

The behavior of those who were plainly abnormal by constitutional defect has been equally open to common observation. The idiot is conspicuously defective; and the various types of feeble-minded, from the simpleton to the dull and stupid, have added to the picture of "not

all there." That this condition so often appeared in early childhood indicated an inherent abnormality, interfering with development. The failure of mental powers in old age has also compelled attention; while the effects of accident and of injury, particularly to the head, appeared in altered mental behavior. Thus abnormal states and abnormal persons have formed part of ordinary human experience.

Such popular knowledge influenced the developing study of the same phenomena by the more systematic procedure of science. The history of psychology is too involved and too remote for inclusion in the present discussion. It may be sufficient to indicate the several stages in the development of the modern discipline. In a sense all the life sciences had to await the illumination of the principle of evolution. Without that clue the meaning of animal behavior (including human) was ill-understood. A more direct requirement for psychology was the decipherment of the nervous system. Modern psychology is neurologically minded; but even the basis for the distinction between sensory and motor neural mechanisms was not discovered until the nineteenth century. Psychology, even when transformed from an arm-chair discipline to an experimental science, continued to focus upon the minute and elaborate mechanisms of the higher mental processes and their supports. The academic and the clinical insights were but slowly amalgamated. The fundamental importance of the emotional factors in human behavior had to make its way against the intellectualist preoccupation. The importance of growth as a process, and of the child and primitive man as authentic psychological documents, had to be recognized. The interaction of bodily and mental conditioning had to be advanced from a crude influence-of-mind-and-body relation to a significant psychogenic principle. The origin of abnormal manifestations in normal trends was gradually recognized, hard lines of separation removed and the borderland discovered; while a sounder view of the bearings of heredity and environment, dependent upon a far reaching restatement of the mechanisms of transmission, was slowly gained. As the conception that human behavior is as pervasively sociological as biological penetrated and displaced overmoralized views of conduct, human experience came to be reinterpreted, and attention to be focused upon the central problem of the composite factors of personality and their play in human relations. This comprehensive restatement of the most fundamental problems of human life was attained, however imperfectly, almost within a single generation. Its culmination is the interpretation of the data of social psychology and of abnormal psychology from a common point of view.

The influence of the rival trends in modern psychology upon abnormal psychology and their relations to it are alike eclectic. A rigid "behaviorism" such as that advocated by Dr. J. B. Watson, which regards substantially the entire range of human reaction as the issue of conditioning, does not hesitate to draw the conclusion that abnormal behavior has the same origin. This position can be reached only by ignoring such a vast range of experience that it is hardly entitled to consideration. The attention of the older type of analytic psychology to the logical processes (and their sensory support) in intellectual activity hindered consideration of deviating types; and the experimental program, however differently oriented, followed a related tradition. The problem of Gestalt psychology lies in the same field. The emphasis upon a functional and dynamic psychology, however, was favorable to an extension of interest to the more complex integrations, including the abnormal. The stimulus to the study of abnormal states and conditions is derived largely from interests outside of, or tangential to, the standard disciplines of psychology. It arose mainly from the clinical interest in human behavior and character, owes much to medical, biological, anthropological and general "humanity" pursuits, and is specifically connected with the educational motive of control in the interests of what we now call mental hygiene. There has been continuous medical interest in the mentally abnormal, in deviation of character make-up and in the vicissitudes of human nature (for which Dessoir proposes the term psychognosis); and philosopher-psychologists (in France more than elsewhere) have found some confirmation and illustration of principles in the abnormal field; but for more complete development abnormal psychology had to await the convergence of these many-sided modern interests. The Freudian contribution holds the unique position of a general psychological interpretation derived from the study of abnormal phenomena. Parallel with the genetic approach studying mental origins and development, and the experimental technique determining precise relations, the abnormal had become a method

of investigation as well as a division of the phenomena of the mind.

With the conception of abnormal mental behavior established, psychiatry incorporated a psychological point of view into its analysis and technique, and insanity became a legal rather than a medical concept. Psychology and psychiatry together developed certain characteristic patterns of deviation from the normal. These concepts have been the basis of all subsequent work. Mental disturbance associated with organic lesions, loss and disorder of function, or defect, were regarded as constituting a central group of the major mental disorders. The delusions of grandeur, exuberant fantasies, incoherence, disorientation and coarse deterioration of behavior that marked general paralysis of the insane were seen to be as significant as the motor impairment that gave it its name. It was realized that paretics could be diagnosed psychically as well as physiologically, and the association of this condition with syphilitic infection placed that disease in line with allied medical findings in other fields. Symptoms came to be regarded as but clues to disease patterns of the total psychic liability in one and another type of variation. The symptoms of elation and agitation (mania) and those of depression (melancholia) were recognized as phases of the manic-depressive psychosis, one type form of mental disorder. An equally useful and comprehensive category was that of dementia praecox, the failure to continue the integrative development of youth and the tendency to splitting or division of the psychic personality. In such fashion the orientation of psychiatry became dominantly psychological.

Early in the history of abnormal psychology the functional nervous disorders moved to the foreground of consideration, not only because they furnished so large a quota of all mental maladjustment, but also because in their analysis lay the clues to mental mechanisms essential to the normal maintenance and direction of life energy. Insight into the mental mechanisms in health and disease has been one of the major cooperative contributions of psychiatry and psychology. Of the psychoneuroses thus studied, hysteria is the richest in bearing. From the ancient view (embodied in the name) of its association with feminine liability, to the modern concept of a comprehensive and variable neurosis or neurotic tendency, is a far step; the transition occurred through a repeatedly altered and slowly matured development of the concept. Hysteria as a nervous disorder with a recognizable though protean range of symptoms, may be viewed as the manifestation, in morbid intensity, of a pervasive liability and a particular temperament. In the one aspect, it involves emotional over-excitability; and in the other a tendency to dissociation. The cruder outbreaks of angry and destructive hysterical violence, the panicky fears, the high-strung sentimentalism, the erotic excesses, even the Puritanic restraints, fall within the picture. Complex emotionalisms, from mob violence, disturbing prejudices and war hysteria to paroxysms of grief and despair and religious ecstasy, present a range of disturbances individually and socially significant. Wayward impulses, irresponsible outbreaks and deficiencies of conduct may be similarly conditioned.

Such over-emotionalism, involving rapid and large oscillations within the emotional wave, intensity, impulsiveness and instability, enters into the picture of a temperament; it is represented also in a genetic stage. A distinguished British neurologist, Dr. Core, maintains that in the pattern of their responses children are hysterical, and that primitive people show similar characteristics, though in different forms; moreover all but the most stable (or phlegmatic) when under stress incline to be hysterical. To Dr. Core the process of civilization is in part the reduction of the natural hysteria of the human race. Consistent with this interpretation is the Freudian principle of regression, which regards anger outbreaks, intensive fears, losses of emotional balance and lapses into uncontrollable impulses as regressions or relapses to behavior on a lower genetic level, in part that characteristic of the child, in part that of primitive man. The greater emotional susceptibility of women, as well as the special waywardness, vagaries and flighty, high-strung escapades of adolescence and youth, fall within the scope of this diagnosis, often well within the normal orbit, at times outside it.

The strong personal tone of the range of emotions, principally those of sex, involved in this phase of the hysterical liability is peculiarly important. Under the hysterical stress experiences are responded to dominantly for their bearing on personal esteem or disesteem; the objective attitude is weakened and life centers too vividly and too intensively around the social estimates of self. In the period of courtship and mating and in the erotic relations emotional attitudes are still more centralized. The hyster-

ically implicated functions are the fundamentally vital ones associated with the dominant urges, anchored in the less consciously controlled mechanisms. Among these the sex relations may readily become dominant.

The tendency to partitioning of the psyche or to its partial disintegration, though equally characteristic of the total hysterical liability, is less readily interpreted. It appears clearly in the more extreme cases of this neurosis, yet in others may play but a slight part in the temperamental disposition. When pronounced this tendency may lead to violent contortions, loss of consciousness, altered personality. When more partial it may induce hysterical blindness, deafness, anaesthesia or paralysis, and mimic almost any variety of disease symptom upon which the liability has been fixed by way of a psychic association. These liabilities were clearly manifested in the war neuroses, when under unbearable stresses from the menacing attack upon the danger instinct men succumbed to "shell shock." The connection between over-emotionalism personally centered and the tendency to dissociation is not clear. But it can be noted that Charcot found the most susceptible hypnotic subjects among his hysterical patients; that Janet in the same group found pronounced pseudosymptoms, sensory and motor curtailments and contractions of the ego, as well as trances and fugues; that Freud found the most elaborate examples of subconscious and fantasy manifestations and bodily symptoms of psychic origin, and that Flournoy and Morton Prince found the typical cases of multiple personality and trance utterances, from Delphic oracles to automatic writing, among similar patients. When this variety of abnormal behavior appears in its most developed form among hysterical patients, we seek a unifying concept, and perhaps find it in an emotional instability, an over-action and dissociated action of the deeper emotional mechanisms, breaking away from the higher central control.

Hysteria becomes one of the major interpretative concepts for a great variety of behavior, including episodic impulsions such as kleptomania or sex delinquencies and wayward and irresponsible conduct in general. Prejudice, riot, war and class hysteria, fanaticisms and irrational beliefs, deeply disturbing complexes, illustrate as well that when feeling runs high, reason runs low. In the Freudian incidents they induce bodily symptoms. A fertile source of hysterical complexes may be seen in the nature-set conflict between the biologically older, deeper urges, all highly emotionalized and anchored most strongly in the vital needs, and the later evolved controls of reflection and discipline associated with the higher brain centers. The commanding role of sex in the conflict remains conspicuous and pervasive.

That other formulae redistributing life values may similarly represent other types of neurotic liability or syndromes of functional neuroses, is more than probable. Neurasthenia represents the other great division of such liability. Its nucleus is an undue sensitiveness to fatigue, an inward turned psychic attitude, a hesitant reaction, a fear ridden distress, a motor incoordination, a far reaching anxiety, a devastating depression. This presents again a consistent though variable picture and in most respects one directly contrasted with the first, the hysterical tendency making for impulsive activity, and the neurasthenic for a many-sided incapacity. Less menacing socially, neurasthenia is the more subtly disqualifying and unfitting individually, and plays havoc with the attainment of that efficient integration of instinctive urges and reflective control that enters into the standards of balanced efficiency and the ideals of mental hygiene. The psychasthenic variety of neurosis is affiliated with it but extends into the domain of elaborated systems of complex behavior. It overlaps the more serious distortions of the psychopathic personality—eccentric, exotic, strangely sensitive and yet more strangely insensitive, following recklessly a few directive urges.

The mechanisms involved in abnormal psychology have been notably developed by Freud and his followers. To accept this approach as significant and helpful does not imply a full acceptance of the doctrines of Freud; it does, however, imply a conviction that the Freudian insight is essential to abnormal psychology. We shall never return to pre-Freudian ways of thinking about human behavior, its assets and liabilities, its vicissitudes and vagaries. Among the Freudian principles is that of the importance of subconscious activities and processes representing (in Jung's view) the deeper and older, more primary and instinctive urges and action tendencies—a sort of racial repository. This subconscious type of activity is more freely expressed in fantasy-romancing, both in day-dreaming and in the dreams of sleep. It is an order of thinking which proceeds mainly by the pleasure principle and against

which the reality principle (the stress of things as they are and their recognition by reason) has to make its way. The resulting neurosis may be an escape into illness, an assumed or imposed disqualifying incapacity that makes further struggle unnecessary; or it may be an irresistible fixation to which Freud assigns a sex bearing. Owing to the same conflict repression occurs, and the unpleasant and upsetting is buried alive and continues to trouble. The psychoanalyst attempts to bring these disturbing memories to the open forum of the conscious, where they may be set in order and dismissed. Inducements to neuroses may be found in early childhood incidents, upsetting shocks, sexual in most cases, by way of a trauma or psychic assault that leaves a functional scar. Conflict, especially between the powerful native urges and their social repression, is the essence of the situation.

The taboos that operate most intensively are those surrounding sex. Making sex central, Freud evolved his "family romance," in which the child-parent relation is the crux of the (potentially) neurotic situation. In one form it becomes the Oedipus complex in which the son with his emotions fixated erotically upon the mother develops a usurping jealousy of the father. The interpreting mechanism is that of symbolism. Accordingly dreams have on the one hand a patent content, and on the other hand a latent meaning which is the symbolically disguised real meaning, to be interpreted by analysis.

Another mechanism is compensation, by which, in dream and fantasy or delusive belief, the subject finds compensation for his defects by resorting to an unreal world of self-gratification. The great variety of cultural myths and traditional fairy tales are explained by reference to the same principle. They thus become racial or folklore versions of the same theme—the insistent struggle for a fuller, richer life, more abundantly or more freely satisfying the vital urges. The mechanism of rationalization also enters the picture, cloaking in the consolations of reason the repressed or unsatisfied desires of a thwarted life.

This selection of Freudian principles and mechanisms may serve to indicate the mode of approach and the positions reached by the school. The method and the conclusions apply to behavior patterns and to personalities. Much of the doctrine is summarized in the term "complex," meaning a set of ideas (on the will side a "wish," on the sensation or action side an impulsion or impediment of behavior) highly charged with emotion, that checks or warps the natural and effective relation between stimulus and response. Complexes condition neuroses and reveal their points of origin.

In its bearing on personality, analysis as developed by Jung has led to the recognition of the two dominant types of extravert and introvert. The extravert is the more common type, with his main psychic energies directed outward to the world of things, occupations and objective interests, and but little troubled by inner reflections, doubts or emotional resistances. The psychic energy flows freely into channels of momentary occupation and is likely to be abundant, bubbling, enthusiastic. Jung recognizes several sub-varieties distinguishable as the dominant trend is modified by sensory, motor or reflective interests. He applies the same system of detailed classification to the introvert. The introvert stands closer to the neurotic source. In him the flow of psychic energy meets with resistance, with the inhibition of hesitant motor impulses, of timid withdrawal or troubled reflection. The psychic energy is directed inwardly instead of going out to objects and active pursuits. Naturally he is a more complicated individual, largely by reason of emotional complication; his aspirations may run higher, his feelings deeper, his patterns of behavior may be more intricate. For one marked introvert, there are a score mildly and irregularly introvert. Indeed every individual must be equipped with extraverting and introverting trends; but except in the very weakly toned and neutral nondescripts, there still remains a dominant type pattern.

Kretschmer makes a similar differentiation of personality types from the side of clinical experience and bodily build. He puts the question: If you succumbed to a mental disorder (for whatever reason, by inherent frailty of constitution or excessive stress of circumstance or both), what type of abnormal pattern would your neurosis or psychosis take? In the answer you will find your psychic type. On the one hand stand the manic-depressive psychoses, with their large and typically alternating fluctuations of mood (cycloids). The other statistically large component among cases of mental disorder is that of dementia praecox (schizophrenia), in which the distinctive tendency is that of dissociation or a split personality (schizoids). Naturally there are as many exceptions

as conformities, and these Kretschmer calls the dysplastic types. He makes much of the temperamental equivalents among normal people (cyclothymes and schizothymes), thereby justifying his findings as a contribution to the psychology of character analysis. His investigations associate psychic with physical types. The pyknic (robust, stocky) bodily constitution is far more abundant among those of cycloid psychic disposition; the schizoid disposition is found most typically in the asthenic constitution and in the athletic.

Parallel with the insight into the determination of behavior from above through the psychic mechanisms (notably the Freudian ones) has come equally novel and convincing evidence of the influence from below, principally through the glands of internal secretion (endocrines). The one may be termed the psychogenic, the other the physiogenic principle. Normal and abnormal behavior alike are subject to both sets of determination. It has been suggested that each of us is a physio-chemical as well as a psycho-sociological-historical person, and that the resulting personality complex is in no small measure the expression of glandular balance, dominance or deficiency.

The specific evidence is too detailed for discussion here. It is sufficient to refer to the thyroid, the "miracle gland," extracts from which, when administered to feeble-minded cretins, in favorable cases have accomplished their approximate restoration to normality; or to recall that over-excitability of the hysterical order is definitely connected with over-activity of the thyroid, and phlegmatic apathy with its under-activity (again in certain orders of cases); that the mechanisms by which active secretion of the adrenal glands occurs in violent emotional states (anger and fear) have been established; that the pituitary gland is closely associated with the determinants of bodily growth; or that the profound influence of sexual urges on behavior is again a glandular function of a different order. From such conclusions may arise a future chemistry of temperament, regulating alike normal and abnormal behavior.

Significant in this contribution is the close connection of so many of these glandular processes with the functions of the autonomic nervous system. This structure, by far the older in evolutionary terms, becomes the regulator of the vital, life shaping reactions; while the later superimposed central nervous system represents the higher level of conscious, rationalized control. Not a little of the conflict of which life consists, and which under undue stress precipitates mental disorder, may be referred to the antagonism, the imperfect adjustment, of these two systems. Modern civilization in increasing measure makes difficult demands upon the central nervous system, while the older aboriginal urges must still be satisfied. The total nervous equipment was evolved to meet far simpler conditions, and the resulting strain expresses itself in the marked increase of mental disorder and disqualification.

The social applications of abnormal psychology may best be approached by way of child psychology. That the imbecile remained permanently in a childish state of mind was recognized of old. The picture of mental deficiency is that of arrested development, nor is it in any way accidental that Binet arrived at the concept of mental age through the practical problem of separating the subnormal pupils in the school population. By projecting the concept of retardation backward, one reaches a definition of the imbecile (mental age from three to seven) and the idiot (mental age below three years). From the more useful statement of mental age in terms of the intelligence quotient (I.Q.) is derived the category of the feeble-minded, indicated by an I.Q. of less than 70. This group may be subdivided into morons (I.Q. 70 to 50), imbeciles (50 to 25) and idiots (below 25). Except for a percentage, small but not negligible, of cases of arrested development due to disease and other causes, the mental defectives express a hereditary defect. This means mainly (as Dr. Myerson has shown) that some types of feeble-mindedness run in families; but other causes (notably syphilis), and the spontaneous occurrence of feeble-mindedness in almost any grade of human stock, must be clearly recognized. With some exceptions the individual I.Q. remains constant throughout life, so that the grade of intelligence as thus tested is of fundamental importance in the personal data of any case of social delinquency or maladjustment. Following the same procedure, it becomes possible to determine superior intelligence.

But more consequential is the study of the symptoms of "nervousness" in children and the inclusion of the maladjusted child in the program of abnormal psychology. When Dr. Cameron enumerated as signs of nervousness in young children poor sleep, irregular feeding habits (refusal of food, food resistance, food

whims, vomiting), habit spasms (finger sucking, twitchings, later stammering), negativism or the persistent "no" habit, and contrary patterns of reaction; and when he added that childhood constitutes a distinctively "nervous" or emotionally sensitive period notably characterized by tendencies to emotional upset, anger states (tantrums) and fear states (night terrors, imaginative dreads, panicky fears and violent disgusts) he outlined a program of interpretation that in its subsequent development has completely revolutionized the neurological direction of early childhood. It has shifted the interpretation of child behavior from that of naughtiness or moral transgression to that of a neurological difficulty. This contribution from the abnormal side has been of far reaching consequence in indicating the essential problems of child growth or maturing. It underlies the program of the nursery school; it continues in the free methods of progressive education. It introduces a different perspective of values, of what is important and what secondary, in the early educational process. It gives hope that later neurotic disaster may be avoided by wiser adaptation of training to the individual needs of children according to their psychological types. The whole technique of modern child study, which extends from the feeble-minded to the gifted or superior children, is strongly influenced by the clinical attitude developed in the observation of symptoms in abnormal children.

The same interest has made central the matter of adjustment; for the abnormal child is frequently the maladjusted child. Environmental maladjustments or errors in management affect most disastrously the sensitive, nervous types of children. The chief obstacle to successful adjustment is some form of nervous instability. The two rubrics of the unstable individuals and the maladjusted individuals grow in complication when the child becomes the adolescent. Not only does this deeply organic reconstruction place increasing stresses upon nervous instability, but it increases the need of adequate outlets for the more complex and compelling urges. It is the failure in such adjustment that brings to the fore the problems of unhappiness or of delinquency. Misconduct takes the direction of destructiveness, mischief making, wilfulness, truancy, vagrancy, stealing, cheating, lying, cruelty or sex offenses. The conclusion derived from clinical experience is that such forms of behavior grow out of conflict situations deeply anchored in instability of a neurotic type and out of a maladjustment within the family or in the social stresses and imposed restraints.

A normal intellectual life, establishing right contacts with knowledge and control led by reason; a normal emotional life with proper outlets for sympathy, cooperation, generosity, fair play and control of fears and angers; a normal social life with the stimulations of companionability, consideration and respect, and the reciprocal attraction of the sexes; such is the warrant of a normal development. Upon such a diagnosis most remedial policies are based. The remedial agency is often the social worker. The foundation of mental clinics in association with schools, social aid organizations, courts, churches, special foundations, also represents the practical recognition of findings in abnormal psychology. Diagnosis usually utilizes the genetic method; it is realized that the early environment gives way in importance to the maturing environment, and that simpler impulses are overlaid by later complications. The imperfect overcoming of early tendencies, a variety of mental infantilism, may create difficulties leading to delinquency or to psychic impediments. The becoming emotionally as well as intellectually adult, the finding oneself in work, in serious purpose, in play, in the love life, in the total social adjustment of interests and pursuits—this maturing process is the difficult achievement, and marked defects in it appear as abnormal behavior.

One of the more socially important phases of such abnormal behavior is criminal activity, and among the applications of abnormal psychology, criminal psychology offers peculiarly complex problems. The central consideration is that of the psychology of the criminal, including the causes of crime. Quite distinct in scope and application is the psychology of "criminal" procedure, including that of evidence, detection of crime, the setting of the trial, the function of judge, jury and witnesses, the role of prejudice, public opinion, etc. A third field is the psychology of punishment and reform. All have been profoundly affected by the advances in abnormal psychology.

The present discussion must be limited to the more intimate phases of the psychology of the criminal and the orders of crime. The divergence of opinions in regard to the dominant causes (including motives and urges) of criminal behavior indicates the issues. Crime is a socio-legal term; the behavior patterns that it

implies are patho-psychological products. From the point of view of abnormal psychology the latter concept must dominate. There are well recognized (abnormal) tendencies to deviating behavior; under certain circumstances phases of such deviating behavior become criminal. There is no independent psychology of criminal behavior apart from deviating behavior. Even the social notoriety or prestige of law breaking as a feat of adventure and defiance finds its parallel in similar lures of social display, just as in the opposed emotional reaction the sense of disgrace and the social stigma of the trial and the prison have their counterparts in the social disapproval attaching to a large variety of (moral or conventional) misconduct or even misfortune.

The orders of crime likewise refer back to the same psychological sources. At the simplest these may be classified as crimes of malice (15 percent), crimes of acquisition (75 percent) and crimes of lust (10 percent). (The numbers are derived from one group of English statistics and are typical of their relative occurrence.) This does not mean that the tendencies to anger, to amass property, to indulge in sex passion are the most unruly trends in human nature, or the most deleterious to social welfare, but only that in certain of their expressions they come in conflict with the common good. It means that basic to such conduct when it is "criminally" exhibited are fundamental human urges shared by all, which if properly directed contribute to human welfare and happiness; it means that because these urges are strong and uncertainly poised, they are apt to be overdone and go wrong; it likewise means that the complex organization of the social environment as we know it and as we have helped to make it offers special inducements to the excessive and distorted expressions of such urges. It means that psychological defect, such as mental deficiency and still more decisively defective emotional control, is the basic "cause" of crime in at least a considerable group of so-called criminals.

If we take the next step and ask how far original constitutional deviation is the responsible factor, and how far the environmental stress, we enter the controversial field. The most definite expression of the first appears in the views of Schlapp and Smith (*The New Criminology*, New York 1928) who hold that an unbalanced glandular action is the determining factor. In this revised sense the criminal is predominately born and not made. The evidence of such glandular origin of psychopathic deviation responsible for crime is comprehensive. The overactivity of the thyroid intensifies the urges and diminishes control; its underactivity is related to the low grade mentality conducive to crime. The relation of kleptomania to sexual periodicity in women is well established. In many respects the thesis is supported that so far as disordered emotions are due to defective human chemistry, criminal emotionalism becomes one form of expression of emotional unhealth. The same order of social temptation surrounds a considerable proportion of the community; those who succumb to crime (no differently from those who develop psychoneuroses) do so because they belong to the constitutionally deficient type of one order or another, intellectual, emotional, generally psychopathic. Superiority may have a similar basis; nor is the psychoneurotic disposition without its (at times significant) compensations. So far as such neurotic disposition is explicable in glandular terms, the argument may take that form.

Those who find the Freudian clue adequate and enlightening in regard to the causation (or motivation) scheme of deviating behavior generally, and of the psychoneuroses more particularly, are prepared to extend that application to the psychology of misconduct and specifically to the varieties of misconduct recognized as, or associated with, crime. They find the decisive factor in a strong and disturbing mental and emotional conflict. Such conflicts in turn have a setting in human relations, as well as in psychic and organic urges. Family conflicts, adolescent cravings, the emergence of sex as the usurping emotion, over-repression, protests against deprivation or inferiority feelings, present the setting in which truancy, delinquency, lying, stealing and irregular sex practises find their motivation patterns. The diagnosis is completed by the further idea that crime is at times the surrogate or substitutional escape of emotions aroused by a conflict situation, and that the crime represents a false solution of a trying situation (as do neuroses likewise). This view recognizes the neurotic dispositional factor, alike in defective mentality and in imperfect or mistrained emotional control. It places maladjustment, delinquency and crime in the allied groups of deviating behavior with a closely related diagnosis. Accordingly, while stealing or breaking in or a hold-up constitutes the

crime, the true situation is the resort to stealing for social or personal display, for indulgence, for excitement, for revenge. Shoplifting by girls and freight car looting by boys, exploiting sex allure by women and hold-ups or forgery by men, register behavior patterns consistent with the psychology of male and female traits. Their treatment must follow the same psychological clues. Reform becomes a problem in readjustment. Complicated by different psychopathic deviations, similar psychic situations may result in different orders of crime. What is done is less significant than the source of the urge and motive. Consistent with this view is the predominating juvenile character of so large a proportion of all crimes. That there are from five to ten times as many male offenders as female is likewise an important part of the problem. The clues to their comprehension are psychological.

Those who emphasize the environmental factor do so for a variety of reasons. The extreme position is that of the "behaviorist" who regards all behavior, desirable and undesirable, as the result of conditioning systematized into training, and asserts that a proper environment and training will produce from any given human material not markedly defective to begin with, a worthy, efficient, industrious citizen in any profession. Criminals are held to be completely made by their conditions. This view comes into such gross contradiction with experience that it can hardly be accepted. But convincing evidence of the environmental factor in producing crime comes from the clinical records in the readjustment of delinquents and young offenders, from the recent experiences in humane and educative prison discipline and from a variety of sociological studies. Its great importance, which it shares with the emphasis upon favored disposition, lies in its bearing upon the methods of treatment and reform; in time it may completely transform the penal code and the false psychology and consequent sociology upon which penal traditions are based.

Yet these psychological principles cannot be indiscriminately applied. Socially and statistically a career of crime may follow upon quite the same order of deliberate and rationalized plan as is involved in ordinary honest pursuits. Low standards of behavior and temptation abound. Shady transactions, skirmishing just within the pale of the law, and occasional encroachments beyond it are common failings. Any adequate survey of crime leaves in doubt how much of it is of psychopathic origin. Institutional statistics may place it as low as from 7 percent to 10 percent if a marked psychopathic standard is insisted upon and as high as 50 percent if any measure of mental defect and emotional abnormality is a sufficient warrant for inclusion in this class. The crimes associated with mental defect are of one order; there are other crimes, like embezzlement, that are definitely crimes of intelligence. By reason of these complications the analysis of crime must remain largely a sociological study, however much guided by the findings of abnormal psychology.

The social menace of abnormal states and conditions invades every occupation and profession. Its civic importance was brought forward by the mobilization of the Great War, with the numerous rejections on the basis of mental unfitness among the enlisted soldiers. The records of shell shock and the necessity of maintaining psychiatric divisions behind the lines; and the foundation after the war of hospitals for rehabilitation of veterans, brought vividly to the fore a suggestive picture of the widespread incapacity in the industrial and social world caused by mental disqualification.

The constructive ideal becomes the program of mental hygiene; and the recognition of the importance of this completely modern discipline itself summarizes the achievements of abnormal psychology. The normal assets of a well-integrated, well-rounded personality appear as resulting from wholesome development of a stable nervous control and a satisfactory adjustment to the conditions and decisions of which life consists; the liabilities appear in the deficits, the impediments, the handicaps of abnormal attitudes, in the lack of balance between contending urges, in weakened or disorganized controls. Sanity becomes a more distinctive concept, a more exacting ideal, by virtue of the expansion of the older limited concept of insanity, as applying to profoundly altered mental conditions, into the concept of mental deviation and deficit. There are levels of mental efficiency, of competent adjustment, of successful life management, if not of sanity, that are of high social moment. The efficient control of the mental resources of a people, the maintenance of high standards of mental hygiene, are as vital to national welfare as any contributing factor to human progress.

JOSEPH JASTROW

See: PSYCHOLOGY; PSYCHIATRY; PSYCHOANALYSIS;

MENTAL HYGIENE; CHILD PSYCHOLOGY; EDUCATIONAL PSYCHOLOGY; SOCIAL PSYCHOLOGY; MENTAL DEFECTIVES; MENTAL TESTS; PERSONALITY; JUVENILE DELINQUENCY; CHILD, PROBLEM; ADOLESCENCE; INSANITY; ALIENIST; CRIMINOLOGY; SEX EDUCATION.

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ABOLITION. The history of the movement for the abolition of the institution of slavery and the traffic in slaves is at once a study of the forces behind an organized movement and of the machinery for effectively influencing humanitarian sentiment and political opinion.

Opposition to slavery arose with the beginning of the Atlantic slave trade. The zeal of missionary orders, closer economic relations with the Negro and a changing European *Zeitgeist* made possible the growth of the cult of "the noble savage." During the eighteenth century this curious and friendly attitude toward non-Europeans was incorporated in the literatures of the maritime nations (*Robinson Crusoe*, for example), thus preparing the popular mind for the reception of antislavery ideas. Particularly in England after 1725, philosophical deism and evangelical piety rivaled each other in helping to swell the body of humanitarian feeling. A rapidly growing slave system, however, seemed to mock the dreams of reformers. Such conditions made inevitable a conflict between slavery and humanitarianism.

The first important direct attack on modern Negro slavery was made by an evangelical, Granville Sharp, who in 1771 and 1772 brought a Negro named Somerset before Judge Mansfield. Hargrave, the attorney for Somerset, argued that the rules of the vanished villeinage, the only possible legal basis for the existence of slavery in England, actually did not tolerate but destroyed it. The decision, incorporating this point of view, resulted in the liberation in England of 14,000 or 15,000 slaves, valued at about £50 each. A similar decision, in the Joseph Knight case in Scotland (1778), completed the process of emancipation in Great Britain. Sharp's efforts to secure Negro freedom in the British colonies by extending these judicial decisions, on the ground that slavery was "absolutely contrary to the laws of reason and equity, as well as the laws of *God*," were unavailing, because colonial slavery, having the sanction of positive law, could be abolished only by legislation.

The legislative attack began after the American Revolution under the leadership of Thomas Clarkson, William Wilberforce and the younger Pitt. Their plan was not to molest the institution of slavery but to attack the slave trade. This end was to be obtained by laws against the traffic in each country and by international agreement for their enforcement. Sharp wished to abolish slavery as well as the slave trade, but the other eleven members of the Abolition Committee, organized in 1787, were convinced that the destruction of a traffic which sometimes carried as many as 100,000 Negroes across the Atlantic in one year and which yielded an average annual net income of 24 percent, was a sufficiently large undertaking. Emancipation would necessitate overriding the irritable British colonial legislatures, like that of Jamaica, whereas the slave trade could be outlawed by Parliament. Moreover the French Revolution destroyed the hope of early abolition by England alone or in agreement with other powers, threw the slave trade more largely into British hands, and caused the temporary emancipation (1784–1802) of the slaves in the French colonies, largely in order to make these colonies valueless for the English, who were then engaged in their conquest. Eventually selfish economic interests inspired some of the British planters to vote for abolition, since they did not wish the former French, Dutch, Spanish and Portuguese colonies to be well stocked with slaves if they should be returned to their original owners. In 1806–07 a new and more zealous minister, Charles James Fox, was able to secure the abolition of the slave traffic.

In the United States the twenty-year period for carrying on the slave trade which had been

granted by the constitution ended on January 1, 1808. Slavery had been rapidly disappearing in the northern states for economic reasons, and until 1807 the controversy in the United States was mild in comparison with that in England and France.

In America (1696) and in England (1727) the Quakers had been the first organized body to condemn the slave trade. Two American Quakers, John Woolman (1720–72) and Anthony Benezet (1713–84), the latter a correspondent of Sharp and a medium of information for Clarkson, were of international importance. The first European state to abolish the slave trade, however, was Denmark, which in 1792 prohibited the importation of slaves to its own possessions; this decree was made effective in 1803.

The fundamental problem concerning the means whereby abolition was to be made universal and effective continued to vex the English abolitionists. The African Institution was organized in 1807 to replace the old Abolition Society of 1787. The primary objects of the new organization were to watch over slave traders, to procure abolition in other countries and to promote the civilization of Africa by missionary enterprise and by commerce. The destruction of the traffic would, it was hoped, ameliorate the lot of the slaves in the West Indies and make possible the economic development of Africa.

The immediate task, however, was to lay plans for universal abolition at the end of the Napoleonic wars. Lord Castlereagh, who had voted against British abolition on the ground that the act could not be enforced, devoted his years at the Foreign Office (1812–22) to securing universal outlawry of the traffic in slaves. Other British foreign secretaries applied themselves to the same problem with the result that between the end of the Napoleonic wars and the Webster-Ashburton Treaty (1842) the slave trade was put under the ban of the civilized world, and machinery for its suppression, such as the mutual right of search, cruising squadrons and mixed commissions, was established.

Nevertheless, because of the great demand for slaves in Brazil, Cuba and the United States, universal outlawry and all the means of law enforcement could not prevent the Atlantic slave trade from reaching its height between 1830 and 1860. This was largely due to the increased market for cotton, coffee, sugar and other tropical products. Smuggling to the British colonies was checked by a registry of slaves before the death of Castlereagh in 1822, but elsewhere the illicit trade flourished. British antislavery propagandists saw that slavery would have to be abolished not only as an evil in itself but in order to make the abolition of the trade effective. Accordingly in 1823 an Anti-Slavery Society was organized to effect the gradual emancipation of the slaves in the British colonies. After a bitter ten-year struggle, under the leadership of Thomas Fowell Buxton and Zachary Macaulay, a measure favoring British emancipation, including a four and a six year period of apprenticeship, became law in 1833. This victory was partly due to the fact that British slavery had become unprofitable. The British Empire was expanding its trade in the temperate zones and in Asia. The East Indian interests helped in the attack on the West Indian sugar monopoly in England and joined in the antislavery cry. To establish emancipation it was necessary for the British government to offer only £20,000,000 as partial compensation to the financially embarrassed colonial interests smarting under the blows of the humanitarian attack. Neither the warning example of Haiti nor the possibility that the sugar colonies might be completely ruined was sufficient to stop the antislavery movement.

To secure universal emancipation, obviously the next step, the British and Foreign Anti-Slavery Society was organized in 1839. It has been active ever since. Throughout the entire history of the abolition movement the chief influences in forming abolitionist sentiment in other countries had emanated from England. Now the new society applied itself to its missionary task with redoubled fervor and administrative competence. It summoned two international antislavery conventions in 1840 and 1843, in both of which American abolitionists were greatly interested.

In spite of sporadic beginnings in the eighteenth century and such attempts in the first decades of the nineteenth century as the formation of the American Colonization Society in 1816, abolition did not become a serious problem in the United States until 1831. In that year the South was alarmed by the defeat, by only one vote, of a bill in the Virginia senate to colonize free blacks and thereby encourage private emancipation of slaves. Even more disturbing was the unyielding tone of William Lloyd Garrison's *Liberator*, first published in 1831. With a passionate conviction Garrison denounced

the conspiracy of silence about the institution of slavery, and insisted on being heard. He had to contend against indifference, antipathy to the blacks, belief in moderation, the fear of disturbing the delicate status quo and especially the economic dependence of the North on southern cotton. Historical opinions differ as to the wisdom of Garrison's extremist stand, but there can be no question that he did manage to attract attention to the slave problem. In 1832 the New England Anti-Slavery Society was organized, and the next year the American Anti-Slavery Society was formed under the presidency of Arthur Tappan, with Garrison as one of the secretaries. Their members were extremely effective in organizing abolitionist sentiment and bringing the whole issue unpleasantly to the fore. They invaded the church, the college and the law court; they used the lecture platform, the public meeting and the political party; they spread antislavery literature even in the South. They had adherents as respectable as Wendell Phillips, John Greenleaf Whittier, Lewis Tappan, Edmund Quincy, Joshua Leavitt, William Jay, James G. Birney, William Goodell and Amos Phelps; in Congress John Quincy Adams presented their petitions in spite of the opposition in the South. The killing of Elijah P. Lovejoy in 1837 because of his antislavery utterances intensified the abolitionist feeling. The growing tendency of Garrison to fight for causes other than antislavery, such as woman's rights and non-resistance, produced an antislavery split in 1840. Garrison and his followers believed that both the churches and the Union were in the hands of the slave power and they were ready to break up the Union. The Tappans, the Beechers, Joshua Leavitt and their followers believed that the churches and the Union could be used to destroy slavery. One group opposed political action; the other favored it.

The problem of the annexation of Texas was made a test case by the antislavery forces on both sides of the Atlantic. The war with Mexico, the annexation of the new territory in the Southwest, and the passage of the Fugitive Slave Law (1850) alarmed the abolitionists and directed their energy even more intensely into the channels of press propaganda. A realignment of sections on the basis of the nascent industrialism brought the Northwest and the East together. The political evidence of this realignment was the organization of the Republican party between 1854 and 1860 with its program of high tariff, free homesteads, a friendly attitude toward immigrants, and the non-extension of slavery. This constituted notice to the South that its economic and political life in the new industrial age would be circumscribed. The Republican victory in 1860, the secession of the South and the emancipation of the slaves as a war measure are part of the well-known story of slavery in America. The decade of the fifties had witnessed the education of the North in the Unionist sentiments of Daniel Webster, at the same time that the fictional propaganda of *Uncle Tom's Cabin*, the story of "Bleeding Kansas," the Dred Scott decision and Helper's *Impending Crisis* had destroyed the possibility of further compromise with the South.

Some nations had emancipated their slaves before the Civil War, others followed later. Mexico freed her slaves in 1829, and various provisions for emancipation were made by Argentina, Colombia and other Latin American states. Slaves in the Danish and French colonies were emancipated in 1848 and in the Dutch colonies in 1863; Cuban slavery disappeared under the act of 1870 providing for general freedom; Portuguese slavery was abolished in 1878; and freedom in Brazil was decreed by an act of 1888. Moreover from 1861 to 1865 British abolitionists were almost as much interested in the abolition of Russian serfdom as in the freeing of the American slaves.

The approaching end of slavery in the Americas made possible the opening up of Africa as contemplated by Clarkson, Wilberforce and Pitt. Their chief purpose had been to stop the slave trade so that Africa might enjoy an orderly economic development, but success was slow. The colonization of Sierra Leone was relatively a failure; Buxton's Niger expedition of 1840 came to a sad end. Africa remained practically unknown to Europeans, although the French established themselves in Algiers in 1830 and the British were in possession of the Cape of Good Hope. After 1850 missionaries and explorers, Livingstone among them, began to penetrate into Africa. With the development of European imperialism about 1870 the scramble for the complete partition of Africa was intensified. It continued in the readjustments of territory after the Great War. An increasing demand for African products has brought the dark continent into the stream of the world's economic life but has left the problem of the protection of the natives as a task for enlightened world opinion and governmental administration by the European powers. The relative ease with which

the Negro can be subjected to forced labor makes it possible that Africa may even now become a land of peons. The Anti-Slavery and Aborigines Protection Society and similar organizations elsewhere are therefore constantly active in bringing pressure to bear on their own governments and at Geneva to secure conventions giving colored men the maximum amount of protection against exploitation, and to assure their advancement in civilization.

Abolition has been in the past applied mainly to the attitude which aims to stamp out slavery and, by an extension of meaning, serfdom or forced labor. As applied to slavery it has meant at different times and in different contexts a program ranging all the way from the desire merely for gradual manumission of slaves to the complete and immediate extirpation of slavery as an institution. Within these extremes there have been such gradations as plans for the colonization of free blacks, or the redemption and colonization of slaves, or the outlawry of the slave traffic. Among abolitionists there has been uniformity neither of program nor of temper; extremists and pragmatists have mingled their counsels; and it is a testimony to the underlying community of purpose in the New England Anti-Slavery Society that it was able to keep together members as moderate as Samuel May and as uncompromising as Garrison.

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See: SLAVERY; SERFDOM; PEONAGE; FORCED LABOR; HUMANITARIANISM.

Consult: Ingram, J. K., *A History of Slavery and Serfdom* (London 1895). FOR THE MOVEMENT IN ENGLAND AND FRANCE: Clarkson, Thomas, *The History of the Rise, Progress and Accomplishment of the Abolition of the African Slave-Trade by the British Parliament*, 2 vols. (London 1808); Mathieson, William L., *British Slavery and Its Abolition, 1823–1838* (London 1926); Klingberg, F. J., *The Anti-Slavery Movement in England* (New Haven 1926); Hardy, Charles O., *The Negro Question in the French Revolution* (Menasha, Wis. 1919). FOR THE MOVEMENT IN AMERICA: Woodson, Carter G., *The Negro in Our History* (4th ed. Washington 1927); Adams, James T., *New England in the Republic, 1776–1850* (Boston 1926) ch. xvii; Catterall, H. H. T., *Judicial Cases concerning American Slavery and the Negro*, vol. i– (Washington 1926–); *A Side-Light on Anglo-American Relations, 1839–1858, Furnished by the Correspondence of Lewis Tappan and Others with the British and Foreign Anti-Slavery Society*, ed. by A. H. Abel and F. J. Klingberg (Lancaster 1927). FOR THE PRESENT DAY SITUATION IN AFRICAN TERRITORIES: Lugard, F. J. D., *The Dual Mandate in British Tropical Africa* (2nd ed. Edinburgh 1923); Buell, R. L., *The Native Problem in Africa*, 2 vols. (New York 1928). See also the biographies of outstanding abolitionists and the bibliographies following them.

ABORTION is the practise of giving birth to the foetus before it has become a viable human being, which is twenty-six weeks after conception. Legally miscarriage is understood to mean the same thing. The practise existed in historic times and with some exceptions is fairly evenly distributed all over the world. Plato and Aristotle approved of it, Aristotle looking at it from the standpoint of a Malthusian check on population. Hippocrates, on the other hand, referred to it in his famous oath in these words: "I will not give to a woman a pessary to produce abortion." Seneca thought it immoral but not a criminal act, while Cicero spoke approvingly of a case in Miletus where a woman was put to death for practising abortion. She had, he said, robbed the father of his hope and of the memory of his name, destroyed the support of the family, deprived the household of an heir and the state of a citizen. The *Digest* and the Justinian code made abortion a criminal offense, but these prohibitions date from a later period and in the Roman Empire, as well as in the Hellenistic world, abortion seems to have been very common among the upper classes. The Christian church opposed the pagan attitude and in its canons abortion became a sin. As a result legal practises in Christian communities under the influence of the church made it a crime punishable with varying degrees of severity, although Anglo-Saxon law considered abortion an ecclesiastical offense only.

Among primitive peoples there are many various reasons for abortion. The same economic motives which are operative in the case of infanticide are operative also in the case of abortion. Psychological motives are also of considerable importance. A significant factor is a fear of disgrace because the child may be born out of wedlock, or because it may be born too soon after marriage, or because it may mean more than a certain fashionably approved number of children, or because the child may appear at the wrong time. No less effective are motives of vanity or the fear of losing the attention of the husband. Under primitive conditions when lactation is a prolonged process, the woman fears that the prescribed continence during that time is undesirable or unpleasant to the husband, and in order not to alienate his affection she will avoid giving birth to a child. Often the difficulties of a nomadic life will make women seek to avoid the additional burden of childbearing. Primitive women never resort to abortion for the protection of their own

health, although some may resort to it in order to escape the pains of childbirth. In India child marriage and frequent early widowhood force women to resort to abortion in order to hide illicit sexual relations. In Persia to give birth to a child means death to an unmarried girl, widow or divorced woman, and accordingly abortion is frequently resorted to. Among Moslems there is an additional reason in the credence given to a pregnant woman's superstitious fear that she may have a bad delivery. For this and other reasons it is claimed that in Moslem countries there are public places for the practise of abortion.

In communities living within the pale of western civilization abortion is also common although, because of the usual legal prohibitions and restrictions, information as to its frequency is difficult to obtain. The motives for the practise are much the same as in primitive communities, except for the one difference that the disgrace which is attached to the unmarried mother is greater among civilized than among primitive peoples. Available information, however, shows that abortion is more common among married than among unmarried women. The explanation of this fact may be found in the lenient attitude of the community toward the married woman as compared with the critical attitude toward the unmarried, making the former far less afraid than the latter to confess to abortive practises.

A survey made among the practising physicians in Maine showed an estimate of 63.5 percent of abortions as criminal; while a nation-wide survey among one hundred physicians brought the estimate that one third of all pregnancies throughout the country end in abortion, giving an absolute figure of not less than 100,000. A large number of these are criminal, causing the death of some 6000 women yearly. In Great Britain, exclusive of Ireland and Scotland, "it is estimated that of legitimate pregnancies one in twenty end in stillbirth, and of illegitimate one in ten." Bertillon reported that the proportion in France was 193 to 1000, while Doleris claimed that between 35 and 40 percent of pregnancies in France were interrupted, and Landroy stated in 1912 that there were then more abortions than births, there being 70,000 abortions to 63,000 births in Paris. In France the abortions number 500,000 annually or nearly two thirds of the births. In Denmark the illegitimate stillbirths are twice as numerous as the legitimate. A study made of criminal abortion in East Prussia indicates a frequency of between ½ and 2 percent of all pregnancies. It is also estimated that in East Prussia from 70 to 80 percent of premature births at all stages of pregnancy are due to interference. Dutch statistics vary from 7 to 33 percent, according to the experience of the obstetrician. Russian statistics indicate about one third, and American experience is said to indicate the same number of purposely interrupted pregnancies.

The East Prussian study mentioned above gives as motives for the practise of abortion in one third of the cases the fact that a new child could not be maintained without lowering or impairing the standard of living of the family. In 25 percent of the cases the families believed they had all the children they could support; in another 25 percent the parents said that they did not wish to be inconvenienced by children; in 13 percent the mothers were unmarried and feared the disgrace attaching to their condition; in 4 percent the illness of the mother was the reason for abortion; and in the remainder of the cases the cause was the mother's fear that she would die during labor or that she would give birth to an unhealthy child. It appears, therefore, that except in cases in which the health of the mother demands it, the practise of abortion in civilized communities is primarily due to motives of material comfort in the case of married women and to the convention of chastity in the case of unmarried women. It is difficult to establish any connection between actual poverty and abortion in civilized society, whatever may be the case in primitive communities. Abortion is due in part to the general attitude of a community toward birth control or the limitation of offspring, and it will be resorted to when and where contraceptive methods are forbidden or not well understood.

Abortion will also be found to be a consequence of the urban middle class attitude toward illegitimacy. Although the dominance of the city has extended bourgeois morality over the whole social structure, it is still true that in communities living under peasant or semi-peasant conditions abortion is by no means general, although it is known and practised. In such communities children are generally considered a blessing and a child is not considered illegitimate when born before marriage, as long as the father is known and it is expected that marriage will soon follow. Nevertheless,

under the pressure of contact with urban conditions, this attitude is disappearing. Church influences are also helping in this direction. The tendency of young men to go to the city for work or for army service removes them from the influence of the local mores and marriage no longer follows the birth of an illegitimate child as a matter of course. In such a situation the mother is likely to resort to abortion because she is afraid of finding herself in disgrace. Moreover, if her parents do not approve of the suitor, the daughter may resort to abortion in order to avoid their wrath.

The urban mores of the middle class have enhanced the value of chastity, and the legitimation of prenuptial conception has become obsolete. Greater impersonality of social relationships, the desire for fewer children, the greater seclusion of women, the increased instability of the male, the possibility of sexual relations for the male in the city without recourse to matrimony or danger of offspring, the larger influence of religio-moral ideals and perhaps also a reaction away from rural customs are additional reasons. As deviations from the current moral code become more offensive, there is a greater necessity to hide such deviations and abortion is one of the means adopted.

As to the methods of abortion, Hovorka and Kronfeld classify them in three groups, as follows: first, mechanical, which includes indirect methods (lifting heavy weights, jumping, bleeding) and direct methods (perforation); second, internal medicine, which may be either purgatives or "special" remedies such as juniper; third, magic practises. They also enumerate 174 objects, instruments and methods found in use in classic and modern times and among primitive and civilized communities.

The general legal and moral attitude in most modern communities is in contrast to that of Soviet Russia. Under the czarist regime the penalties for the aborting mother and for the person who performed the abortion were extremely severe. The Soviet regime abolished these penalties in 1917 and made abortion legal. This new situation soon resulted in a crowding of the hospitals with women suffering from infections resulting from unscientific operations. The government decided to exercise supervision over the matter and in 1920 it became illegal for abortions to be performed outside of hospitals or by unqualified persons. In 1924 it was provided that petitions for abortion should be presented to a local commission composed of one doctor and a number of members of the local women's organization. The women consider the social and economic conditions of the applicant and decide whether, in her economic condition, she has enough children; the doctor decides the matter from the standpoint of the effect on the mother of the forthcoming delivery. In a city of about 30,000 inhabitants the commission, sitting once a week, received applications from 20 percent of the pregnant women and granted permission to 18 percent. The legalizing of abortion is said to have resulted in no increase in the number of aborting women, as the proportion in Russia is the same as in Germany where abortions are still illegal.

The literature of the problem is shot through with discussions as to the moral justification for the practise. Havelock Ellis has given a full discussion of this aspect, which is essentially in contrast to the social-scientific analysis presented here. Much to the point are the remarks of Iwan Bloch that it is utterly inconsistent for the state to consider as sacred the life of the child before it is born and to punish anyone who interferes with its preservation, and then to consider that same child as a bastard as soon as it is born and for the rest of its life.

MAX SYLVIUS HANDMAN

See: BIRTH CONTROL; INFANTICIDE; BIRTH RATES; ILLEGITIMACY; CHASTITY; SEX ETHICS.

Consult: Carr-Saunders, A. M., *The Population Problem* (Oxford 1922) and bibliography given there; Westermarck, E., *Origin and Development of the Moral Ideas*, 2 vols. (2nd ed. London 1912–17) vol. i, p. 413–17; Hovorka, O. V., and Kronfeld, A., *Vergleichende Volksmedizin*, 2 vols. (Stuttgart 1908–09) vol. ii, p. 541–43; Ploss, H., and Bartels, M. and P., *Das Weib in der Natur- und Völkerkunde* (11th ed. Berlin 1927) chs. xxvi–xxvii; Temesváry, R., *Volksbräuche und Aberglauben in der Geburtshilfe* (Leipsic 1900); Lecky, W. E. H., *History of European Morals*, 2 vols. (3rd ed. London 1877) vol. ii, p. 20–24; Bloch, I., *Das Sexualleben unserer Zeit* (9th ed. Berlin 1909), tr. by M. E. Paul (London 1910); Hirsch, Max, *Fruchtabtreibung und Präventivverkehr im Zusammenhang mit dem Geburtenrückgang* (Wurzburg 1914); Villard, H. G., "Legalized Elimination of the Unborn in Soviet Russia" in *Journal of Social Hygiene*, vol. xii (1926) 294–98; Ellis, Havelock, *Sex in Relation to Society*, Studies in the Psychology of Sex, vol. vi (Philadelphia 1913) p. 601–12.

ABOUT, EDMOND (1828–85), French man of letters and popularizer of economic doctrines. He was educated at the Ecole Normale and at the French School in Athens, and devoted himself to literature and to political and

economic writing. As an economic writer he popularized the orthodox laissez-faire doctrine on labor problems, doing this first as a story teller in *Maître Pierre* (Paris 1858) and in the *Lettres d'un bon jeune homme* (Paris 1861), and then in a more direct and didactic manner in *Le progrès* (Paris 1864), *L'A B C du travailleur* (Paris 1868), and *Le capital pour tous* (Paris 1868). In his political writing he is known chiefly for his *La question romaine* (Paris 1859, tr. by H. C. Coape, London 1859), a bitter denunciation of the regime of the papal states and a plea for nationalism in religion. Though About was on friendly terms with the government of the empire, the book had to be published in Brussels and was forbidden admission into France. After the fall of Napoleon About accepted the republic and became the editor of the review, *Le 19e siècle*, which he made an organ of anticlericalism and conservative republicanism. He also published an extremely nationalistic book on *Alsace* (Paris 1873). His work in literature won him membership in the French Academy (1884). A selection of his letters was published in *La nouvelle revue*, 3rd series, vol. xxi (1911) 289–322.

BENJAMIN GINZBURG

Consult: Deschamps, Gaston, "Edmond About" in *La revue hebdomadaire*, vol. xxxiii (1924) no. xi, 164–86; Colonel Gruau, "Le centenaire d'Edmond About" in *La nouvelle revue*, 4th series, vol. xciii (1928) 3–12 and 123–31.

ABOVIAN, KHACHATOUR (1804 or 1805–48), also known as Khachatour Andonian Aboviantz, founder of modern Armenian literature and great pioneer in popularizing education. He was born in a small village near Erivan, the son of well-to-do and distinguished parents, and enjoyed the advantages of the best schooling of his time. In his early years he became intimately associated with several German scientists traveling in the Caucasus. In 1830 he studied at Yuriev (Dorpat) University on a fellowship. He returned to Tiflis six years later and became headmaster of a school; later he occupied a similar position at Erivan.

In 1839 he composed a primer for beginners to make teaching intelligible and learning attractive in the elementary grades. This was followed in 1841 by *Verk Haiasdani*, a novel written in a vividly descriptive style, interspersed with folk songs and portraying faithfully the political and economic conditions under which the common people lived and suffered. He also wrote fables in verse, poems, short plays and essays, many of which served as reading texts in schools. His literary as well as his pedagogic work was done in the Armenian vernacular as distinguished from the "written language" of the time, which was ponderous and unintelligible to the masses. Abovian's activity served thus as a turning point in the method of Armenian education and opened the modern era in Armenian literature. His works, in Armenian, were collected and published by Isaac Zhamhariantz (Moscow 1897).

LEON ARDZROONI

Consult: Haxthausen, A. von, *Transkaukasia* (Leipsic 1856), tr. by J. E. Taylor (London 1854) p. 203–46.

ABRAHAMS, ISRAEL (1858–1925), Anglo-Jewish teacher, author and communal worker, was educated at Jews' College and at the University of London and from 1899 until 1905 acted as senior tutor at the former institution. He also was reader in Rabbinics at Cambridge University until his death. One of the founders of the Jewish Religious Union, later the Liberal Jewish Synagogue, he acted as lay preacher at frequent intervals. Together with Claude G. Montefiore he was the founder and joint editor of the *Jewish Quarterly Review* from 1888 until 1907 and in this capacity had a far reaching influence on the development of Jewish learning throughout the English speaking world. He was also one of the founders of the Jewish Historical Society of England, and until his death edited the society's *Transactions*.

Abrahams was a prolific writer and possessed the rare ability to popularize abstruse subjects. He published a considerable number of volumes of essays on various phases of Jewish history and literature. His best known book is his *Jewish Life in the Middle Ages* (London 1896), a pioneer work in the field of Jewish social history. Abrahams utilized the *Responsa* of the mediaeval rabbis for the history of that period and, after the works of Berliner and Gudemann, his was the first attempt to give a composite picture of Jewish life in all countries during the Middle Ages. His *Studies in Pharisaism and the Gospels* (Cambridge, Eng. 1917; 2nd series, Cambridge, Eng. 1924) marks a distinct step in advance in the treatment of the problem of the relations of the Gospels to rabbinic literature.

JULIUS H. GREENSTONE

Consult: Loewe, Herbert, "Israel Abrahams" in *American Jewish Year Book*, vol. xxviii (1926) 219–34; introductory articles by S. S. Wise, Dudley Wright, M. H. Harris, F. J. Foakes-Jackson, Nathan

Krass and C. G. Montefiore in *Jewish Studies in Memory of Israel Abrahams* (New York 1927) p. xi–lxvi.

ABSENT-VOTING. The expansion of business enterprises from purely local operations into statewide, interstate and even international activities during recent decades, the multiplication of itinerant vocations, the greatly augmented number of state and federal officials and employees, the enormous influx of students into colleges and universities, together with the ease and rapidity of modern means of transportation and intercommunication, have entailed the absence of thousands of eligible voters from their legal voting residences throughout much of the year, often including the days when primaries and general elections occur.

Until the enactment of absent-voting laws, beginning with Vermont (1896) and Kansas (1901, 1911), such voters were in effect disfranchised if unable to appear in person at the polls in their home precincts on primary and election days. To remedy this defect in our election system, all but three states (Connecticut, Indiana and Kentucky) now (1929) have laws which permit such absentees to mark an official ballot (a) at home, in anticipation of absence on election day, or (b) at some other place in the voter's home state, where he may happen to be on the day of election, or (c) at some point outside of his own state. The ballot thus marked is mailed, or delivered in person, either to the election officials in the voter's home precinct, there to be counted on election day, or to a county canvassing board or official, to be counted at the official canvass shortly after the election.

The earliest absent-voting laws were exclusively for the benefit of citizens serving in the Union army during the Civil War; and at least two such laws (in Maine and Pennsylvania) are still on the statute books. At the present time, however, only four states (Maryland, New Jersey, Pennsylvania and Rhode Island) restrict the privilege of voting *in absentia* to persons in the army or navy. While most of the mobile classes of the population are now taken care of, no state permits absent-voting, indiscriminately, by all classes of civilians. Most laws prescribe that the voter shall be "unavoidably" or "necessarily" absent, or absent "because of his duties or occupation." The law of Michigan is more specific and generous than most of such laws, extending the privilege of absent-voting to persons in the actual service of the United States or of the state, students in institutions of learning, public-school teachers, persons enrolled in military or naval training camps, members of the legislature while attending legislative sessions, railway employees, commercial travelers, sailors engaged or employed on the Great Lakes or in the coastwise trade, and "persons necessarily absent while engaged in the pursuit of lawful business or recreation." Although absence from the election district is a usual prerequisite, about fourteen states, including Michigan, allow absent-voting by persons detained at their homes by illness or disability.

The meager statistics available indicate that comparatively few voters actually take advantage of the absent-voting laws. The explanation is largely to be found in the newness of most of these laws and the failure of election officials and party workers to give adequate publicity to the opportunities which they hold out.

Absent-voting legislation has been held unconstitutional by the state supreme courts in Kentucky (1921) and, as it applies to the civilian population, in Pennsylvania (1925).

P. ORMAN RAY

See: REGISTRATION OF VOTERS; NON-VOTING; ELECTIONS; SUFFRAGE.

Consult: Benton, J. H., *Voting in the Field* (Boston 1915); Rocca, Helen M., *A Brief Digest of the Laws Relating to Absentee Voting and Registration* (Washington 1928); Ray, P. Orman, *An Introduction to Political Parties and Practical Politics* (3rd ed. New York 1924) p. 280–87, 583–84; Pollock, J. K., Jr., "Absent-Voting, with Particular Reference to Ohio's Experience" in *National Municipal Review*, vol. xv (1926) 282–92.

ABSENTEE OWNERSHIP. Separation of the place of residence of property owners from the location of the property from which they derive an income and which they ultimately control gives rise to economic and social problems of wide ramifications. The subject seems first to have attracted serious attention in connection with conditions in pre-revolutionary France. Here one of the important factors in the situation was the removal of the higher nobility to the capital after the final triumph of the crown over feudalism in the mid-seventeenth century, and their transformation into elegant, but parasitic and extravagant courtiers. It must be observed that clear recognition of absenteeism as an active cause of the discontent which culminated in the revolution is much easier to find in the analyses of later historians than in the writings of the period, though antipathy to the

bailiffs who managed the estates is one of the recurring notes in the *cahiers* of 1789.

Historically absenteeism is more famous, or at least has received much more discussion at the hands of recognized economists, in connection with the Irish question, which was so important during the nineteenth century. More recently a similar agitation has been carried on in regard to India. Around the middle of the century it was estimated that as much as one third of the entire produce of Ireland was sent out of the country in payment of rents to absentee proprietors. The leading economists of the liberal school took an active interest in the Irish question, and the effects of absenteeism were argued especially by McCulloch, Longfield and Senior. McCulloch held that it is a matter of indifference whether proprietors live and consume their incomes in the country or abroad. Longfield, lecturing at Dublin in 1834, admitted the validity of much of the orthodox liberal reasoning, particularly as against popular arguments, such as that of Swift, to the effect that the country was being drained of its gold and silver. But he endeavored to show that absenteeism is disadvantageous in various ways. Senior took a somewhat intermediate position, but nearer to the indifference side. Longfield's reasoning as to effects on prices and costs raises issues of general theory not yet settled, but he showed a good deal of insight in emphasizing social considerations. He particularly stressed the influence on the quality of agricultural management due to the interest a resident will naturally take in his estate, and also the influence of the proprietor's leadership and example in community affairs and mode of life. He held it to be axiomatic that any influence exerted would be for the good, since any bad example or suggestions would be ignored. It is of interest that Adam Smith inclined to the opposite view, that the residence of wealthy spenders in a community tends to corrupt rather than to improve social morale.

In the past two generations the question of farm tenantry has received extensive notice in the United States, as the general problem of land tenure has always and everywhere. But factual study shows that conditions in America do not involve on a considerable scale the holding of land for investment by absentees. In this country absenteeism is more discussed in connection with "industry" and, in particular, the separation of investment from control through various modern devices of corporate organization and finance, holding companies, classification of securities, banker domination, etc. The high point of the attack on grounds of general social effects is perhaps Thorstein Veblen's *Absentee Ownership*. Currently the discussion of branch banking and chain stores exemplifies argument or prejudice in one direction, opposite to that shown in the general scramble of communities to secure immigration of capital or its owners on nearly any terms.

Allusion has already been made to some of the theoretical issues raised by the general question of absenteeism. Such ideas as that of draining a community of its money may of course be dismissed. In the logic of abstract individualistic economics, it is a matter of indifference to all other individuals where any particular individual resides. Even the matter of men's pleasure or displeasure in each other's society would theoretically find effective expression in the competitive determination of places of residence (though only to the extent that such feelings are mutual). In this field, as in others, the classical economists reasoned awkwardly and often erroneously to conclusions which have a sound theoretical basis, which actually represent the main long-run economic tendency, and which are generally correct in their practical emphasis as against ruling popular fallacies. But, in the first place, some of the implicit assumptions of the individualistic theory are more or less contrary to fact and reasonable possibility and, in the second place, there are questions of community interest which are not practically reducible to individualistic terms.

Relative to the first head are some consequences of mobility and immobility. Any measure which increases the population and volume of business in a community naturally works to the direct economic advantage of the owners of immovable wealth in that community, and more or less to the advantage of the numerous other sorts of persons who have localized vested interests. Some productive activities (some "industries") are located, either by necessity or because of decisive advantage, near immovable natural resources or other productive conditions; some follow the residence of the consumers—this is true strictly of personal services and in varying degree of final manufactures; some can without great difference in technical efficiency be moved about inside wide limits. Consequently the issues involved in absentee ownership overlap exten-

sively with those involved in the broader questions of interregional economic relations, specifically, "protectionism" in all its forms. There is no doubt that Senior followed a sound intuition in making the effect of absenteeism depend to a considerable degree on whether conditions in the "home" country are such that the income would be transferred in the form of raw produce or in that of manufactured goods.

Of community interests which do not find adequate expression in contracts between individuals the most immediate and direct is the political, including taxation and military service. Neither of these goes absolutely with location, but in general that connection holds. Distribution of power to tax and of the proceeds of taxation between the community which is the source of the wealth and that in which the owner lives was one of the early questions taken up by the League of Nations, and is a source of growing conflicts of interest within all large nations; it holds possibilities of an especially acute sort for a federal system such as that of the United States, and in general confronts with a theoretically insoluble problem all efforts to combine local autonomy in government with political unity on a broad basis.

Less tangible but equally important consequences of place of residence are expressed, in their extreme development, in the whole difference between a rural and an urban civilization. Even in modern industrial nations cities are predominantly aggregations of consumers, and of the service occupations and industries which supply the immediate wants of consumers. And since in a broad sense civilization is an urban phenomenon it is also a phenomenon of absenteeism in its manifold variations. The political effects obviously depend on the extent of the separation of political jurisdiction between the localities of residence of owners and of the property itself.

A phase of absenteeism which has received much attention first and last is the effect on labor policy. It is undoubtedly true that a humane attitude on the part of employers, in opposition to their purely economic interest, is more likely to go with some personal contact—though the reverse may hold in some cases. More important, undoubtedly, is the greater likelihood of an *intelligent* policy of control, working to the mutual economic advantage of employer and employee, when there is direct contact without the intervention of a managerial bureaucracy. But again, a salaried administrative staff may be more, and not less, intelligent in personnel policy in comparison with ultimate proprietors. It is difficult to generalize, and if independence and self-reliance are recognized as ethical values and paternalism as a danger, it is clear that "there are two sides" to the whole question of personal relations versus the cash nexus.

FRANK H. KNIGHT

See: LAND TENURE; FRENCH REVOLUTION; LATIFUNDIA; FARM TENANCY; RURAL SOCIETY; INVESTMENT; FOREIGN INVESTMENTS; CORPORATION; HOLDING COMPANY; LOCALIZATION OF INDUSTRY; DOUBLE TAXATION; ECONOMIC ORGANIZATION.

Consult: ON PRE-REVOLUTIONARY FRANCE: Taine, H. A., *L'Ancien régime*, 2 vols. (23rd ed. Paris 1900), tr. by J. Durand (New York 1896); Lowell, E. J., *The Eve of the French Revolution* (4th ed. Boston 1925); Sée, Henri, *La France économique et sociale au xviiie siècle* (Paris 1925), tr. by E. H. Zeydel as *Economic and Social Conditions in France during the Eighteenth Century* (New York 1927).

ON IRELAND: Johnston, C., and Spencer, C., *Ireland's Story* (Boston 1923); Lecky, W. E. H., *Leaders of Public Opinion in Ireland*, 2 vols. (3rd ed. London 1903); Smith, Goldwin, *Irish History and the Irish Question* (New York 1905).

IN GENERAL: Longfield, M., *Three Lectures on Commerce and One on Absenteeism* (Dublin 1835); Senior, N. W., *Political Economy* (6th ed. London 1872); Veblen, T. B., *Absentee Ownership and Business Enterprise in Recent Times; the Case of America* (New York 1923).

ABSENTEE TAXATION. *See* TAXATION.

ABSENTEEISM (LABOR) refers to time lost in industrial establishments by avoidable or unavoidable absence of employees. Time lost by strikes and lockouts or by lateness amounting to an hour or two is not usually included. Absenteeism is measured either in the percentage of time lost as compared with the total scheduled time of work including authorized overtime, or more popularly in the number and fraction of working days lost per year. Since working days approximate three hundred per year, the percentage of time lost may be translated into days lost per year by multiplying by three.

A further and more important complication in measuring absenteeism lies in the lack of any standard upper limit to the period of absence. When an employee has been absent, say nine months, some establishments may continue to keep his name on the books and to add in his lost time, while other establishments may consider that he has left his employment and will simply "write him off" as a case of

labor turnover. The lack of any definite limits where absence passes into labor turnover restricts the use of statistics of absenteeism in the comparison of different establishments, different industries or different countries.

If a limit of six months is taken arbitrarily, then the "unavoidable" loss of time due to sickness and non-industrial accidents may be estimated for England and America as averaging about 1.85 percent for men and 2.20 percent for women or about five and a half working days per year for men, six and a half for women (Florence, p. 202). This rate varies seasonally, sickness being considerably higher in winter than in summer. The other elements in unavoidable absenteeism are more difficult to average. Absence due to industrial accident varies greatly from industry to industry. In the metal industries of both America and England the time lost by men on account of industrial accidents is about one and a half days per year. Probably the accident rate is roughly the same on railways but two or three times as much in coal mines and less than half in textiles and other manufacturing industries. Adding all elements in unavoidable absenteeism, male employees may be expected to lose from six to ten and a half working days per year, i.e. 2 percent to 3.5 percent of their time, according to the industry, in unavoidable absence of not more than six months' duration.

"Avoidable" absence, that is, absence not due to sickness, accident or family circumstances, is yet more variable, and the *total* absence found by actual record during the period of the war in various English establishments ran from 5.3 percent to 14.3 percent of the total working time in the case of men and from 7.6 percent to 12.3 percent in the case of women (Florence, p. 189). In post-war days the Royal Commission on the Coal Industry reported 22¾ days lost by coal miners in 1924 due to all personal causes, i.e. almost 8 percent of the total working time, but the proportion varied widely from district to district, and in the intensive investigation of the Industrial Fatigue Research Board absenteeism in a group of ten collieries was found to average 12.5 percent.

The chief source of absence statistics in America are not government inquiries but the records of individual establishments. Establishments keeping and publishing such records would naturally be the more efficient, and hence it is not surprising to find a lower total absence rate centering around 5 percent of scheduled time, with percentages still lower among office staffs and in "model" establishments as a whole. Where government inquiries were made, however, such as in southern cotton mills and in shipyards during the war, rates of 11, 13 and 18 percent are quite comparable to the British extremes (Douglas). But in the Far East such statistics as have been published show a wide divergence from rates in the western countries, indicating an altogether different type of economy. The proportion of absence in Japanese coal mines runs as high as 33 percent for men and 45 percent for women.

Absenteeism is a serious problem in factory management because it involves heavy additional expenses. Either reserves and understudies must be held in readiness to take the place of the absent, or the overhead cost of idle equipment must be faced. Industrial employees do not usually ask leave to be absent beforehand or even give notice during an absence as to its expected length, so that the management is generally left in uncertainty as to the probable duration of any employee's absence and cannot take appropriate measures to fill the gap. The first obvious remedy which a wise personnel management should adopt to reduce the heavy expenses of absenteeism is therefore to encourage notification, especially in cases such as sickness when the duration of absence is likely to be long; and where other personal and family circumstances, e.g. illness of children in the case of married women employees, make absence unavoidable, to grant leave of absence liberally. A second type of remedy open to the factory management is to reduce the unavoidable absence due to sickness and industrial accident by recourse to the programs of the industrial hygiene and safety movements.

The wide margin between total and unavoidable absenteeism points to a third line of attack, namely the reduction of avoidable absenteeism. To some extent regularity of attendance may be encouraged by bonuses and other pecuniary inducements; but more can be effected by removing the underlying causes of absence. Absenteeism is probably a natural human reaction to the routine of the modern factory. There is a maladjustment between man's instincts and desires and the regular working habits that are imposed upon him. This routine can be relaxed or modified by granting vacations with pay, shortening or redistributing scheduled hours, having employees live nearer their work, and adjusting the physical conditions of the plant,

especially noise and ventilation. There is probably considerable physiological and psychic fatigue not sufficient to make a person recognizably ill, yet reducing the feeling of fitness and inducing an aversion to work. Minor and often avoidable physiological complaints appear to be a fertile source of the markedly higher rates of absenteeism found among women members of office staffs.

P. SARGANT FLORENCE

See: LABOR TURNOVER; ACCIDENTS, INDUSTRIAL; MORBIDITY; FATIGUE; INDUSTRIAL HYGIENE; SAFETY MOVEMENT; PERSONNEL MANAGEMENT.

Consult: Stone, E. L., and Cox, C., "Absenteeism in Industry: A List of References" in U. S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, vol. xxv (1927) 190–97; Princeton University, Industrial Relations Section, *Memorandum: Reduction of Absence and Tardiness* (mimeographed bibliography) (Ann Arbor 1928); Douglas, P. H., "Absenteeism in Labor" in *Political Science Quarterly*, vol. xxxiv (1919) 591–608; Florence, P. Sargant, *Economics of Fatigue and Unrest* (London 1924) ch. vii; Keir, J. S., "The Reduction of Absences and Lateness in Industry" in American Academy of Political and Social Science, *Annals*, vol. lxxi (1917) 140–55; Vernon, H. M., *Industrial Fatigue and Efficiency* (London 1921) chs. viii–ix; Watkins, G. S., *Labor Management* (Chicago 1928) ch. xiii; Fisk, E. L., and Sharp, C. T., "Health of Industrial Workers" in American Engineering Council, *Waste in Industry* (New York 1921) ch. xv; Vernon, H. M., and Bedford, T., "A Study of Absenteeism in a Group of Ten Collieries" in Great Britain, Industrial Fatigue Research Board, *Report no. 51* (London 1928); Best, E. L., "Lost Time and Labor Turnover in Cotton Mills" in U. S. Women's Bureau, *Bulletin no. 52* (Washington 1926).

ABSOLUTISM in the history of political theory has stood for two doctrines: the absolutism of the seventeenth and eighteenth centuries and Hegelian absolutism. These doctrines, separated in time and appearing at first sight to differ in substance, have yet, as we shall see, a definite historical connection. Absolutism in the seventeenth and eighteenth centuries was a doctrine suited to the absolutist monarchies which had been gradually coming into being since the Reformation. As a theory (e.g. in Hobbes) it applies to all governments—oligarchies and democracies as well as monarchies—but in practise its protagonists are always thinking of monarchies. It is the doctrine of the absolute right of the ruler, i.e. the affirmation that the ruler is bound neither by the laws of nature nor by any kind of moral or legal limitation. It is connected obviously with the doctrine of sovereignty which, first formulated with limitations by Bodin in the sixteenth century and given its classical definition by Hobbes in the seventeenth, was, as Jellinek says, a negative protest against the limitations imposed upon the growing nation states by the empire, the church and the feudal rights of the nobility. The nation states of Europe, as they were consolidated in the sixteenth and seventeenth centuries, were absolutist in the sense that they were released from these limitations. The ideal of a unified political organization for Christendom was finally abandoned and the absolute independence of the several sovereign states was recognized; the secularity of the state, its independence of, or superiority to, the church, and the omnicompetence of the central government over old standing customs, privileges and private jurisdictions were the more outstanding features of this new type of state.

But the distinguishing characteristic of the new state and the essence of absolutism is the state's relation to law. The mediaeval state rested on law. The monarch was above positive law but subject to the law of nature. This law of nature was conceived of as something fundamental and unalterable even by God, on the acceptance of which all society depended. Most sixteenth century writers, however much they may assert that the power of government is free from the more external limits, take for granted the overriding compulsion of the law of nature. It was Machiavelli's repudiation of such compulsion that made him so revolutionary a figure. But when the new movement comes to its maturity in Hobbes, the laws of nature are reduced to mere rules of expediency —with the far reaching consequence that for the view that social relations, and with them the state, are founded on law, is substituted the view that law is thought to be dependent on the state. These rules, says Hobbes of the laws of nature, men used improperly to call laws. For law is the word of him who by right exercises command over others. It is thus regarded as a command and as nothing else: its authority comes not from its content but from the authority of the person who commands it. This new attitude, as Figgis has pointed out, has its counterpart in contemporary theology. To Calvinist and Jesuit alike, actions are right because God commanded them—they are not commanded by God because they are right.

From this new conception of law all absolutism follows. If for the existence of law an *a priori* relation of commanding and obeying is

necessary, then personal authority is the basis of the state. To such authority there can be no limitations: for the only possible limitations would be another commander, which would mean anarchy; or the universal acceptance of some principle that should either delimit the spheres of different authorities or limit the commands of the one sovereign, which would mean that the law was not a command.

The basis for that personal authority may be expediency, as in Hobbes, or religion, as in the theory of the divine right of kings. The inner compulsion of absolutism is always the same. Man cannot be trusted to recognize and interpret any general moral or social principles; and that being so the only way in which the agreement and conformity necessary to government may be attained is the recognition by all of the authority of some person or persons who shall have entire power to do all that is necessary for society. There is paradoxically a connection between absolutism and toleration, as is clear from Hobbes. Agreement to obey an arbiter is the refuge of those who cannot agree on moral principles to guide their conduct.

Hobbes' absolutism was supposed to be compatible with other forms of government than monarchy. Government might be of one or more persons: its powers must be absolute in all cases. The monarchical absolutism of the divine right of kings was succeeded by the democratic absolutism of Rousseau, who marks the transition from the first kind of absolutism to the second. Rousseau takes for granted that law is a command but he also assumes that no individual has a right to command others. He therefore looks for an entity with the necessary authority to command, whose authority is to be compatible with the freedom of the individual citizens, and he finds what he seeks in the community or the general will. The omnicompetence and unlimited powers of the monarch are now transferred to the general will. This democratic absolutism upholds the complete independence of the nation state and the complete authority of this state over all other associations. Nevertheless it has to make a distinction between the actual government and the general will. Rousseau's doctrine is thus a return to the notion of government being limited by law, although his assumption that law is a command obscures the fact of this return. Rousseau's general will is really not a person who issues commands but a principle.

Rousseau's doctrine of the sovereignty of the general will was restated by Bernard Bosanquet in his *Philosophical Theory of the State*. Absolutism for Bosanquet, as for Bradley and other English Hegelians, has primarily a metaphysical meaning. Kant had shown that it is the nature of reason to seek for the unconditioned. For the Hegelians who made reason constitutive and not, as Kant insisted it should be, merely regulative, this meant that truth was to be found only in the unconditioned or absolute. Hence the distinction between appearance and reality based on the principle that what is in any way conditioned is so far only appearance. When this general point of view is applied by Bosanquet to political theory it easily takes up the suggestion from Rousseau that the sovereignty of the state can only reside in the community as a whole and that against the claims of such sovereignty there can be no limitations. The view that law is a command with its consequent denial that sovereignty can be in any way limited is retained by the conception of the state as a personality.

This modern absolutism involves a confusion between the state and society, and tends to ascribe power to political government over other associations, as for instance the church, on the ground that the state is society as a whole. It has been much criticized by recent political theorists, particularly Hobhouse, Laski and MacIver, on that score. It certainly does not do justice, moreover, either to international cooperation or to the original claim upon the loyalty of the individual made by such an institution as the church. The omnicompetent, entirely independent state which absolutism in all its forms presupposes no longer exists. It may perhaps be said that the modern state is returning more and more to a conception of political society more akin to the mediaeval than to that of which absolutism is the expression. It insists on the reality of the notion of a world society; it thinks of power as always conditioned by law or agreed principle; it is federalist rather than unitary; and it is no longer satisfied with the conception of law as a command. With all these positions absolutism in any sense is incompatible.

A. D. LINDSAY

See: SOVEREIGNTY; AUTHORITY; AUTOCRACY; MONARCHY; DIVINE RIGHT OF KINGS; STATE; PLURALISM.

Consult: MacIver, R. M., *The Modern State* (Oxford 1926) p. 133–45, 426–38; Figgis, J. Neville, "Political Thought in the Sixteenth Century" in *Cambridge Modern History*, vol. iii, ch. xxii; Allen, J. W., *A*

History of Political Thought in the Sixteenth Century (London 1928); Coker, F. W., "Pluralistic Theories and the Attack upon State Sovereignty" in *A History of Political Theories, Recent Times*, ed. by C. E. Merriam and H. E. Barnes (New York 1924) p. 80–119; Lindsay, A. D., "The State in Recent Political Theory" in *The Political Quarterly*, vol. i (1914) 128–45; Barker, Ernest, "The Discredited State" in *The Political Quarterly*, vol. ii (1915) 101–21; Willoughby, W. W., "The Juristic Conception of the State" in *American Political Science Review*, vol. xii (1918) 192–208; Laski, H. J., *A Grammar of Politics* (New Haven 1925) ch. vii.

ABSTENTION FROM VOTING. *See* NON-VOTING; OBSTRUCTION, PARLIAMENTARY.

ABSTINENCE is the term employed by Senior and, following him, by later economists of the English classical tradition to designate the peculiar element in the cost of commodities which is involved in the use of capital in production. Since to the older economists cost meant sacrifice or pain, abstinence may be defined as the productive sacrifice for which the distributive share of interest (in the older usage, profit) is the remuneration. There were more or less definite anticipations of Senior's doctrine by earlier writers, especially by Scrope, who used the term in 1833, and perhaps by G. Garnier (*Abrégé élémentaire des principes de l'économie politique*, Paris 1796).

Lassalle and others have effectively ridiculed the abstinence pain of the wealthy capitalist as a justification for the payment of interest; but this has no bearing on the notion of an equivalence between reward and sacrifice, at the margin, for each individual saver, as a causal explanation. The English economists, prior to the rise of the Austrian school, did not use the abstinence theory to develop a quantitative explanation of the rate of interest—a fact connected with the generally undeveloped state of their distribution theory in comparison with the theory of value. According to Senior, abstinence sets a minimum level of "profit," but this, like his maximum, is quite indeterminate, and the notion that some interest is a necessary inducement to saving was accepted doctrine before he wrote (*cf.* especially James Mill, but also Smith, Ricardo *et al*). Ricardo, moreover, has recognized that the value of commodities is affected positively by the length of time expended in production, independently of other causes. Jevons, the English pioneer in deriving value from utility in place of cost, discussed the psychology of present and future satisfactions in connection with the theory of utility; but though he ostensibly reconciles his theory of capital with the abstinence concept, the theory actually runs in terms of the productivity of investment (*Theory of Political Economy*, 4th ed., London 1911, p. 71 *et seq.* as contrasted with p. 233 and p. 247).

The modern discussion of capital and interest dates from the publication of Böhm-Bawerk's first (historical) volume in 1884. This writer gave an elaborate development of the theory of preference of present to future goods and made one of three main grounds for this preference the "technical superiority" of the former, due to the greater effectiveness of roundabout processes in production. Since that time discussion has been centered on the two main issues: first, whether this technical superiority of present goods is different in principle from the productivity of capital rightly interpreted; and second, whether the view of a non-technical, psychological preference is different in principle from the doctrine of abstinence. Regarding the latter distinction Böhm-Bawerk defended to the last his ingenious contention of 1884 that abstinence cannot be treated as a sacrifice additional to the labor of producing a capital good, and that the discount of futurity is a separate, in fact contradictory, principle. Of the two leading American advocates of a psychological in opposition to a technological explanation of interest, Professor Fisher has supported Böhm-Bawerk, while Professor Fetter adopts and uses the abstinence notion without protest. The majority of economists, however, seem to agree with Alfred Marshall that the distinction is fallacious, a matter of words or of psychological subtlety. Commonly, however, they prefer the term "waiting" to "abstinence," a substitution first suggested by Macvane in 1887. The view is that this waiting, abstinence, or discount of future enjoyment, is the chief factor limiting saving and hence determining the supply curve for capital.

Aside from the question of the relations between technological and psychological factors in the capital and interest situation, the psychological theory itself is admittedly in an unsatisfactory state. J. B. Clark and others have suggested that a low rate of interest might stimulate more saving than a high rate. Cassel holds that the facts involve a connection between the interest rate and the length of human life. Inasmuch as at the ordinary rate

of interest it is doubtful whether on the average invested savings replace themselves with an increase during the lifetime of the saver, and in view, further, of the large proportion of the income from capital which is constantly reinvested, it is arguable that the term abstinence is after all more descriptive than waiting. And the same reasoning casts doubt over the realism of the whole view of the psychology of saving as a comparison between present and future enjoyment. In this field of economic behavior an institutional interpretation seems especially applicable.

Even from the standpoint of rationalistic economics the abstinence-time-preference theory needs to be carefully stated. In a world where opportunities are notoriously open to all to secure through technical investment larger quantities of goods in the future in exchange for a present sacrifice, the rational individual must carry saving to a point at which there is a psychical cost equal to the gain. But this does not make abstinence or time preference the cause of the gain. It seems dangerously near to "idle speculation" to theorize in general terms as to what behavior would be in the absence of this fact, or to say what behavior is to be regarded as rational in the face of all the unknown quantities which affect future needs and future resources. Moreover the bulk of the capital supply actually comes from "postponement" of consumption until after death. It is surely inaccurate to describe as a preference of present to future enjoyment (or a sacrifice incurred in postponement) the fact that men will not voluntarily postpone all consumption to the indefinite future. The only workable zero-point for reckoning time preference is that of a uniform rate of consumption through the individual life, or the responsible or "normal" part of it, and on this basis the view that civilized man typically looks ahead excessively and "borrows trouble" is abstractly as arguable as the reverse contention. It is to be observed that even a rate of consumption is not a magnitude susceptible of objective measurement.

It is fairly safe to say that the most fruitful approach to the problems affected by abstinence or related conceptions is a realistic analysis of the conditions of supply and demand for consumable goods, for the instrumental or indirect goods behind these, and ultimately for "capital" and "loanable funds." Although there is now much disagreement among competent economists regarding ultimates, the drift seems to be toward a view which gives a relatively minor place to the psychological comparison of present and future enjoyments as an element in the situation at a given moment. For it is to be noted, finally, that beyond question industry could absorb vast amounts of capital at a low interest rate (elastic demand), while no possible change in conditions affecting saving can in a short time make a large difference in the aggregate supply of productive capital.

FRANK H. KNIGHT

See: ACCUMULATION; SAVINGS; ECONOMIC INCENTIVES; CAPITAL; INTEREST; ECONOMICS.

Consult: Senior, N. W., *Political Economy* (6th ed. London 1872); Lassalle, F. J., *Herr Bastiat-Schultze von Delitsch* (Berlin 1874); Böhm-Bawerk, E., *Kapital und Kapitalzins*, 2 vols. (4th ed. Jena 1921), 1st ed. tr. by W. Smart as *Capital and Interest* (London 1890) and *Positive Theory of Capital* (London 1891), and appendix to 2nd ed. tr. by W. A. Scott and S. Feilbogen as *Recent Literature on Interest (1884–1899)* (New York 1903); Carver, T. N., "The Place of Abstinence in the Theory of Interest" in *Quarterly Journal of Economics*, vol. viii (1893–94) 40–61; Cassel, G., *The Nature and Necessity of Interest* (London 1903); Fisher, Irving, *The Rate of Interest* (New York 1907) p. 43–52; Fetter, F. A., *Economic Principles* (New York 1915) ch. xx, xxi; Marshall, Alfred, *Principles of Economics* (8th ed. London 1922) bk. iv, ch. vii, §§ 8–10, bk. vi, ch. vi, § 1, Appendix E, §§ 332–33.

ABUL FAZL ALLAMI (1551–1602) was the son of the Shaikh Mubārak, who first suggested to Akbar, the Mogul emperor, that he should become the spiritual head of his empire. The emperor, after coquetting with Hinduism, Jainism, Zoroastrianism and Christianity, finally in 1552 established as the official religion the Dīn Ilāhi, or Divine Faith, a kind of theosophy of which Abul Fazl was the high priest. This excited the rage of orthodox Moslems, and in 1602 he was brutally murdered at the instigation of Prince Selīm. Abul Fazl was one of the emperor's most intimate friends, "the King's Jonathan," say the Jesuits, and for his encyclopaedic learning and courtly attainments he has been compared to Francis Bacon.

Of his two great works, the *Akbar Nāma* (Reign of Akbar) (3 vols. Calcutta 1877–86; tr. by H. Beveridge as *Akbar Nāma*, pts. i–xiii, Calcutta 1907–21) is spoiled by its tendency toward fulsome panegyrics; the monumental *Ain-i Akbari* (Institutes of Akbar) (2 vols. Calcutta 1872–77; admirably translated by Blochmann and Jarrett as *Ain-i Akbari*, 3 vols. Calcutta 1873–94) is, on the other hand, really a gazetteer of Hindustan, and is one of the most

amazing things of its kind in the world. Its compilation occupied over seven years. Books I and III describe in detail Akbar's court and administrative system, with a statistical account of the empire. Nothing is omitted; prices, wages, coinage, architecture, manufactures, are carefully tabulated. Book II contains an admirable chapter on regulations for education, laying down for Indian schools an elaborate curriculum which includes mathematics, logic, agriculture, political science, history and theology. Books IV and V are devoted to a minute and learned account of the religion, philosophy and customs of the Hindus, and a collection of "Happy Sayings" of Akbar, of unique value for the light which they throw upon the emperor's character and views. This book has been criticized for showing Akbar's empire in too favorable a light, but even allowing for this, it is a work of the greatest importance for the study of the social and economic history of India in the sixteenth century.

H. G. RAWLINSON

Consult: Smith, Vincent A., *Akbar, the Great Mogul* (2nd ed. revised, Oxford 1920).

ACADEMIC FREEDOM is the freedom of the teacher or research worker in higher institutions of learning to investigate and discuss the problems of his science and to express his conclusions, whether through publication or in the instruction of students, without interference from political or ecclesiastical authority, or from the administrative officials of the institution in which he is employed, unless his methods are found by qualified bodies of his own profession to be clearly incompetent or contrary to professional ethics.

The freedom of opinion, speech and publication claimed for the university teacher is not in extent significantly different from that usually accorded to other citizens in modern liberal states, and the reasons for maintaining it are in part the same. It is peculiar chiefly in that the teacher is in his economic status a salaried employee, and that the freedom claimed for him implies a denial of the right of those who provide or administer the funds from which he is paid, to control the content of his teaching. The principle of academic freedom is thus, from the purely economic point of view, a paradoxical one; it asserts that those who buy a certain service may not (in the most important particular) prescribe the nature of the service to be rendered. The reason why such freedom is nevertheless socially necessary lies in the fact that there are certain professional functions generally recognized to be indispensable in the life of a civilized community which cannot be performed if the specific manner of their performance is dictated by those who pay for them, and that the profession of the scholar and teacher in higher institutions of learning is one of these.

There are three aspects of the social role of the scholar which make such freedom essential. In the first place, he is the technical expert, given a prolonged training and often a costly equipment, and set apart to investigate problems which it is not practicable for all men to investigate thoroughly and at first hand for themselves. His function is thus in part that of expert adviser or informant of the community at large on the questions which fall within his science. Secondly, his office has for the same reason some analogy to that of the judge. His opinions must be not only competent but disinterested. No one indeed is constrained to accept them; but if specialized knowledge and methodical inquiry by trained minds are to have in the long run the part in the shaping of general opinion and social policy which it is desirable that they should have, it is important that those who are appointed to this function should be free from intimidation and subordination. They should, moreover, be beyond reasonable suspicion of subjection to such influences, especially from economic groups. The third reason is the most important. The university is not only a vehicle for transmitting to successive generations knowledge already gained; it is, more distinctively, the chief organized agency for the advancement of science and the canvassing of new ideas. It is the outpost of the intellectual life of a civilized society, the institution set up on the frontier of human knowledge to widen the dominion of man's mind. The performance of this function of seeking new truths will sometimes mean, as it has repeatedly meant since the beginnings of modern science, the undermining of widely or generally accepted beliefs. It is rendered impossible if the work of the investigator is shackled by the requirement that his conclusions shall never seriously deviate either from generally accepted beliefs or from those accepted by the persons, private or official, through whom society provides the means for the maintenance of universities. Others still remain free to adopt or reject, to apply or disregard, new discoveries

or hypotheses, but the university's most characteristic task is to seek for them, cautiously and critically, yet without external restraints.

Academic freedom is, then, a prerequisite condition to the proper prosecution, in an organized and adequately endowed manner, of scientific inquiry and the communication of the results of it to the public and to students in the higher stages of their initiation into the intellectual life of their age. In the needs and rights of such students a further reason for maintaining the teacher's freedom is apparent. They are entitled to learn the contemporary situation in each science, the range and diversity of opinion among specialists in it; it is not the pedagogic province of the university to acquaint students merely with facts of common knowledge and with opinions accepted by the general public or the donors of endowments. The same rights of the student, however, demand of the university teacher, in his function of instruction as distinct from investigation and publication, special care to avoid the exclusive or one-sided presentation of his personal views on questions upon which there is no agreement among experts. He is not entitled to take advantage of his position to impose his beliefs dogmatically upon his students; the nature of his office requires that alternative opinions be fairly expounded, and that the student be encouraged and trained to reach his own conclusions on such questions through critical reflection upon carefully ascertained facts.

It has been held by some writers that in state institutions freedom of teaching conflicts in certain cases with another and more fundamental right—that underlying the principle of the religious neutrality of the state. Upon this principle the opponents of state religious establishments have usually based their case. But it has been argued that "if it is wrong to compel people to support a creed in which they disbelieve, it is also wrong to compel them to support teaching which impugns the creed in which they do believe." And if the teacher in institutions maintained by taxation is free to "teach" the theories he himself accepts, he may, and usually does, impugn the creed of some body of taxpayers, and sometimes of the majority of them. This argument has usually been employed by those who have attempted, in a number of American states, to obtain legislation prohibiting the "teaching of evolution" in state schools and universities—attempts which have been successful in Tennessee (1925), in Mississippi (1927) and (through popular referendum) in Arkansas (1928). The hypothesis of evolution, it is contended, is in conflict with the belief of citizens who accept literally the Biblical narrative of the creation; hence the rights of the taxpayer are violated if instructors paid out of public funds are permitted to teach that hypothesis.

This argument, especially in its application to universities, is subject to two criticisms. First, it involves an ambiguous use of the word "teach." To "teach a theory" might mean merely to expound it; or to expound it and also to state the arguments of its adherents; or to do both of these and also to indicate the prevailing opinion of experts with regard to it; or to let the teacher's own opinion concerning it be known; or to inculcate it dogmatically or to proselytize in behalf of it. If laws prohibiting the "teaching" of certain theories in state institutions are construed only in the last, i.e. in the strictest, sense they do not essentially conflict with the principle of freedom of teaching as above set forth. They would leave entire liberty of inquiry, discussion and undogmatic expression of personal opinion to both teacher and student. The principal objection to them when they are so interpreted is that it is difficult or impossible to define so precisely and comprehensively, in terms of concrete acts, what would constitute violations of them as to bring the matter effectively within the scope of the criminal law.

If, however, prohibition of the "teaching" of any scientific theory not accepted by all taxpayers is construed in any other sense, it is incompatible with the maintenance by the state of institutions performing the characteristic functions of universities. It is evident that the principle of state neutrality cannot consistently be limited to a single hypothesis, but must apply to any "teaching" which any taxpayers believe to conflict with their religious or ethical convictions. A state may, in short, have a university or do without. But it cannot have one, in the usual and proper sense, if it excludes, under a misconception of the principle of neutrality, both a large part of the subject matter of science and also the method of free inquiry and free expression, which is necessary to the functioning of this type of social institution.

There exist in most communities private institutions of learning which do not fully accept the principle of academic freedom, and therefore do not undertake to perform the functions

mentioned. The legitimacy of their existence is generally admitted, but it is evident that a community in which only institutions of this type exist lacks adequate provision for the advancement of science and for the maintenance of that really fruitful "neutrality" in higher education which depends upon liberty of unbiased investigation and thought. Even in institutions of the restricted kind, however, it is commonly recognized that the limitations imposed should be formulated with reasonable definiteness in the charter or statutes, so that teachers may know, before accepting employment, to what requirements they are bound, and that the restrictions upon their liberty of opinion and teaching may not be subject to arbitrary and varying interpretation by administrative officers.

In some cases teachers have been dismissed or otherwise penalized because of their exercise, outside the university, of their ordinary political or personal freedom in a manner or for purposes objectionable to the governing authorities of their institutions. While such administrative action is contrary in spirit to academic freedom, it is primarily a special case of the abuse of the economic relation of employer and employee for the denial of ordinary civil liberties.

There are several principal means, aside from an enlightened public opinion, for the effectual maintenance of academic freedom. It is evident that the governing boards of universities or similar corporations should decline all endowments for the inculcation of opinions specified by the donor. The general control of admission to the teaching office should be in the hands of members of the scholar's profession, and primarily in those of specialists in the subject to be taught. The recommendations, with respect to appointments, of bodies representative of university faculties should not be rejected by state officials or lay governing boards unless there is evidence of corruption, favoritism or the acceptance of discreditably low standards of professional competence in the action of those bodies. But the chief practical requisite for academic freedom consists in guaranteed security of tenure in professorial positions, unless removal for some grave cause (such as proved incompetence or moral delinquency), other than the content of the teaching of the professor concerned, becomes necessary. Experience has shown that such cause may sometimes be officially alleged for dismissals which are in fact due to pressure from economic, sectarian or other groups desirous of restricting freedom of teaching in some particular. Removal from professorial office should therefore be possible only through some definite form of judicial procedure in which the faculty, as the local representatives of the academic profession, should responsibly participate. The American Association of University Professors, which has contributed much to the formulation of a professional code for university teachers in the United States, has adopted the principle that "every university or college teacher should be entitled, before dismissal or demotion, to have the charges against him stated in writing in specific terms and to have a fair trial on these charges before a special or permanent judicial committee of the faculty senate or council, or by the faculty at large. At such trial the teacher accused should have full opportunity to present evidence" (*General Report on Academic Freedom*, 1915, in *Bulletin* of the Association, vol. i). This rule, however, does not apply to teachers on definitely limited or probationary appointment. But since the withholding of reappointment may also involve a covert or open denial of the teacher's freedom of thought or utterance, the question should, according to the declarations of the same association, always be passed upon by a competent faculty body.

The principle of academic freedom could not influence the policy and organization of universities until its two presuppositions had been formulated and become familiar: first, that science is not static nor even merely cumulative, but is a continual quest of new knowledge, to which old conceptions must be constantly readjusted; and second, that truth is more likely to emerge through the interplay and conflict of ideas resulting from the exercise of individual reason than through the imposition of uniform and standardized opinions by authority. These two ideas in conjunction first became conspicuous in modern thought in the seventeenth century. The new conception of a university as a place devoted to the continuous "advancement of learning" through an organized and cooperative "inquisition of nature" was vigorously enunciated by Bacon ("Prometheus" in *De sapientia veterum*, 1609, and *New Atlantis*, 1627); and both presuppositions found their most eloquent expression in Milton's *Areopagitica* (1644): "If the waters of truth flow not in a continual progression, they sicken into a muddy pool of conformity and tradition"; and "though

all the winds of doctrine were let loose to play upon the earth, so Truth be in the field, we do injuriously by licensing and prohibiting to misdoubt her strength."

Yet in England these principles remained without actual application to universities for nearly two centuries. It was in Germany that academic freedom had its birth. In 1673 Spinoza was called by the elector palatine, Karl Ludwig, to a professorship in the University of Heidelberg, with the assurance that he would be given *philosophandi libertatem amplissimam*—though upon the understanding that this freedom would not be "abused to disturb the religion publicly established." Spinoza declined the call, partly on the ground that it was not clear how much was implied by the proviso. The principle of freedom of teaching was further extended in the subsequent new foundations in Germany, notably in the universities of Halle (1694), Göttingen (1734) and of Berlin (1809). The principle that "science and the teaching of it are free" became an article of the organic law of Prussia in the constitution of 1850.

The first non-sectarian university in England, the University of London (afterwards London University College), was opened in 1828. Not until 1854–56 were creedal requirements for the taking of degrees (other than in divinity) abolished in the older English universities. In 1871 the University Tests Act abolished all theological tests (with the same exception) for the holding of professorships, fellowships, scholarships and other emoluments in these universities and their colleges.

The early American colleges, founded by religious bodies, were subject in varying degrees to sectarian restrictions. These limitations, in force until the nineteenth century, were eventually abolished in all the more important of the older institutions. The earliest state university, established in Virginia in 1819 upon the plans of Jefferson, was non-sectarian, but there was no express enunciation of the principle of academic freedom in the act creating it; and the first appointee to its faculty, Thomas Cooper, though chosen by Jefferson himself, was removed under pressure from certain religious leaders. In later times interference with freedom of teaching in the United States has usually taken the same form: it has consisted in attempts by sectarian, political, economic or other groups to impose limitations not prescribed by statute or by the charters of the institutions concerned, usually through the dismissal of teachers whose opinions or utterances were obnoxious to these groups.

The above mentioned formulation by American university teachers of a code for the preservation of academic freedom indicates not only a growing professional cohesiveness but an increasing general awareness of the problem. Overt attempts at the control of teaching have probably become less frequent and, when made, less effective in recent years. The great and expanding cost of maintenance of a modern university has made private institutions—which are especially numerous and important in America—dependent upon a steady flow of large gifts from persons of wealth; and this situation, it has often been asserted, causes the teaching of the social sciences in such institutions to reflect unduly the interests and views of a single class. This interpretation has been expressed most forcibly by Thorstein Veblen. The greater gifts to American higher education have, however, usually been notably exempt from formal restrictions upon freedom of teaching; and in a number of privately endowed universities it has been better assured than in many state institutions. While ambitious administrative officers chiefly concerned for future endowments have not seldom imposed upon teachers in these subjects an unwholesome and unbecoming timidity and subservience, there are some indications that this condition is becoming more rare. Although exception must be made of certain sections of the country, it is probable that in the greater part of the United States, at the close of the third decade of the twentieth century, freedom of thought and speech in universities is growing wider and less insecure. The price of liberty is, however, the same in universities as elsewhere.

ARTHUR O. LOVEJOY

See: FREEDOM OF SPEECH AND OF THE PRESS; RELIGIOUS FREEDOM; UNIVERSITIES AND COLLEGES; RESEARCH; ENDOWMENTS AND FOUNDATIONS; TEACHING PROFESSION; LEARNED SOCIETIES; PROFESSIONAL ETHICS; EXPERT; SCIENCE; RELIGIOUS EDUCATION; SECTS; FUNDAMENTALISM; INTOLERANCE; CONFORMITY; PUBLIC OPINION. See also Part II of the Introduction to volume I, on the Social Sciences as Disciplines.

Consult: UNITED STATES: American Association of University Professors, *Bulletin*, vol. i (1915) 17–43, vol. iv (1918) no. 2, vol. vii (1921) no. 1, p. 8–9, vol. viii (1922) 100–02, 489–549; *Academic Freedom*, compiled by Julia E. Johnsen, Reference Shelf, vol. iii, no. 6 (New York 1925); Chafee, Z., *Freedom of Speech* (New York 1920) ch. vii; Jameson, J. F., *Control of Higher Education in the United States* (Richmond, Ind. 1910); Cattell, J. McK., and others,

University Control (New York 1913); Veblen, T. B., *The Higher Learning in America* (New York 1918); Meiklejohn, Alexander, *Freedom and the College* (New York 1923); Shipley, M., *The War on Modern Science* (New York 1927); Lippmann, W., *American Inquisitors* (New York 1928).

OTHER COUNTRIES: Hamilton, W., *Discussions on Philosophy and Literature, Education and University Reform* (London 1852); Smith, Goldwin, *A Plea for the Abolition of Tests* (Oxford 1864); Kaufmann, G., *Die Lehrfreiheit an den deutschen Universitaten im neunzehnten Jahrhundert* (Leipsic 1898); Lexis, W. H. R. A., *Das Unterrichtswesen im deutschen Reich*, 6 vols. (Berlin 1904) vol. i; Paulsen, F., *Die deutschen Universitäten und das Universitatsstudium* (Berlin 1902), tr. by F. Thilly and W. W. Elwang (New York 1906) bk. i and bk. iii, ch. iii; Muller, Max, *Die Lehr- und Lernfreiheit. Versuch einer systematisch-historischen Darstellung der franzosischen, deutschen und schweizerischen Verhaltnisse* (St. Gall 1911); Liard, Louis, *L'enseignement supérieur en France 1789–1889*, 2 vols. (Paris 1894) vol. ii, p. 297–333; Poggi, Alfredo, *Stato, chiesa, scuola* (Florence 1924); Trubetzkoi, Eugen, "Die Universitätsfrage" in *Russen uber Russland*, ed. by J. Melnik (Frankfort 1906) p. 16–53.

ACADEMIES. *See* LEARNED SOCIETIES.

ACCEPTANCE. The acceptance of a bill of exchange is defined in the Uniform Negotiable Instruments Law as "the signification by the drawee of his assent to the order of the drawer." It is the drawee's adoption of the bill or draft as his obligation, without which the instrument is no contract of his. The acceptance must be in writing and must be signed by the drawee. Acceptance is appropriate or necessary only in the case of time bills, as contrasted with demand or sight bills; but the certification of checks should be noted as an exception to this statement. The word "acceptance" is also used to signify the accepted bill itself.

A time bill drawn by the seller of goods upon the buyer thereof and accepted by the latter is known as a "trade acceptance." This is an important instrument of foreign and of domestic commerce, and in this country today such bills are being drawn and discounted even where seller and buyer are in the same city.

The time bill drawn upon and accepted by a bank gives us what is known as a "bank acceptance." Bills drawn upon and accepted by "acceptance houses" and "acceptance corporations" are for most purposes classified with bank acceptances. There is now at all times a tremendous volume of bank acceptances outstanding in this country. They are created to finance the movement or sale of goods in both our foreign and our domestic trade and are utilized to some extent to finance for short periods the carrying of goods in warehouses.

The right of any person or company to draw a time bill upon a given bank is in no way founded upon the possession of a deposit with that bank, but is created by a special arrangement which pertains to some particular mercantile or financial transaction or to a series of such transactions. The authority which the bank confers upon the accommodated party to draw the time bill is very commonly evidenced by a letter, which usually takes the form of the so-called commercial letter of credit. It is understood that the accommodated party or parties will before the maturity of the acceptance supply the bank with the funds necessary to discharge the instrument, and that they will pay the bank a commission. The normal arrangement will provide in one manner or another for the pledge of the goods involved in the case to the bank as collateral security during the time running between the acceptance of the draft and the bank's receipt of funds for payment thereof, that is, the time through which it carries a risk. The bank does not lend any funds of its own and it does not receive any interest on money. What the bank does is to lend the strength of its name and take a risk of the failure of the accommodated parties to provide funds for the discharge of the acceptance at maturity, and it receives a commission which is chiefly a reward for this risk taking. The drawer of the bill obtains cash for the same by discounting it with some bank or broker. American banks often discount and rediscount their own acceptances.

Before the establishment of the Federal Reserve Banks the time bill was very little used in the domestic commerce of the United States. When a negotiable instrument did arise out of a mercantile transaction it would be the buyer's promissory note made payable to the one who had sold him goods on time. But since 1913 and especially since the conclusion of the Great War there has been an immense development in the use of time bills (and thus of course of acceptances). This movement was stimulated by the strong and persistent advocacy of the use of the instrument by a group of bankers and business men organized under the name of the "American Acceptance Council." The Federal Reserve Act affected this development (1) by making clear the legal right of national banking corporations to serve as drawees and acceptors of time bills (a right called in question by the decision of a lower federal court at an earlier time) and

(2) by giving the accepted bill of exchange a favored position over the promissory note, among instruments eligible for purchase by the Federal Reserve Banks. This country now affords a large and stable discount market for acceptances, and it is evident that this market will be permanent. The acceptance business of banks and of acceptance houses is older in Europe than in the United States and has flourished especially in England.

A. C. WHITAKER

See: BILL OF EXCHANGE; NEGOTIABLE INSTRUMENTS; BANKING, COMMERCIAL; FEDERAL RESERVE SYSTEM; FOREIGN EXCHANGE; MONEY MARKET.

Consult: Mathewson, P., *Acceptances, Trade and Bankers'* (New York 1921); Steiner, W. H., *The Mechanism of Commercial Credit* (New York 1922); Ward, W., *American Commercial Credits* (New York 1922); Burgess, W. R., *The Reserve Banks and the Money Market* (New York 1927); *Acceptance Bulletin* (monthly) of the American Acceptance Council, published since 1919; *Federal Reserve Bulletin* (monthly) of the Federal Reserve Board, published since 1915 (for statistics and valuable discussion).

ACCIDENT INSURANCE. *See* COMPENSATION AND LIABILITY INSURANCE.

ACCIDENTS of all sorts took about 96,000 lives in continental United States in 1928, according to the estimates of the National Safety Council. Accidents in that year ranked seventh among all the causes of death, following close after pneumonia and tuberculosis. The accident death rate was in 1927 over two and one half times as great among males (112.3 per 100,000) as among females (43.6 per 100,000). In contrast to the principal diseases whose incidence is much heavier in later life, the accident death rate varies relatively little for the various age groups. Thus among children from five to fourteen accidents as a cause of death surpass not only any one disease but any two diseases. In the five to nine age group automobile accidents alone caused more deaths in 1926 than any one disease.

The trend of the accident death rate during the present century and especially during the past fifteen years has been on the whole slightly downward, but the decline has not been nearly so rapid as in the case of such diseases as typhoid fever, smallpox and tuberculosis. While the death rate from a considerable group of these diseases declined over 50 percent between 1913 and 1927, the accident death rate during the same period showed a net decline of only 7.4 percent.

This decline has been accomplished in the face of a rapid and serious increase in automobile accidents. Table I gives the comparison of death rates in 1911 and 1927, from Census Bureau figures, for the more important types of accidents. Each item shows a decrease, sometimes as great as 50 percent, with the exception of automobile accidents, which were multiplied almost ninefold. This multiplication has been due of course to the great increase in automobile traffic.

Vital statistics offer no separation between industrial and non-industrial or "public" accidents. The sub-classification afforded by the International List of Causes of Death relates rather to the type of accident, as shown in Table I. From other data it has been estimated by the National Safety Council that of the total of 96,000 deaths in 1928 one fourth, or about 24,000, occurred in industry, leaving about 72,000 to be classed broadly as "public," including some 24,000 in the home, 27,500 in automobile accidents and the remainder from miscellaneous causes in public places, such as drowning, fire, falls and the like.

The number of accidents causing non-fatal personal injuries can only be roughly estimated by applying the ratios which have been found to exist in certain localities or groups. Table II sets forth the estimated non-fatal injuries, as well as fatalities in the public, home and industrial groups, together with similar estimates of the direct economic cost.

As the classification of accidental deaths based on the International List of Causes of Death is so unsatisfactory from the point of view of prevention, various efforts are now being made to improve the statistical knowledge of accidents. The standard death certificate is being altered to show in all cases of accidental death whether the accident occurred at home, in industry or in a public place, and to show also something of its nature. In addition an increasing number of state and city vital statisticians are using a supplementary form to obtain still further needed information regarding the circumstances of accidental deaths. Detailed information for non-fatal as well as fatal accidents is being collected by certain state motor vehicle bureaus, city police departments and safety councils, as well as by labor departments and individual industries.

The accident problem, although serious, is now no more so and probably less so than in earlier decades or centuries. Our machine age

TABLE I

ESTIMATED ACCIDENTAL DEATHS IN THE UNITED STATES, AND DEATH RATES 1927 COMPARED WITH 1911

TYPE OF ACCIDENT	NUMBER OF FATALITIES 1927*	DEATH RATES PER 100,000 U. S. REG. AREA		
		1927	1911	PERCENT CHANGE
Accidental and unspecified external causes	93,127	78.4	84.7	—7.4
Burns (conflagration excepted)	6,669	5.6	7.7	—27.3
Accidental drowning	7,991	6.7	9.4	—28.7
" shooting	3,060	2.5	2.2	+13.6
" falls	16,596	14.0	15.0	—6.7
Mine accidents	2,940	2.5	3.8	—34.2
Machinery accidents	2,326	2.0	2.1	—4.8
Railroad accidents	7,549	6.4	13.0	—50.8
Collision with automobiles	1,836	1.5	..	..
Other railroad accidents	5,713	4.8	..	..
Street car accidents	1,590	1.3	3.2	—59.4
Collision with automobiles	521	0.4	..	..
Other street car accidents	1,069	0.9	..	..
Automobile accidents (excluding collision with railroad and street cars)	23,176	19.5	2.2	+786.4
Injuries by vehicles (other than railroad cars, street cars and automobiles)	1,750	1.5	3.8	—60.5
Excessive heat (burns excepted)	580	0.5	5.3	—90.5
Other external causes	18,900	15.9	17.0	—6.5

*Estimated for entire United States from U. S. Census Bureau data.

has introduced new hazards, but it has probably eliminated more than it has produced. Yet accidents and their prevention, both in and out of industry, are undoubtedly receiving much greater attention today than ever before. The reasons are both altruistic and economic. This change in our national attitude toward accidents is quite in keeping with other trends of thought and action.

On the non-economic side the greater interest in the tragedies of accidental death or injury follows naturally upon the greater appreciation of the value of human life. Our increasing determination, as individuals and as a people, to reduce accidents is thus in step with our like determination to reduce diseases, prolong the span of life and generally ameliorate mortal ills rather than blindly accept them.

But in this industrial age the economic cost of accidents and the economic necessity of accident prevention are perhaps even more weighty. Not in industry alone are accidents now recognized as a definite and serious economic loss. An accident, wherever it occurs, represents an interruption of the orderly business of society. Death or disablement of the home keeper is just as much an economic loss to the family and to society as death or disablement of the factory worker. Careful calculations have demonstrated the large economic investment in children of various ages as well as in adults, all of which is lost to society in the event of untimely death through accident. The medical and hospital costs of an accident are often heavy. And generally there are related costs such as property damage, loss of time by associates and other losses growing out of the interruption. In fact for every accident causing death or personal injury there are several which cause a measurable economic loss without personal injury. Rarely are these costs met by any sort of compensation or insurance (and

TABLE II

ESTIMATED ACCIDENTS AND THEIR COST, UNITED STATES, 1928, BY LOCATION*

TYPE OF ACCIDENT	FATAL	NON-FATAL PERSONAL INJURIES	ECONOMIC LOSS†
Motor vehicle	27,500	950,000	$900,000,000
Other public	20,500	2,000,000	850,000,000
Home	24,000	4,800,000	
Industrial	24,000	3,200,000	1,000,000,000

*Estimated for entire United States from reports made to the National Safety Council.

†Economic loss from fire is estimated at $550,000,000 additional.

when so, the cost is only passed on or distributed). Generally the expense must be absorbed by the individual or family budget, often entailing the most serious sacrifices. In other cases the financial and mental strain of a serious accident pushes the family over the line into temporary or permanent dependence, and society must pay the bill. In some cities careful studies have indicated that accidents cause as high as 17 percent of the total community cost for social service and relief.

Accident prevention is more possible in a controlled world. We have to a large extent learned how to avoid losses of life and injuries from the forces of nature. While these gains have been partly offset through the development of man made hazards, such as the automobile, it is possible to control these also—witness the decline in railroad accidents as shown in Table 1. And if accident prevention is more possible in a controlled world, it is equally true that in such a world the high cost of accidents and the need for accident prevention are more apparent and more keenly recognized.

The remedies for accidents of any sort fall into two main divisions: first, improvement of the environment, or removal of physical hazards; and second, improvement of personal practises, which is to be sought through a combination of education and supervision. Thus the prevention of traffic accidents means better streets and highways, better vehicles, better traffic control systems; education of all street users to understand the hazards of the street and to avoid them through care and law observance; and, finally, proper law enforcement for the recalcitrant minority. In exactly the same way the avoidance of home accidents means keeping home equipment in safe condition, educating both children and adults to the proper use of home equipment and the avoidance of unsafe practises and, finally, supervision of children especially to make sure that these precepts are carried out. And both these cases are parallel to the necessary combination of engineering improvement, education and supervision in industry. It is through such measures that accidents have been reduced and almost eliminated in numerous cases, and it is through similar measures that the present toll must be cut down.

SIDNEY J. WILLIAMS

See: ACCIDENTS, INDUSTRIAL; MINING ACCIDENTS; RAILROAD ACCIDENTS; MOTOR VEHICLE ACCIDENTS; MORTALITY; SAFETY MOVEMENT; COMPENSATION AND LIABILITY INSURANCE.

Consult: National Safety Council, *Accident Facts 1929* (statistical report) (Chicago 1929); National Safety Council, *Proceedings*, published annually since 1912.

ACCIDENTS, INDUSTRIAL. The subject of industrial accidents covers the occurrence of unforeseen or unexpected happenings in industry causing death or injury to persons employed or occupied, together with their causes and prevention. The present article is limited primarily to manufacturing industries; for other types of industrial accidents *see* MINING ACCIDENTS, RAILROAD ACCIDENTS and MOTOR VEHICLE ACCIDENTS.

The importance of industrial accidents may be illustrated by estimates of their numbers and of the economic losses which they produce. In the United States in 1919, it was estimated, there were 23,000 fatal accidents in industry, 115,000 accidents causing permanent total or partial disability, and 3,000,000 accidents causing disability of one day or more. These figures, together with the standard equivalents in time loss (see Table 1) in cases of death and total disability, were used as the basis for an estimate of 296,000,000 days of lost time due to industrial accidents.

The wage loss was estimated, on the basis of an average of $4.00 per calendar day, at a total of $1,184,000,000. If the cost of subsistence of the men killed be deducted, and the costs of medical service and insurance overhead, amounting to an estimated $161,000,000, be added, the net economic loss due to industrial accidents reaches the figure of $1,014,000,000. In this sum no allowance is made for discounting. Actually the accidents that occur in a given year cause losses which in cases, for example, of permanent total disability run far into the future. If in figuring the total losses from accidents which occur in a given year an allowance is made for discounting the value of these future losses to the date of the accident in all cases, the net total loss is reduced by about one third, or roughly to $675,000,000. This represents approximately the annual losses from accidents in the United States.

The hazard of industry, or the frequency of accidents to persons employed or occupied in industry, is a concept capable of statistical measurement. In many industries, such as coal mining in gaseous mines, airplane transportation and deep sea fisheries, the presence of risk can

be recognized without elaborate statistics. Publicity given to accidents in these industries forms the basis for a popular estimate of risk. But a true picture of hazard can be given only by statistics of accidents placed in relation to the number of persons exposed to risk. The gathering of data on these points is comparatively recent; it is only within the past half century that it has been done, usually in connection with the administration of workmen's compensation laws for alleviating the consequences of industrial accidents.

Injury or death to the person, rather than the "accident," is the primary unit for measuring industrial hazard. Thus mass accidents or catastrophes in which many persons lose their lives or suffer serious injury are counted in the statistics not as a single accident but as injuries or fatalities to the number of persons involved. An "accident" in which no one is injured or killed is not counted in statistics of industrial accidents, although separate data on such accidents are available for railroad operation. Such occurrences may involve considerable property damage, but their omission from the statistics of injuries is necessary in order not to confuse the significance of industrial hazard. The data obtained as statistics of injuries, their causes and prevention are doubtless equally valid for all accidents.

Injuries caused by accidents are of different degrees of severity, ranging from the slightest abrasion of the skin to total disability or death. The number of trivial injuries, as already indicated by the estimates quoted, is of course far greater than the number of serious injuries. In the statistics, accordingly, minor accidents are omitted. In the larger number of states of the United States the recommendation of the International Association of Industrial Accident Boards and Commissions is followed, according to which injuries are tabulated if they caused lost time extending beyond the day or shift during which the accident occurred. In some states only accidents causing loss of time of a week, or even two weeks, are counted. In others accidents are tabulated only if compensable, that is, only if the loss of time exceeds the minimum waiting period, which may vary from three days to two weeks or more. These differences in definition of accidents which figure in the statistics are a cause of serious difficulty in statistical comparisons of industrial hazards in different states or countries.

The simplest method of stating industrial hazard is to measure frequency of accidents in relation to the average number of employees exposed to the risk of accident. As already noted, minor injuries causing no lost time beyond the day of the accident are omitted. Even when these are omitted, however, the great number of relatively insignificant injuries means that such a rate is largely controlled by their frequency. This difficulty can be avoided in two ways.

In the first place, special rates can be framed on the basis of particular classes of disability: a frequency rate for fatal accidents; another for permanent total disability; a third for permanent partial disability; and a fourth for temporary disability. In this way the total accident frequency rate is split up into various components, each fairly comparable with other similar rates, except the fourth, which depends upon the definition of minor accidents included

TABLE I

SCALE OF TIME LOSSES FOR WEIGHTING INDUSTRIAL ACCIDENT DISABILITIES

NATURE OF INJURY	DAYS LOST	DEGREE OF DISABILITY IN PERCENT OF PERMANENT TOTAL DISABILITY
Death	6,000	100
Permanent total disability	6,000	100
Arm above elbow, dismemberment	4,500	75
Arm at or below elbow, dismemberment	3,600	60
Hand, dismemberment	3,000	50
Thumb, any permanent disability	600	10
Any one finger, any permanent disability	300	5
Two fingers, any permanent disability	750	12½
Three fingers, any permanent disability	1,200	20
Four fingers, any permanent disability	1,800	30
Thumb and 1 finger, any permanent disability	1,200	20
Thumb and 2 fingers, any permanent disability	1,500	25
Thumb and 3 fingers, any permanent disability	2,000	33⅓
Thumb and 4 fingers, any permanent disability	2,400	40
Leg above knee, dismemberment	4,500	75
Leg at or below knee, dismemberment	3,000	50
Foot, dismemberment	2,400	40
Great toe, or any 2 or more toes, any permanent disability	300	5
One toe, other than great toe, any permanent disability	0	0
One eye, loss of sight	1,800	30
Both eyes, loss of sight	6,000	100
One ear, loss of hearing	600	10
Both ears, loss of hearing	3,000	50

in the statistics. In comparisons between countries these rates are often more useful than the total frequency rates.

Secondly, a composite rate may be formed by weighting the accidents in accordance with their severity. The most feasible (and most used) method is to weight accidents in proportion to the actual time lost; except that in case of death, permanent total disability and specific types of dismemberment accidents are weighted according to a standard weighting system which places a due weight upon these serious injuries. Table I gives the standard weights adopted by the International Association of Industrial Accident Boards and Commissions, which are used by the United States Bureau of Labor Statistics in its accident severity rates. In this system a death or total disability is weighted with 6000 days lost time, on the assumption that the average loss in such cases is equivalent to twenty years of three hundred working days each, while the weight assigned for the loss of a hand is set, perhaps somewhat arbitrarily, at 3000 days. Severity rates, as thus calculated, measure industrial hazard in terms of days lost as compared with the time at risk.

In all these rates the basis or "exposure" is of fundamental importance. The total number of workers is less satisfactory than the average number of workers employed, since the latter gives a truer measure of exposure; and furthermore, because of differences in hours of labor in different industries and at different times, even the average number of employees is a relatively poor method of measuring exposure. Obviously the longer the working hours, other things being equal, the greater the number of accidents. In order, then, to allow for differences in hours of work between different establishments or different industries, and particularly in order to measure gains in reduced accident frequency due to decreases in hours of labor, the denominator of the rate fraction must take account of the total hours of employment. Accordingly, in careful accident statistics, frequency and severity rates are expressed in terms of hours of employment, e.g. in terms of 1,000,000 or 1000 hours (as in the rates of the United States Bureau of Labor Statistics) or in terms of the number of "full time workers," that is, a worker working 300 days a year, 10 hours a day, or 3000 hours (as in German accident rates).

Turning to the statistics of accidents in industry, Table II presents, for eleven states, accident frequency and severity rates by industries for the year 1925. Frequency rates (accidents per 1,000,000 hours exposure) varied from 1.96 in the manufacture of woolen goods to 59.08 in the manufacture of automobile tires. Severity rates (days lost per 1000 hours exposure) ranged from .32 in the boot and shoe industry to 4.85 in the paper and pulp industry. Among the more hazardous manufacturing industries were structural iron work, lumber planing mills, lumber saw mills and flour mills. Among the least hazardous were the manufacture of woolen goods and the manufacture of stamped and enamel ware. The rates for a single year, however, are not always significant of permanent conditions, since they may be affected or determined largely by unusual conditions.

The most extensive analysis of hazard in any American industry is that of the iron and steel industry made by the United States Bureau of Labor Statistics. This analysis extends over a period of twenty years. The hazards of the industry are analyzed according to the department of work and, to a limited extent, according to occupation, age and other personal characteristics. Subjoined is a table showing variations in accident frequency and severity rates in the iron and steel industry from 1907 to 1925.

The analysis shows striking differences between different departments in the iron and steel industry. Frequency rates per million hours exposure for 1921–1924 varied from 17.0 in Bessemer converters to 63.1 in foundries, while severity rates for the same period ranged from 1.9 days lost per thousand hours of exposure in sheet mills to 4.6 in blast furnaces.

The record of improvement in accident frequency and severity is brought out clearly in this table. In the department of Bessemer converters the frequency fell from 101.5 in 1907–1910 to 17.0 in 1921–1924, a decrease of over 80 percent. In foundries, however, little or no change has been manifest. In heavy rolling mills a decline of 70 percent has been attained. In sheet mills a decrease of over 25 percent has been noted. Decreases in severity rates are somewhat less marked. This is especially true of Bessemer converters, where the decrease in severity rates was only slightly over 50 percent as compared with an 83 percent decrease in the frequency rate.

Comparisons between the two parts of the steel industry are significant of the influence of preventive work. The average accident fre-

TABLE II

ACCIDENT FREQUENCY AND SEVERITY RATES BY INDUSTRIES FOR 11 STATES, 1925 *

INDUSTRY	ACCIDENT FREQUENCY RATES PER 1,000,000 HOURS EXPOSURE				ACCIDENT SEVERITY RATES PER 1000 HOURS EXPOSURE			
	DEATH	PERMANENT DISABILITY	TEMPORARY DISABILITY	TOTAL	DEATH	PERMANENT DISABILITY	TEMPORARY DISABILITY	TOTAL
Agricultural implements	0.18	1.60	23.31	25.09	1.10	1.26	0.42	2.78
Automobiles	.10	1.24	7.80	9.14	.59	1.02	.16	1.77
Automobile tires	.07	1.03	57.98	59.08	.40	1.06	.84	2.30
Boots and shoes	....	.18	9.88	10.06	....	.13	.19	.32
Brick	.17	.62	30.46	31.25	1.03	.73	.55	2.31
Carpets	.15	1.00	4.87	6.02	.91	1.45	.15	2.51
Chemicals	.09	1.00	5.63	6.72	.52	1.49	.18	2.19
Electrical machinery	.07	1.26	9.46	10.79	.43	1.12	.24	1.79
Flour	.37	.65	18.71	19.73	2.21	.57	.27	3.05
Foundry and machine shops	.08	1.43	23.62	25.13	.48	1.24	.43	2.15
Furniture	....	1.09	14.96	16.05	....	.79	.25	1.04
Glass	.03	.49	24.37	24.89	.16	.65	.27	1.08
Leather	.07	1.08	11.17	12.32	.43	.82	.29	1.54
Lumber—planing mills	.20	1.96	19.78	21.94	1.22	2.62	.49	4.33
Lumber—sawmills	.36	.78	18.49	19.63	2.15	.66	.48	3.29
Machine tools	.06	.94	21.09	22.09	.33	.77	.27	1.37
Paper and pulp	.15	2.39	20.47	23.01	.90	3.20	.75	4.85
Pottery	.11	.32	16.52	16.95	.64	.87	.37	1.88
Slaughtering and meat packing	.21	1.13	22.94	24.28	1.26	.94	.42	2 62
Stamped and enameled ware	....	.68	16.97	17.65	....	.54	.19	.73
Steam fittings, apparatus and supplies	.05	2.04	31.52	33.61	.32	1.89	.74	2.95
Stoves	.08	.25	43.08	43.41	.50	.24	.45	1.19
Structural-iron work	.31	2.15	48.49	50.95	1.84	1.95	.75	4 54
Woolen goods	.03	.34	1.59	1.96	.16	.24	.05	.45

* *Source*: U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924–26" (Washington 1927) p. 226

TABLE III

ACCIDENT RATES IN THE IRON AND STEEL INDUSTRY BY DEPARTMENTS AND BY FOUR-YEAR PERIODS *

PERIOD	ALL DEPARTMENTS	BLAST FURNACES	BESSEMER CONVERTERS	OPEN HEARTH	FOUNDRIES	HEAVY ROLLING MILLS	PLATE MILLS	SHEET MILLS
FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE)								
1907–1910	69.2	76.1	101.5	84.2	60.1	61.0	69.4	44.1
1911–1914	53.3	50.3	65.0	67.6	59.3	39.4	44.7	48.1
1915–1918	41.6	39.0	57.7	50.5	61.0	32.4	39.2	32.7
1919–1922	34.9	32.9	30.5	33.0	61.7	23.8	31.4	37.2
1921–1924	31.3	29.0	17.0	29.9	63.1	18.1	26.8	32.2
SEVERITY RATES (PER 1000 HOURS EXPOSURE)								
1907–1910	5.0	10.6	7.6	7.5	2.7	4.4	5.1	3.1
1911–1914	3.6	6.2	5.3	5.8	3.3	3.4	3.1	2.2
1915–1918	3.6	5.8	6.9	6.5	3.4	3.9	2.5	1.5
1919–1922	3.0	5.0	3.2	4.2	2.7	2.4	2.4	1.9
1921–1924	2.7	4.6	3.2	4.0	3.1	2.6	2.6	1.9

* *Source*: Compiled from U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924–26" (Washington 1927) p. 235.

quency and severity rates in that part of the industry which is engaged in active safety work are approximately one fourth those in the other part. How striking was the decrease in accident frequency rates in the former division can be learned from Table IV. An average frequency rate of 60.3 accidents per million hours exposure for the year 1913, for example, decreased for the year 1925 to 8.2, a decrease of over 85 percent. An analysis of the rate by causes permits us to judge how evenly the decline was distributed among the component parts of the rate.

TABLE IV

ACCIDENT FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE) BY CAUSES IN A PORTION OF THE STEEL INDUSTRY, 1913, 1925 AND 1913–1925 *

CAUSE OF ACCIDENT	1913	1925	AVERAGE, 1913–1925
All causes	60.3	8.2	27.2
Machinery	7.3	1.6	3.7
Working machines	3.8	.7	1.7
Caught in	2.5	.5	1.2
Breakage	.1	—†	.1
Moving material in	1.2	.2	.4
Cranes, etc.	3.5	.9	2.0
Overhead	2.8	.7	1.6
Locomotive	.3	.1	.2
Other hoisting apparatus	.4	.1	.2
Vehicles	2.3	.3	1.1
Hot substances	5.4	.6	2.6
Electricity	.5	—†	.2
Hot metal	3.6	.4	1.8
Hot water, etc.	1.3	.1	.6
Falls of persons	4.5	1.1	2.6
From ladders	.3	—†	.1
From scaffolds	.2	.1	.2
Into openings	.2	—†	.1
Due to insecure footing	3.8	.9	2.2
Falling material, not otherwise specified	1.2	.1	.4
Handling	26.7	3.4	12.5
Dropped in handling	11.2	1.5	5.1
Caught between	3.4	.4	1.6
Trucks	1.9	.2	.8
Lifting	2.5	.3	1.4
Flying from tools	.2	—†	.1
Sharp points and edges	3.8	.4	1.8
Tools	3.7	.5	1.6
Miscellaneous	12.9	1.1	4.3
Asphyxiating gas	.3		.1
Flying, not striking eye	.8	.1	.4
Flying, striking eye	2.9	.2	1.2
Heat	.9	—†	.2
Other	8.0	.8	2.4

* *Source*: Compiled from table, U. S. Bureau of Labor Statistics, *Bulletin no. 430*, "Handbook of Labor Statistics, 1924–26" (Washington 1927) p. 235–36.

† Less than one tenth of one.

Accident frequency and severity rates are available in detail for a few industries outside the iron and steel industry. The United States Bureau of Mines compiles accident frequency rates in metallurgical plants. In 1924 frequency rates per 1000 hours exposure were 52.42 for ore dressing plants, 37.73 for smelting plants and 46.17 for auxiliary works. For fatal injuries the frequency rates were .41, .18 and .36 respectively.

For certain establishments associated in the National Safety Council accident experience by industries is available. Frequency and severity rates in thirteen principal industries in 1925, based upon conditions in 1231 establishments represented in the National Safety Council, are given in Table V. The average accident frequency rate for all these establishments was 30.60 (per 1,000,000 hours) and the average severity rate was 2.02 days lost per 1000 hours worked. The lowest rates were in the textile industry, with a frequency rate of 13.61 and a severity rate of .45. In this industry only one accidental death occurred in 77,924,601 hours of employment. The highest rate (except that of 99.99 in mining) was 69.54 in construction (with a severity rate of 7.57). Since the establishments included in this experience are all actively interested in safety work, it is probable that these rates are lower than the average for the industries as a whole.

Next to the study of industrial accidents in the United States, that in Germany is of

TABLE V

INDUSTRIAL ACCIDENT EXPERIENCE BY INDUSTRIES, 1925, FOR ESTABLISHMENTS ASSOCIATED IN THE NATIONAL SAFETY COUNCIL *

INDUSTRY	FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE)	SEVERITY RATES (PER 1000 HOURS EXPOSURE)
Total	30.60	2.02
Automotive	23.42	1.06
Cement	26.08	5.00
Chemical	20.91	2.71
Construction	69.54	7.57
Metals	32.50	1.82
Mining	99.99	8.51
Packers and tanners	40.15	1.27
Paper and pulp	38.43	2.15
Petroleum	27.35	2.33
Quarry	48.56	7.64
Rubber	29.15	1.11
Textile	13.61	.45
Woodworking	44.20	2.75

* *Source*: U. S. Bureau of Labor Statistics, *Bulletin no. 430*, "Handbook of Labor Statistics, 1924–26" (Washington 1927) p. 253.

especial interest. In Germany, as early as 1884, an accident insurance or workmen's compensation law on a comprehensive scale was passed. In preparing the statistical basis for the law it was recognized that statistics of accidents were far from satisfactory. A by-product of the law has been the development of reasonably accurate accident frequency rates.

Table VI shows accident frequency rates per 1000 full time workers in a number of German industries. These rates are not statistically comparable with those already presented for the United States, since in Germany accidents causing less than thirteen weeks disability are cared for by the sickness insurance institutions, while only those causing disability exceeding this period are counted in the statistics of cases cared for by the accident insurance funds. In any case the differences in the basis of calculation in terms of (per 1000) full time workers

TABLE VI

ACCIDENT FREQUENCY RATES IN SELECTED INDUSTRIES, GERMANY, 1926 *

INDUSTRY	ACCIDENTS PER 1000 FULL TIME WORKERS			
	TOTAL	FATAL	TOTAL DISABILITY	PARTIAL DISABILITY
All industries	6.87	0.56	0.06	6.26
Mining	13.85	1.96	0.05	11.84
Quarrying	12.68	1.36	.20	11.12
Iron and steel:				
South German	10.05	.45	.04	9.55
Middle German	4.94	.27		4.66
Northeast German	7.47	.44	.06	6.97
Silesian	15.46	.56	.05	14.85
Northwest German	7.46	.58	.01	6.87
Other metals:				
South German	6.12	.10	.03	6.00
Musical instruments	4.63	.09	—	4.54
Glass	4.49	.27	—	4.23
Chemical	6.09	.48	.06	5.55
Gas and water works	5.99	.66	.04	5.29
Linen	4.61	.22	.02	4.37
Textile:				
North German	2.64	.10	.02	2.51
Silk	2.02	.10	.02	1.90
Paper	3.82	.06	.01	3.74
Papier maché	10.37	.91	.03	9.43
Leather	6.72	.41	.06	6.25
Wood:				
North German	7.63	.29	—	7.33
Milling	11.37	.87	.14	10.36
Sugar	2.25	.10	.02	2.13
Brewery and malt products	4.97	.39	—	4.57
Tobacco	1.04	.02	—	1.01
Clothing	2.44	.06	—	2.38
Construction:				
Hamburg	8.52	.64	.08	7.80
Book printers	2.52	.11	.01	2.39
Inland navigation	7.53	.72	.05	6.76
Ocean navigation	7.48	1.69	.12	5.67
Slaughtering and meat packing	7.13	.31	.28	6.54
Wholesale trade	7.65	.65	.14	6.86
Retail trade	1.78	.08	.03	1.67
	ACCIDENTS PER 1000 INSURED WORKERS			
All industries	6.04	.49	.05	5.50
Agriculture	4.27	.19	.09	3.98

* *Source*: Compiled from *Statistik der Sozialversicherung 1926, mit einem Blick auf das Jahr 1927*, Beilage zu den amtlichen Nachrichten für Reichsversicherung (1928) no. 2, p. 24–25.

TABLE VII

COMPARATIVE MORTALITY FROM ACCIDENT FOR SELECTED OCCUPATIONS, ENGLAND AND WALES, 1910–1912 *

OCCUPATION	COMPARATIVE ACCIDENT MORTALITY FIGURE †
All occupied and retired males	47
Seamen-merchant service	199
Bargemen, lightermen, watermen	193
Coal miners	118
Dock laborers, wharf laborers	100
Fishermen	97
Lead miners	96
Tin miners	95
Iron miners and quarriers	93
Stone slate quarriers	89
Railway guards, porters, pointsmen	78
Coal heavers	77
Ship building	64
Coach, cab, omnibus service, grooms	49
Railway engine drivers, stokers, cleaners	47
Boiler makers	41
Copper manufacture, copper workers, coppersmiths	41
Glass manufacturing	38
Paper manufacturing	31
Brewers	30
Sawyers	30
Cotton manufacturing	29
Farmers, graziers, farmers' servants	28
Law clerks	22
Civil service, officers and clerks	22
Printers	21
India rubber, gutta percha workers, etc.	18
Wool worsted manufacturing	16
Silk manufacturing	13
Clergymen and priests	13
Hosiery manufacturing	12

* *Source*: *Supplement to the 75th Annual Report of the Registrar-General for England and Wales*, part iv, "Mortality of Men in Certain Occupations in the Three Years, 1910, 1911, and 1912" (London 1919) p. xxii–xxiv.

† Calculated by applying to a standard male population 25 to 65 years of age the actual accident mortality rates in the specified occupation, the average rate from accident for all occupied and retired males 25–65 yielding 47 deaths when applied to this standard population. See reference for details of its construction.

(i.e. per 3,000,000 hours) should be noted. The chief value of these figures is for comparing different industries, and for this purpose rates for mining, transportation and agriculture are included in the table. Frequency rates are shown also for fatal cases, for total disability and for partial disability.

The statistical record of accidents in Germany shows a very marked decrease in accident frequency rates in the forty years during which the insurance system has been in operation. The number of fatal accidents, for example, per 1000 insured workers in industrial corporations decreased from .77 in 1887 to .47 in 1926. The frequency of accidents involving total permanent disability similarly decreased from .73 in 1887 to .05 in 1925. The figures for temporary disability are not of special significance because of the tendency of rates to increase owing to improved reporting of accidents.

An alternative method of throwing light on industrial hazard is through the study of mortality from accidental causes, classified by occupations. Although these figures include accidents not only from industrial but from other causes as well, industrial hazards are the chief factor in producing differences in accident mortality for persons in different occupations.

The only satisfactory statistics of occupational mortality on the basis of which industrial hazard can be measured are for England and Wales. Statistical analyses, made every ten years since 1890, show the relative importance of accidents as a factor in mortality in different occupations. A selection of hazardous and non-hazardous occupations with their comparative mortality from accidents according to the latest available figures, those from 1910–1912, are given in Table VII.

The distribution of accidents according to degree of disability and severity of the injury caused, as already suggested, is fraught with some difficulty on account of the variable definitions of the accidents which are in practise included in the statistics. Especially in case of minor accidents are the statistical differences likely to produce differences in their apparent frequency. For purposes of presenting a fair picture of the relative frequencies of fatal accidents, those causing permanent disability and those causing temporary disabilities over varying lengths of time, the standard accident table compiled by Dr. I. M. Rubinow is presented in slightly abridged form as Table VIII. This table is based upon a careful analysis and comparison of the available statistical materials on the severity of industrial injuries in the United States and European countries.

TABLE VIII

DISTRIBUTION OF 100,000 ACCIDENTS ACCORDING TO DEGREE OF DISABILITY CAUSED *

DEGREE OF DISABILITY		NUMBER OF ACCIDENTS
Fatal		932
Dismemberments		2,323
Loss of left arm	64	
Loss of right arm	95	
Loss of left hand	50	
Loss of right hand	61	
Loss of one or more fingers or their phalanges	1,323	
Loss of one leg	129	
Loss of both legs	3	
Loss of toes	57	
Loss of one eye	465	
Loss of one eye with injury to other	62	
Loss of both eyes	14	
Permanent total disability other than dismemberment		110
Permanent partial disability other than dismemberment		2,442
Disability of 1–10 percent	672	
" " 11–20 "	728	
" " 21–30 "	378	
" " 31–40 "	265	
" " 41–50 "	179	
" " 51–60 "	92	
" " 61–70 "	92	
" " 71–80 "	36	
Temporary disability		94,193
Less than 1 week	37,113	
1–2 weeks	23,925	
2–3 "	12,433	
3–4 "	6,970	
4–5 "	4,427	
5–6 "	2,732	
6–7 "	1,695	
7–8 "	1,130	
8–9 "	942	
9–10 "	565	
10–11 "	471	
11–12 "	377	
12–13 "	283	
13–26 "	933	
Over 26 weeks	197	
Total		100,000

* *Source*: Rubinow, I. M., "A Standard Accident Table as a Basis for Compensation Rates" in American Statistical Association, *Publications*, vol. xiv (1914–15) 358–415.

The causes of industrial accidents are a primary object of inquiry. The conception of cause has undergone considerable modification. Early ideas of responsibility led to a classification according to the responsibility of employer and of employee, with a considerable residuum of accidents attributed to the general hazard of the industry. The fundamental idea that lies

TABLE IX

CAUSES OF INDUSTRIAL ACCIDENTS IN SELECTED COUNTRIES *

CAUSE	PERCENT DISTRIBUTION OF ACCIDENTS								
	AUSTRIA	BELGIUM	FRANCE	GERMANY	NETHERLANDS	NORWAY	SWEDEN	UNITED STATES	
								CALIFORNIA	MASSACHUSETTS
Machinery	22.6	7.2	7.2	23.1	9.1	17.7	20.4	10.7	27.0
Prime movers	0.6	.5	.2		.5	.1	.3	.3	
Transmissions	1.3	1.7	.6		.7	1.5	1.0	1.1	
Working machines	20.7	5.0	6.4		7.9	16.2	19.1	9.3	
Hoisting apparatus, cranes	1.8	.6	.6	5.9	3.2	3.0	2.8	1.1	—
Boilers, steam pressures, explosions	.2	.4	.1	.5	.1	.2	.2	1.0	4.4
Furnaces, flames, conflagrations	—		—	—	.4	—	—	4.6	
Explosive substances	.7	—	.1	2.1	.1	2.0	.3		
Hot and corrosive substances	4.7	4.8	5.5	4.0	8.6	2.7	4.0		
Collapse, fall and handling of objects	14.7	35.4	29.4	15.0	11.0	13.5	6.4	33.4	29.1
Fall of ballast, etc.		—			—	2.3		8.1	3.6
Falling in, etc.		.2			—	11.2			
Collapse of piles, pieces of wall, etc.		5.9			.8	—			
Chutes, falling objects, etc.		13.4			10.2	—			
Handling of objects		15.9			—	—		25.3	25.5
Falls of persons	13.5	18.3	18.5	11.6	17.0	21.1	8.2	13.4	12.7
Loading and unloading by hand	15.3	10.2	14.7	9.7	14.5	12.2	19.0	—	—
Vehicles and animals	12.6	10.9	5.7	15.5	6.2	3.8	11.7	11.9	7.4
Animals	—	2.2		1.1	.6	—	1.1	2.1	.7
Animal-drawn vehicles	4.6	1.9			—	3.8	4.1		
Funiculars, vehicles on rails, etc.	—	—		4.0	—	—	5.8		
Crushing by vehicles	—	—			1.1	—	—	9.8	6.7
Automobiles, bicycles, etc.	—	—			3.1	—	.3		
Railways	7.9	.9		9.8	.8	—	—		
Metalled and stoned roads		5.9		—	—	—	—		
Navigation	.1	—		.6	.6	—	.4		
Hand tools	7.8	7.4	6.6	4.0	12.0	5.0	15.6	9.4	8.0
Miscellaneous	6.1	4.8	11.3	8.6	17.8	18.8	11.4	14.5	11.4
Electricity		.1	.2	.7	.6		.3	.6	.6
Flying chips, splinters, etc.		4.2	—	—	3.3		—	—	—
Compressed air, gas, etc.		.2	.1	—	—		.1	—	—
Stepping on objects		—	—	—	—		.9	8.2	5.0
Other causes		.3	11.0	7.9	13.9		10.1	5.7	5.8
Unknown causes		—	.3	—	—	—	—	—	—

Note to original: "Austria: annual statistics of 1909, accidents disabling for over 28 days. Belgium: quinquennial statistics of 1906, accidents disabling for more than a week. France: factory accident statistics of 1913, accidents disabling for more than 4 days. Germany: annual statistics of 1920, accidents disabling for more than 91 days (agricultural accidents excluded). Netherlands: statistics of 1906, accidents disabling for more than 2 days. Norway: statistics of 1904–1906, accidents disabling for more than 28 days. Sweden: statistics of 1919, accidents disabling for more than 3 days. California: statistics of financial year 1920–1921, all 'tabulatable' accidents. Massachusetts: statistics of financial year 1918–1919, all 'tabulatable' accidents."

* *Source*: International Labour Office, Studies and Reports, series N (Statistics) no. 3, *Methods of Statistics of Industrial Accidents* (Geneva 1923) p. 13.

back of the present day analysis is prevention. In the United States the basis of classification by causes has been studied by a committee of the International Association of Industrial Accident Boards and Commissions, whose classification scheme has been adopted by the United States Bureau of Labor Statistics and by a considerable number of states. The League of Nations has published the cause classification schemes used in various countries.

Details regarding the principal causes of accidents in the steel industry in the United States have already been furnished in Table IV. This indicates the general character of the cause classification. In other industries the various causes are, of course, of varying importance; each industry needs special data on causes in order to ascertain the direction in which preventive efforts should be turned.

Table IX shows the relative importance of the several causes in seven European countries and in two states of the United States. The marked variations in the percentages of accidents caused by machinery, for example, may be due to differences in the relative importance of mechanical industries, or to differences in the advancement of the safety movement, or perhaps to differences in the assignment of causes in classifying the statistical material.

In addition to causes, what may be termed "causal factors" are of great importance. These are of two groups—those concerning the workers and those concerning the work. Among the first are age and sex of the worker, his race or nationality, his mental and physical condition, fatigue and his attitude toward his work; among the second are the length of the work day, speed and intensity of work, and provision of rest periods. Space is lacking to do more than suggest lines of investigation in two or three of these topics.

Special studies have been made of the influence of fatigue upon the causation of accidents. Data on the relation between the occurrence of industrial accidents and the hour of the day in general show an increase in accidents during the morning hours to a maximum at about eleven o'clock, a falling off as the noon rest period approaches; and an increase during the afternoon to a maximum for the day a short time before the end of the afternoon's work. This analysis indicates that fatigue, though perhaps not the sole element in the situation, is probably an important factor in the rising frequency rate of accidents during the progress of the day's work. A study of the relation between accidents and fatigue was made by the U. S. Public Health Service during the war period in the form of a comparison between the frequency of accidents in an eight-hour and in a ten-hour plant. In this study the frequency of accidents was measured not only in terms of time of work but also in terms of output. Important studies of the relation between accidents and fatigue have been made during and after the war by the Industrial Fatigue Research Board in Great Britain.

Statistics on the relation between age and frequency of accident are available for German experience, and indicate that accident frequency rates increase with age.

TABLE X

ACCIDENT FREQUENCY RATES BY AGE AND SEX, GERMANY, 1897 *

AGE	ACCIDENT FREQUENCY RATES PER 1000 INSURED		
	BOTH SEXES	MALE	FEMALE
Under 16	2.4	2.7	1.6
16–17	3.2	3.6	1.6
18–19	3.6	4.3	1.3
20–29	5.4	6.2	1.6
30–39	9.2	10.1	1.9
40–49	12.3	13.6	2.5
50–59	13.8	15.3	3.2
60–69	14.2	16.0	2.6
70 and over	8.5	9.9	1.1

* *Source*: Manes, Alfred, "Unfallversicherung" in *Worterbuch der Volkswirtschaft* (3rd ed. Jena 1911) p. 1094. Rates for "industry, construction and seafaring."

So far, however, as the liability of accident of young persons just commencing work is concerned, such figures are inconclusive, because the occupations in which young persons are employed are often not of the same character as those in which older persons are engaged. Employment of children in dangerous occupations is prohibited. Lower frequency rates for young persons may thus indicate simply the greater safety of the types of occupations in which they are predominantly engaged.

That physical or mental ill health is a frequent cause of accidents needs no statistical proof; but statistical evidence is lacking because of the difficulty of obtaining data on exposure and on accidents classified in comparable fashion as to condition or type of sickness.

Prevention of accidents and minimizing their

consequences through prompt first aid are the primary objectives toward which both statistical analysis and safety work are aimed. Theoretically, at least, all accidents should be prevented. A study of the magnitude of the problems emphasizes the need for prevention, and a study of the causes of accidents and of the conditions that produce them points the way to methods by which they can be prevented.

Methods of prevention may be directed toward removing a specific cause, bettering or remedying a condition that favors accidents, or stimulating and promoting safety. Responsibility for making industry safe is most effectively placed with the management; this responsibility is in practise made effective by shifting the burden of cost of workmen's compensation to employers. Insurance companies assist in promoting safety through inspection and through rating systems. The actual introduction of methods of prevention is a matter for the technical expert or safety engineer.

A large group of accidents caused by machinery can be prevented by designing machines so as to eliminate the source of danger. Guards are introduced to cover exposed moving parts, to enclose gears, belts and moving chains, so that workers are unable to place their hands in places where they can be injured. Laws to require the provision of machine guards have been generally enacted, and are enforced by routine inspection. Commissions have been set up with administrative power to issue safety regulations. Such regulations are for the most part directed toward the provision of safe work places, although in certain cases unsafe practises of employees are forbidden.

A striking development of recent times is the organization of safety departments in industrial establishments. These departments are charged with responsibility for preventing industrial accidents. They are commonly placed in charge of safety engineers who study the causes of accidents and introduce methods of eliminating and preventing them.

A second direction of effort involves the systematic study and elimination of points of hazard throughout an entire establishment. The manner of routing supplies, of placing machinery with reference to the location of aisles, the quality of illumination, the use of motive power, the substitution of electrically driven single unit machines for the older type of machines driven by exposed belts, are all studied with reference to the possibilities of reducing accidents. In building new establishments, in particular, the layout of the plant is planned with especial reference to eliminating hazards.

These methods of prevention call for technical skill. Each type of machine may require some special device to render it safe. In using electric power automatic devices are required to cut off the electricity before repairs can be made on the machinery. Elevators require special safeguards. The various devices that have been developed for different specific hazards are illustrated in exhibits at safety museums.

Another method of prevention is the provision of special clothing to guard against particular types of hazards. The wearing of goggles with non-splinterable glass is necessary in occupations where workers are exposed, as in work in foundries, to flying particles of metal. Another illustration is in the use of shoes which can be slipped off immediately in occupations in which workers are exposed to splashing molten metal.

Another type of preventive effort is directed toward the education of employees in safety practises and toward stimulating them to cooperate with employers in reducing accidents. These educational campaigns include safety talks for workmen and foremen, and utilize posters and various types of educational material. In particular they make use of the spirit of rivalry in different departments of the establishment or in different establishments in order to obtain the best record in safety.

Personnel selection may be used to reduce accident frequency. Physical examination of workers with special reference to their liability to particular types of accidents is an important method. In railroad operation the elimination of color blind engineers and firemen is a familiar illustration of this type of personnel selection. The examination of employees with reference to their physical condition may extend also to temporary illnesses, and it may provide that employees who are not up to their normal physical standard of health shall be excused from their usual occupations where these involve any considerable degree of risk.

The training of workers in the special requirements of their work is an important method of accident prevention. Records indicate that an unusual proportion of accidents occur within the first few days after a worker begins work on a new type of machinery. In other words, during

the learning process accidents are frequent. If a sufficient training period is allowed, the frequency of accidents during this initial stage may be materially reduced. Careful personnel work includes fitting employees to their positions, providing suitable rest periods and, if necessary, psychiatric treatment to produce the best adjustments.

An important question relates to the proportion of accidents which are preventable. Recent estimates by Sidney J. Williams put preventable accidents at 75 percent. These estimates are supported by the experience of various industries in reducing accidents with the introduction of safety work. For example, in establishments in the steel industry the accident rate has been reduced 75 percent since undertaking systematic safety work.

A study made by the Travelers Insurance Company suggests that 98 percent of all accidents can be prevented. This estimate is reached on the basis of an analysis of a considerable number of accidents. It was found that in practically all cases the accident could have been prevented if the employers had been held responsible for introducing known methods of prevention, including close and watchful care over the physical and mental condition of their employees. In support of this view that practically all accidents can be prevented certain remarkable records for safe operation of industry can be cited. One record is of ten million hours of employment without a lost time accident. Other long runs have been made by enlisting the cooperation of employees in the prevention of accidents. Accidents can be prevented by eliminating all hazard producing causes and conditions in industry, using methods suggested through careful study.

ROBERT M. WOODBURY

See: ACCIDENTS; INDUSTRIAL HAZARDS; FATIGUE; CHILD LABOR; COMPENSATION AND LIABILITY INSURANCE; EMPLOYER'S LIABILITY; WORKMEN'S COMPENSATION; SAFETY MOVEMENT; SHORT HOURS MOVEMENT; REHABILITATION.

Consult: U. S. Bureau of Labor Statistics, *Bulletins* as follows: no. 276, "Standardization of Industrial Accident Statistics" (1920); no. 298, "Causes and Prevention of Accidents in the Iron and Steel Industry, 1910 to 1919" (1922); no. 339, Chaney, L. W., "Statistics of Industrial Accidents in the United States" (1923); no. 395, "Index to Proceedings of the International Association of Industrial Accident Boards and Commissions, 1914–1924" (1925); no. 425, "Record of Industrial Accidents in the United States to 1925" (1927); no. 439, "Handbook of Labor Statistics, 1924–1926" (1927); also *Bulletins* nos. 157 (1915), 201 (1916), 234 (1918) and 256 (1920); "The Methods of Statistics of Industrial Accidents" in International Labour Office, *Studies and Reports*, series N (Statistics 1923–) no. 3; Eckert, J., Hartmann, O. K., and Paul, O., *Handbuch der Reichsversicherung* (Berlin 1926) p. 135–43; Florence, P. S., *Economics of Fatigue and Unrest* (London 1924) ch. x; Goldmark, Josephine, *Fatigue and Efficiency* (New York 1912) pt. i, p. 71–79 and pt. ii, p. 192–213, containing reprints of foreign material on industrial accidents; Newbold, E. M., "A Contribution to the Study of the Human Factor in the Causation of Accidents" in Great Britain, Industrial Fatigue Research Board, *Report no. 34* (London 1926); Vernon, H. M., "An Investigation of the Factors Concerned in the Causation of Industrial Accidents" in Great Britain, Ministry of Munitions, Health of Munitions Workers Committee, *Memorandum no. 21* (London 1918), and *Industrial Fatigue and Efficiency* (London 1921) chs. x–xi; Williams, S. J., "Industrial Accidents" in American Engineering Council, *Waste in Industry* (New York 1921) ch. xiv; Woodbury, R. M., *Social Insurance; an Economic Analysis* (New York 1917), and *Workers' Health and Safety, a Statistical Program* (New York 1927) pt. i.

ACCLIMATIZATION is the process by which an organism becomes adapted to a new climate The test of acclimatization is not the survival of the individual, but of the species or variety. Acclimatization occurs frequently among plants and animals, as appears in the fact that wheat, potatoes, horses, hens and many other species thrive in climates very different from those where they originated. The same is true of man; early man almost certainly migrated into many climates and then became acclimated; modern man is doing likewise. Acclimatization is often accompanied by changes which adapt the organism to the new environment, e.g. the shaggy coat and small size of Shetland ponies, the hairiness of mountain primroses, and the colors of the human skin and hair.

Acclimatization depends upon two fundamental laws. First, every species is subject to climatic limits imposed by temperature, humidity, sunshine, wind and other factors. Within certain limits the individual can survive; within more restricted limits it can permanently reproduce its kind. Second, every species thrives best under definite conditions of climate. But the optimum for vegetative growth may differ widely from the optimum for reproduction. Moreover the optimum and the limits vary appreciably from one individual to another.

The physical optimum for Europeans involves a mean temperature of about 65° F. for day and night together; a relative humidity averaging about 80 percent; and an interdiurnal

variability averaging not far from 3° F. There is some evidence, although not conclusive, that under modern conditions of clothing and housing the optimum for mental activity is an outdoor temperature averaging not far from 40°. On this basis the optimum climate for the white man satisfies the following requirements: midday summer temperature from 70 to 75° F.; winter nights frosty; air moist enough to form dew or frost at night, and relative humidity at noon rarely below 50 percent; storms numerous so that weather is variable and average change of mean temperature from day to day is about 3°. Southeastern England approaches these conditions, but nowhere does the white race live under the absolute optimum of climate.

The main problem of acclimatization centers around the white man in the moister parts of the tropics. The permanent British settlers in northern Australia, the Americans in Hawaii, the Dutch in South Africa and Java, and the Spanish and Portuguese in Latin America are said to prove that white acclimatization in the ordinary sense is possible. Opponents of this view point out that Australia, Hawaii and South Africa are only sub-tropical, in Java there are very few Dutch children of the third generation, while in Latin America people of pure European descent are rare outside the cool highlands and even those few are dark skinned.

The Australian studies of Sundstroem probably indicate the real truth. Among healthy white people living permanently on the edge of the tropics he found that the composition of the blood and the general functioning of the system differ slightly but systematically from those of the white people in cooler climates. Practically all students of the problem agree that life in the tropics tends to produce nervous instability—neurasthenia—among white people. Such conditions do not necessarily prevent the production of healthy children, but they appear to induce a state of physiological stress, and presumably decrease the resistance to disease although this has not yet been demonstrated. More extreme conditions of the same kind doubtless prevail where the climate is more steadily warm and moist. Whether they would prevent the rearing of healthy children if tropical disease were eliminated, no one yet knows. The Japanese reactions to climate are almost identical with those of Europeans. It may be significant that in September at the end of the hot, damp, debilitating summer, which simulates a tropical climate of the more humid type, the conceptions that give rise to living children in Japan, where there is no birth control, are only a little more than half as numerous as in June, and are fewer than the deaths. Moreover, even though tropical diseases may be eliminated among selected groups of both whites and natives, their general elimination among the hundreds of millions of tropical natives is at best a matter of many generations.

The diversity of opinion as to tropical acclimatization arises partly from failure to appreciate natural selection. Constitutional peculiarities, both physical and temperamental, permit some persons to thrive under temperatures and humidities which are almost intolerable to others. Among the thousands of people who contemplate a tropical sojourn, the health or temperament of themselves or their families reduces the sojourners to hundreds, while only tens remain permanently and few of those have families. Thus the white parents who bring up families in moist tropical climates are a very highly selected group. They either possess peculiarly vigorous, adaptable constitutions, or have climatic optima which tend toward the tropical type. Yet even their descendants are weeded out very actively by death, sterility or migration. Thus a healthy European child of the third generation in the tropics represents a highly extreme type and is no indication of what might happen to large groups of people under similar conditions. Even if tropical diseases should everywhere be conquered and the most rigid selection should segregate a fairly well acclimated white stock, we do not yet know whether the vigor of such a stock would equal that of the ordinary stocks in cooler climates.

ELLSWORTH HUNTINGTON

See: CLIMATE; ADAPTATION; ADJUSTMENT; ENVIRONMENT; STRUGGLE FOR EXISTENCE; POPULATION; MIGRATION; IMPERIALISM.

Consult: Huntington, Ellsworth, *Civilization and Climate* (3rd ed. New Haven 1924); Castellani, Aldo, and Chalmers, A. J., *Manual of Tropical Medicine* (3rd ed. London 1919) p. 39–146; Sundstroem, E. S., *Contributions to Tropical Physiology, with Special Reference to the Adaptation of the White Man to the Climate of North Queensland*, University of California Publications in Physiology, vol. vi (Berkeley 1926); Cilento, R. W., *The White Man in the Tropics* (Melbourne 1925); Balfour, Andrew, "Sojourners in the Tropics" in *The Lancet*, vol. cciv (1923) 1329–34, and "Problems of Acclimatization" in *The Lancet*, vol. ccv (1923) 84–87, 243–47; Eijkman, C., "Some Questions Concerning the Influence of Tropical Cli-

mate on Man" in *The Lancet*, vol. ccvi (1924) 887–93; Wickens, C. H., "The Vitality of White Races in Low Latitudes" in *Economic Record*, vol. iii (1927) 117–26, and in Royal Society of Victoria, *Proceedings*, n.s.,vol. xl (1927–28) 17–24; Sayers, R. R., and Davenport, S. J., "Review of Literature on the Physiological Effects of Abnormal Temperatures and Humidities" in United States Public Health Service, *Public Health Reports*, vol. xlii (1927) 933–96; Hoffman, F. L., "Problems of Mortality and Acclimatization in the Central American Tropics" in International Conference on Health Problems in Tropical America, *Proceedings* (Boston 1924) 657–708; Trewartha, G. T., "Recent Thought on the Problem of White Acclimatization in the Wet Tropics" in *Geographical Review*, vol. xvi (1926) 467–78.

ACCOMMODATION is to be differentiated from adaptation, although both are forms of adjustment. If adaptation is defined as structural changes in the organism which take place through biological variation and selection, the term "accommodation" may be reserved for functional changes which take place in the habits and customs of persons and groups and which are socially rather than biologically transmitted. This distinction between biological and social adjustments was first made by J. Mark Baldwin, who perceived in accommodation the process by which "old habits are broken up, and new coordinations are made."

Franklin H. Giddings appears to be the first social scientist to make systematic use of the term accommodation, although in the limited sense as one among several modes of the universal method of conflict. Gabriel Tarde employed the term to denote the resolution of the conflict between two opposing ways of acting and the emergence of a new pattern of behavior. Georg Simmel, without himself using the term, described and analyzed the process of accommodation in its interrelations with the process of conflict. Robert E. Park and E. W. Burgess place accommodation with competition, conflict and assimilation as the four chief processes of social interaction. They point out that these social processes tend to create different types of social order: competition resulting in the economic equilibrium; conflict, in the political order; accommodation, in social organization; and assimilation, in personality and the cultural heritage.

Social organization is the sum total of accommodations to past and present situations. All the social heritages, traditions, sentiments, culture, technique, are accommodations; they are acquired adjustments that are socially and not biologically transmitted.

Historical societies have been organized around different forms of accommodations such as slavery, caste and classes. These types of social organization involve different patterns of social adjustment between dominating and subject groups. Stages in accommodation to conflict situations may be arranged in a series as follows: domination, toleration, compromise, conciliation and conversion. A *modus vivendi* is a special form of accommodation whereby persons or groups in conflict are enabled to carry on certain necessary activities without resolving the points in dispute.

Accommodation groups, organized to articulate with the environing social order, like clubs, social classes and vocational groups, castes, denominations and nations, are to be differentiated from groups organized for conflict, such as gangs, labor organizations, employers' associations, and middle class unions, races, sects and nationalities. The transition from a gang to a club, from a sect to a denomination, and from a nationality to a nation, discloses the process by which a group achieves equilibrium in its milieu.

The equilibrium maintained by accommodation, whether in a society, group or person, has been subjected to internal as well as external description and analysis. Simmel's statement of the reciprocal nature of superordination and subordination; Moll's study of rapport; the essays of James and others upon religious experience; the development of the concept of sublimation—all indicate the insight to be secured by research upon the role of attitudes in the process of accommodation. Life histories and personal documents are found to be valuable materials for research on the original conditioning and subsequent changing of attitudes involved in accommodation. Attitudes of race prejudice, of superiority or inferiority, and of loyalty may be transmitted to the members of a group by tradition, or they may be the outcome of certain crucial experiences of persons or groups. Changes in attitudes in the process of social adjustment to new situations may take place suddenly or gradually. Mutations, or sudden accommodations, occur under crisis situations, such as invention, migration, disaster. Gradual accommodations are the less perceptible changes seen in the process of acclimatization, naturalization and of maintaining equilibrium.

Accommodation, or the process of making social adjustments to conflict situations by maintaining social distances between groups and

persons which might otherwise come into conflict, is to be differentiated from assimilation, which is the process by which cultures and personalities interpenetrate and fuse. An illustration is seen in the accommodation of the immigrant in his adoption of dress, food, habits and language, without himself fully participating in the cultural heritages and common purposes of his adopted country by which his children are assimilated. It follows that while assimilation takes place in situations of primary, personal and intimate contacts, accommodations typically are arrived at by formal and external arrangements.

The concept of accommodation has so far found its most fruitful use in studies of immigration, colonization and race relations. It will also be found of value in research in social conflicts, adjustments in labor problems, industrial relations, community organization and political parties, as well as in the study of the social psychology of subordination and superordination, social status, social types and leadership.

ERNEST W. BURGESS

See: ADAPTATION; ADJUSTMENT; ASSIMILATION, SOCIAL; ACCLIMATIZATION; CULTURE; SOCIAL PROCESS; CONFLICT, SOCIAL; COMPETITION; SOCIOLOGY.

Consult: Park, R. E., and Burgess, E. W., *Introduction to the Science of Sociology* (2nd ed. Chicago 1924) ch. x; Baldwin, J. M., *Mental Development in the Child and the Race* (3rd ed. New York 1906) ch. xvi, p. 452–57; Simmel, Georg, *Soziologie* (3rd ed. Munich 1923) p. 101–85, 250–56, ch. iii tr. by A. W. Small as "Superiority and Subordination" in *American Journal of Sociology*, vol. ii (1896–97) 167–89, 392–415; North, C. C., *Social Differentiation* (Chapel Hill, N. C. 1926) p. 227–52.

ACCOUNTING, in the broad sense of the term, includes all the business records kept by a business organization or unit of government, as well as the principles and technique involved in establishing and maintaining the records. It covers two general groups: first, statistics and memoranda relating to production, properties and other non-monetary quantities; and second, financial records representing investment, expenditures, receipts, fiscal changes and standing, expressed in monetary units. In the narrower sense, as ordinarily used and as treated in this article, it relates to the second class of records. The other records, however, are of great business and public importance; they are usually integrated with the more formal system of accounting dealing with financial categories. A modern railroad company, for instance, maintains in addition to records of monetary transactions, records of service, physical operations, employees, materials, locations and changes of property.

HISTORY. The history of accounting reveals very clearly the constant interdependence of accounting knowledge and business requirements. Progress in the science and technique of accounting has made possible an increase in the size, complexity and territorial scope of business operations. Conversely, these business changes have spurred the advance in accounting knowledge and technique. The kind of records that are needed depends upon the business, but the kind of business that is possible depends upon the records that can be kept.

Accounting goes back to the earliest times of doing business. The simplest of commercial transactions, repeated period after period, required some sort of record. The invention of the system of double-entry, which is fundamental to complete financial statements, cannot be definitely credited to any particular person. There is evidence that it was employed even during Phoenician, Greek and Roman commercial supremacy and it was extensively developed and applied during the great Italian commercial era of the fourteenth and fifteenth centuries. After commercial leadership passed to Holland and England, it was introduced and greatly developed in the accounting houses of the great trading companies. The system depended upon "hand" efforts, and became formalized as to procedure and related books. There was the "day book," which recorded all the business transactions in chronological order. From the day book the items were restated chronologically in the "journal," and analyzed into "debits" and "credits" by accounts. Finally, from the journal the items were entered in the "ledger" to individual accounts. Cross checks and balances were established to maintain accuracy of records. This mechanical system continued until the expansion of business that followed in the wake of the industrial revolution.

The new impetus started about 1840 in Great Britain with the organization of railroad companies and the great growth of manufacturing and trading concerns. It followed to the United States and other countries with the extension of large business organizations and has been hastened by mechanical inventions and cumulative business pressure. During the past fifty years the old formalism has been discarded in large business, but still prevails in smaller

undertakings. Short cuts and adaptations are employed according to possibilities and needs. Specialized records are provided as conditions require. The old day book has been replaced by various forms of original records, kept according to convenience. The formal journal remains only as a record of special accounting adjustments which do not represent original transactions. The old ledger is replaced by special ledgers, subdivided and grouped according to the needs of each organization. But underlying all the sub-ledgers and the various original and intermediary records, the old principle of double-entry controls. The various ledgers are so organized that they are finally brought together in a comprehensive whole, as represented periodically by the balance sheet and the income statement. In large businesses, moreover, there is usually a "general ledger" which is based upon the subsidiary ledgers; this usually preserves in a single book complete financial records of the business, including assets, liabilities and operations, and also contains the accounts which appear directly in the balance sheets and income statements. It is based upon double-entry, and serves as a "control" of the several subsidiary ledgers.

The development in accounting practise during the past fifty years has paralleled business development. The great size of business units has involved increasing complexity as to kind of activity, diversities of property and extent of territory, and the accounting systems have followed the organization of business concerns. Each managerial unit of a large corporation must be completely informed with respect to the properties and activities for which it is responsible. The head of the corporation must have before him such general accounts and records that he can maintain constantly a comprehensive grasp of the entire business, its financial standing, its operating activity, its costs and returns and the interrelation of the larger units. These general records must bring together the various departments, whether organized by functional or by territorial lines or by a combination of the two. Each department head must have similar records for his domain, which may represent both a territorial and a functional subdivision. Extending down the line, each unit head depends upon exact records to exercise control and to keep his part coordinated with the wide ramification of the business. Consequently the amount and variety of accounting work needed by a large modern business concern are enormous. Modern accounting requires coordinated organization, expert division of labor, use of machinery and labor saving devices. It depends upon intricate equipment, mechanical billers, adding machines, typewriters, tabulators and classification machines. Without such facilities modern accounting would be impossible: the great bulk could not be handled, and the cost would be prohibitive.

Numerous special factors have influenced the development of accounting. With the growth of business, there has been increasing need of accurate records of physical property, particularly as operation has involved various kinds of property in large quantities, scattered over wide areas of territory. To meet this situation, continuous inventories have been developed and coordinated with the general accounting system. For manufacturing concerns, it has become increasingly necessary to have reliable cost records, both for the fixing of sales policy and for comparison of results between individual plants under the same ownership. Exact performance data are essential to furnish a gauge of the relative efficiency of plants or operating units. Statistical devices have been incorporated with the accounting system, to supply analysis, to furnish checks upon activities and to promote improved methods of production or management. With the fluctuations in prices or monetary values, it has become necessary for the management to know not only what its actual costs have been, but also what the present costs would be, and what the relative costs are between various units in different localities under the same control.

A large factor in modern accounting development has been the growing control of government over business. Detailed accounting classifications have been prescribed by government commissions for the utilities subjected to public regulations. The companies are required to file annual reports with the commissions, for which uniform provisions are made. Special tax reports are required for local, state and federal governments; the necessary data must be provided through the regular accounting channels. Through these and other relations to business, government has furnished a powerful spur to accurate accounting procedure, better classification and technique; if it has not actually originated new methods, it has exerted an influence in extending the best private practise to all business units in the same field.

While the modern tendency has been away from formalism, to adjust the accounting to business needs, there have been also strong forces for standardization and uniformity. In part, standardization has been promoted by the various governmental regulations. It has been stimulated even more by the demands for comparable data of trade and financial organizations, such as the stock exchange, financial publications, bankers, investors and trade associations. As business has become larger, its strictly private aspects have diminished, and its public character has been augmented. An underlying uniformity of classification has become desirable both as to property and other balance sheet accounts, as well as in respect to operating costs, sales, sources of revenue and other operating data.

Along with the vast extension of accounting practise, there has grown up an accounting profession, which has become variously specialized in fields of accounting investigation, analysis and system installation. Auditing firms, which are themselves organized businesses, make periodical investigation of the accounts of business houses required for a great many public and private purposes (*see* AUDITING). Accounting specialists have also become prominent in connection with various kinds of financial litigation which require technical knowledge and accurate analyses of costs, returns and operating results. Similar studies are made for the purpose of reorganizations, promotion of efficiency, and consolidations. They are required in wage controversies, especially before arbitrators or government bureaus, and are even more necessary in connection with utility rate controversies before the federal, state and local tribunals.

The profession of accounting has become established on a par with law, medicine and other learned professions. The varied accounting activities involve public interests and require assured ability, training and reliability. To safeguard the public, the accounting profession has become organized and regulated by law. Many countries have made provisions for certified or chartered public accountants, who practise within the requirements and protection of the statute, and have formed special organizations in the interests of accounting. Such regulations and organizations developed earlier in Great Britain, because of earlier business conditions requiring professional standards. In Great Britain the profession was thus organized between 1850 and 1880, while in the United States corresponding organization was not started until about 1895, when the New York Society of Certified Public Accountants was established. In continental Europe the recognition of accounting as a profession was much slower in coming. Associations of accountants in these countries were local in character and intended primarily for the protection of common interests. Only after the World War has rapid progress been made and a semi-public status been granted to these associations.

Coincident with this rapid evolution in accounting, there has come a great intellectual interest in accountancy. This is indicated by the new type of books on accounting, by the special accounting journals that have appeared and the character of articles published, by the numerous accounting materials contained in economic and financial publications, and especially by the inclusion of accounting studies in the educational system of the country. A generation ago, bookkeeping of a formalistic type was occasionally taught in the public schools, but was for the most part confined to the special "business colleges," which were generally of low academic grade. During the past generation, however, accounting has come to be a recognized department in every modern high school, and now appears in most of the colleges and universities as a part of the discipline for undergraduates who expect to enter general business. Schools of commerce with programs of study centered in accounting have emerged and grown with amazing rapidity in our large cities; graduate schools of business administration have appeared, and provide opportunities for an intensive study of accounting. In the graduate departments of our universities, accounting has become recognized as worthy of academic tolerance because of its effectiveness as a tool for economic research. Understanding of accounts is now a requisite of modern business preparation, not only for professional accountants, but also for business managers, bankers, lawyers, engineers, economists, in short all who must deal with costs, earnings, business affairs, governmental operations, and activities of public control.

THEORY. Although many old forms and conventions have been discarded, modern accounting is still based on the principle of double-entry, or that of an equation of financial trans-

actions. On the one side are all the so-called debits, and on the other all the credits; the sum of the first equals the sum of the second. The accounts are subdivided according to the needs and convenience of the business, but they always constitute a balancing equation.

When a business is first organized, the accounting begins with the receipt of money or other equivalent values invested in the undertaking. A double entry record is kept, first, of the money or other values placed in the enterprise, and second, of the source of the investment. There is an obvious equation; the amount of cash or other values received is debited to one account, or to a group of accounts, while the same sum is credited to the source or sources from which the values were obtained. The cash or equivalent values constitute assets or property of the business, and a separate record or account is kept of each class of assets. The original entry is a debit or charge to the appropriate asset or property account. On the other side of the equation, the same amount is credited to the particular source or sources from which the assets were derived. The accounts may be of individual owners; stockholders, common and preferred; or bondholders and other creditors who conveyed cash or other assets to the business. The sum of the debits thus represented by the various asset accounts is, necessarily, equal to the sum of the credits entered to the various groups from which the assets were obtained for the establishment and operation of the enterprise. Ordinarily, at the inception of a business, the assets are in the form of cash, and the source is represented by a single individual or by a small group. A modern corporation, however, may begin with a great variety of assets, already classified according to convenience, and with many sources from which the properties were derived. However simple or complicated the beginning, the results are the same: the asset or property values debited to the asset or property accounts are equal to the sums credited to the various sources from which the assets were obtained for the purposes of the enterprise.

After the inception of a business, the accounting is concerned, on the one hand, with recording the changes that take place in the various assets, and, on the other, with the changes in the sources or the relative rights in the assets. The cash with which the business starts is expended for other assets or property required for operation. These changes must be recorded in the proper asset accounts as each is specifically affected. An addition to any particular class of assets is debited or charged to the particular asset account; the disposal of a particular asset is credited to the appropriate account; the difference between the debits and credits of any asset account is the balance of the particular asset in so far as it is represented in the total equation.

In regard to the original credits showing the sources of the funds contributed to the business and hence the rights to the assets, these accounts are ordinarily not affected by the transfer of assets that takes place in the course of operation. The sources or rights at the beginning are represented by owners or creditors, and they are subdivided according to individuals or groups. Each account starts with a credit entry; subsequently, as any change takes place, increases are credited, and decreases are debited. The balance of each particular source is thus shown at any time by the difference between the credits and the debits of the account, and in the total equation it is represented upon the other side by an equal amount of net assets.

The accounts which record the source of funds or interest in the business are usually termed liabilities. This is a comprehensive term, covering all accounts which normally show a credit balance at any particular time. It is used because of its convenience, and is fully understood by accountants; otherwise it might be misleading since it includes not only interests represented by actual liabilities or debts of the business, but also other sources, original capital contributions, reserves accumulated for various operating purposes and profits or surplus derived from operation. The term, however, has been established, and conveniently distinguishes the entire group of credit accounts from the asset accounts which show debit balances at any particular point of time.

The business starts with an equation stating the assets and the source of the assets. Every business transaction is subsequently recorded as it affects the various kinds of assets and the different sources, and thus constantly preserves the equation. All operations involve intrinsically an exchange of some assets for other assets, i.e., goods are bought and sold. There is thus a constant recording of the assets affected with purchases and sales; with every transaction the

proper asset accounts are debited and credited. The object, however, is to obtain more assets in each round of purchase and sale. This involves not only a mere change or turnover of assets, but also a net increase in assets, a new source element in the equation. The net increase in assets is represented by the profit or surplus, which constitutes a separate source or interest, and at any point of time appears as a net credit in the special account (or debit, if there is a loss).

Operation is divided into regular periods, usually a year, with further subdivisions by months or shorter intervals. Within each accounting period, the various fiscal changes are recorded as the transactions take place. Each account is debited or credited as it may be affected. At the close of the period, each account is balanced so as to show its net status at the particular time. For each asset account, all the debits are added; the sum of the credits is deducted from the sum of the debits, leaving a net debit balance as the book value of the particular class of property. Likewise in respect to any liability or source account; at the close of each accounting period, the sum of the debits is deducted from the sum of the credits, and the balance is a net credit for the particular source or interest in the business. These balances are then brought together in a balance sheet, which, under recognized American practise, presents the assets on the left side, according to the classification employed, and the liabilities on the right side, classified according to various sources or interests. The balance sheet thus presents, at the close of each period and for the beginning of the next, the financial status of the business.

During a period of operation in between balancing, it is necessary or convenient to introduce special or temporary accounts to record the transactions. In a large business, these accounts include elaborate classifications of purchases and sales, operating expenses and revenues or manufacturing costs and trading, all pertaining to the particular period. All these interim accounts, however, record only such fundamental changes as above explained, and serve merely for the convenience of periodical calculation. At the close of each period, all these accounts are brought together and are presented as an income statement (or profit and loss account, or under some other title). The net results show the net profits or losses of the period; they are then carried to the balance sheet, which shows the extent to which the assets were derived from past profits of operation (or the extent to which assets were dissipated by past losses of operation).

The accounting system thus requires a classification according to the purposes of the business, not only of the various asset accounts and the various sources of the assets, but also of the periodical processes of operation. For merchandising, this involves a coordinated group of purchase and sales accounts and inventories, together with the wages and materials and other expenses connected with current operation. For a manufacturing concern, it includes systems of cost-keeping to show for each period the costs of the commodities produced.

A great deal of public attention has been given to the accounting systems of railroads and public utilities. For such purposes, elaborate classifications of operating expenses have been established to show the various costs incurred during each period in respect to the services furnished for which revenues are collected or accrued. So far as principle or accounting technique is concerned, there is no fundamental difference from the operation of merchandising or manufacture. Operating expenses represent charges or debits to individual accounts for cost of service instead of cost of commodities. For the service rendered, the revenues are accrued and collected. At the close of each period, the operating accounts are brought together in appropriate groups, as an income statement, to present the results in the most desirable form for the management and the public. The net returns (or losses) are then carried to the balance sheet, and are presented as in any other form of business.

The classifications for railroads and public utilities have particular significance, because of the special public interest in such properties. These are concerns distinguished from ordinary business, in that they are vested with public rights and are particularly subject to rate regulation by public authority. Rates must be reasonable, and, for the most part, the measure of reasonableness is the cost of service, including a fair return on the property used in operation. While other considerations enter into the determination of rates, an accurate record of costs is essential. There is, thus, a special public significance in railroad and public utility accounting. For the most part the systems now in use have been prescribed by the commissions

and have the force of law for the companies. The Interstate Commerce Commission has elaborate railroad and other classifications, as to property, balance sheet accounts, operating expenses, revenues and income accounts. Uniform systems for the various utilities have been prescribed by several state commissions. The purpose of all such classifications is to determine the cost of service, including the separate cost of every important phase or function of operation.

In all such classifications, it is important from the public standpoint, as well as from that of the management, to preserve clear distinctions between costs that are properly chargeable to asset or capital accounts, and those chargeable to operating account to be included in the determination of the cost of service for the particular fiscal period. There is, ordinarily, no difficulty in preserving the proper line of demarcation. The charges to operating expenses include all costs which belong to the service rendered during the particular accounting period. They include all labor and materials used directly in operation; in the case of railroads, for example, the wages of trainmen and the cost of coal used in train movements; in electricity, the powerhouse labor and fuel; for gas, the cost of labor, coal, oil and other materials used for gas production. These are all costs that are directly identified with the service supplied, and are properly included in operating expenses of the period.

Operating expenses, however, include not only all such direct labor and materials used in service, but also the cost of maintaining the property, together with the depreciation chargeable to the particular accounting period. The object is to keep the net property accounts intact; to include in operating expenses all such charges as will preserve the net investment in the fixed capital of the utility, and to add to capital account only improvements and extensions to the property. In regard to maintenance and depreciation, there is greater difficulty in preserving the distinction between proper charges to capital and to operating account.

The established policy is to charge all repairs and minor renewals of property to the operating expenses of the accounting period. True, for strictly accurate accounting there should be separation between periods, because repairs made in any one period are usually due to operation of prior periods; in practise, however, such classification is not feasible. For the most part also, there is an equalization of such costs from period to period, so that the expenses are presented usually with reasonable accuracy in relation to the service rendered. Moreover, to avoid variation in operating expenses from one period to the next a number of periods are usually considered when it is desired to establish the normal cost for the purposes of rate control or executive decision.

The difficulty referred to in respect to repairs and minor renewals appears especially in regard to depreciation or the allowance for the renewal of major units of physical property used in service. While repairs, including the renewal of all minor units of property, tend to equalize themselves, there is much greater variation in renewals from period to period for the larger or major units of property. To charge the cost of all such renewals directly to operating expenses, would result in material distortions and would not be satisfactory for either administrative or rate-making purposes. To prevent this inequality, the so-called depreciation policy instead of the direct renewal costs, has been employed in determining the charges to operating account. The cost of any unit of property with a limited lifetime must, in any case, be finally included in the cost of operation by the time it is replaced. The method of depreciation distributes or allocates to operating expenses the cost of any such unit during its lifetime in service. If an article is consumed or used exclusively during one period, its entire cost belongs to operation of that period. If it be used for a number of periods, its cost must be divided between the periods on the basis of relative use.

Railroads and all public utilities, as well as large industrial plants, consist of huge operating properties the individual units of which have varying years of service. In respect to all such units, the capital cost must be replaced through charges to operating expenses, and thus included in the stated cost of service. For strict accounting, it is necessary therefore to make separate provision for each major unit. Schedules of property must thus be made, showing the unit costs, the expected life and the annual charge for depreciation. The last two items are estimates based upon experience and expert knowledge of operations; still the actual life or total serviceability of a unit of property may turn out to be at considerable variance with the estimate. The management must, therefore, keep in constant touch with the properties,

and should be prepared to modify the estimates as the conditions require.

The usual accounting procedure is to charge depreciation to operating expenses for each period, and to credit the amounts cumulatively to the depreciation reserve, which appears as a credit item in the balance sheet. As actual physical units are retired, their original cost is credited to the property account and charged to depreciation reserve, with adjustments for salvage; the cost of renewals, as of all new property installed, is then charged to the appropriate property account. With this general plan, the sum of the balances of all the property accounts at any time shows the original cost of all the properties then in use, while the balance of the depreciation reserve shows the amount of such costs that have been allocated to past operating expenses as depreciation, and included in the cost of service. The difference between the sum of the property accounts and the depreciation reserve is the net property cost applicable to future operation, to be provided for through subsequent depreciation charges included in future cost of service or output.

While depreciation is usually credited to and accumulated in separate reserves, which are required by most of the official accounting systems, the credits might be made directly to the property accounts, with the same net results in the allocation of costs between capital and operation. If such direct credits were made to the individual property accounts, the balances from time to time would show the net cost after depreciation, instead of the original cost of the property left in service. The setting up of depreciation reserves is preferable, because it furnishes more complete records. It preserves the cost of all properties in use; shows periodically the cost of properties retired, and presents in a single figure the amount of depreciation provided for on account of properties left in use.

The Interstate Commerce Commission has required detailed depreciation provisions for each class of equipment, and for the individual units in each class. It will extend the same general requirement hereafter also to the road accounts, without extending it to the individual units since they cannot be as readily individualized as the items of equipment. The classifications prescribed for utilities by the state commissions impose much less detailed treatment. For the most part, the state commissions have merely the right to prescribe uniform systems of accounting, including the accounts for systematic allowance for depreciation; but they have not had the power to compel the companies to make proper charges for depreciation. As a result, there is wide variation in practise, and the experience to date has been of little value for rate making purposes or for executive control of the properties. Every important rate adjustment has required a separate inquiry as to depreciation, without regard to the provisions actually made by the company through its regular accounting procedure.

Satisfactory administration of rate making largely depends upon the adoption of a systematic cost system. As yet, however, accurate cost accounting in relation to property, maintenance and depreciation, is not accepted as even the controlling factor in fixing rates, and for that reason principally regulation has not been as satisfactory from the public standpoint as had been expected. Effective regulation depends upon definite standards and upon exact facts not subject to dispute. The existing system, where it is not based upon costs, arouses conflict of interest between the companies and the public, and thus results in litigation instead of mere administration of rate making policies.

Apart from regulation and the enforcement of a public interest in property or business, the question of valuation of business properties for accounting purposes has received a vast amount of discussion among accountants and analysts interested in accounting data. One group insists that all the accounts must rest strictly upon monetary costs, both as to property and as to charges to operation or manufacturing output. The second group agrees that all operating expenses, and all direct labor and material charges conveyed to manufacturing costs, should be based upon cash expenditures. As far as property accounts are concerned, however, the latter holds that the amounts should be revised from time to time to bring each account in conformity with the actual conditions of the business at the time of the balance sheet. If property values have risen or fallen, the fact should be recognized in the accounts and in the corresponding showing of the balance sheet of the business.

Apart from public policy or individual business expediency, there is little fundamental principle in the issue thus presented. If there is a special public interest in a business, the rights of the public should be clearly expressed

and safeguarded through the accounting and business records. The public interest thus determines the basis of valuation that should be adopted for public purposes. Where there is no special public interest, the private business purposes must determine the policy to be carried out through the accounts.

All purchases, expenditures, sales and revenues are recorded, in the first instance, at the actual monetary consideration at the time of the transaction. In regard to this practise, there is no difference of opinion as to desirability of procedure. There must be accurate original records of the transactions that actually take place. Subsequently, so far as the property accounts are concerned, it is a matter of expediency, of wise business administration, whether the original costs shall be continued, notwithstanding fundamental changes affecting the industry, or whether a revaluation shall be made from time to time. If the original costs are retained, then the accounts will show constantly actual cost records as to property; such records are of themselves desirable and important to the management. If, however, conditions have changed materially, such records carried into the balance sheet would be misleading as to the showing of financial standing. The property may be grossly understated or overstated as compared with the reasonable value at the time of the balance sheet. The statement of surplus would merely represent the result of the annual accounting as carried into the balance sheet, and would not be based upon the actual values contained at the time in the business. The balance sheet may be intended on the other hand primarily to present a cost statement as to properties in the business and their sources, or to set forth as correctly as possible the real property values and the actual relative rights of the various interested groups. Neither purpose can be taken as fundamental and controlling. Each may be carried out consistently; both may be represented by two different sets of statements. The important consideration is that the objective is clearly conceived, and that the facts are accurately presented accordingly.

The basis of valuation with changing fundamental conditions has a bearing also upon the statements of operating expenses, or manufacturing costs, and the computation of annual profits. In regard to depreciation, for example, shall the charges to operating expenses or to manufactured products be based upon the original money cost of plant units, or upon the market value of similar property at the time of the operation? A consistent cash system would hold to original cost; but if the level of property costs has materially changed since the particular units in use were installed, such a basis for determining depreciation charges, while presenting accurate cost records, would fail to furnish a desirable guide to sales policy under prevailing conditions. What is to be done depends upon the purpose of the management, and not upon inflexible principles of accounting. Depreciation charges may be based quite properly upon revaluation or expected renewal costs rather than upon original costs of the properties. Likewise any accounting entries may be validly changed with shifting conditions in the business. It is important, however, that the purpose be clearly established and that the character of the accounting be correctly presented.

The basis of accounting adopted finally affects the computation of annual profit shown by the business. If original cost is rigidly adhered to, the showing of annual profit and the accumulated reserves and surplus would all reflect cash cost and disregard the changes in values that may have affected the business. A depreciation reserve thus established may be excessive or inadequate for the physical renewals of property. A surplus thus accumulated may have no relation to the actual value attached to the ownership of the business. The accounts, however, would state the facts of cash costs incurred by the business. If periodical adjustments are made according to changing conditions, they would affect, in the first instance, the property values, and would then require a redetermination of reserves and statement of surplus. If property values are materially increased, the depreciation reserve would have to be augmented proportionately with the higher level of expected renewal costs, and surplus would be increased according to the higher showing of net property values. Neither reserve nor surplus as stated in the balance sheet would thus be identified with the periodical depreciation accruals and the statements of income. But if the revaluations are properly made the results would reflect the actual financial standing of the business at the time of the balance sheet.

In this matter of valuation, there is also finally involved the item of good will, so far as private business is concerned. If the object is to present financial standing, the total value

would be materially affected by the character of the management, location, business connections and other facts, which, taken together, determine the good will of the business. A complete present statement would include, first, the physical properties valued on the basis of costs at the time of the balance sheet, plus the good will valued according to earning power in excess of the return required to support the physical properties. There is often little significance in the valuation of physical plant, especially where this consists of fixed properties which can be used only for the particular business. The ultimate basis of plant value is financial success, and the stated physical values may be inadequate or excessive in relation to established earning power.

These considerations lead to calculation of intangible values, as distinct from the physical properties subject to independent appraisal. Accountants, generally, are opposed to including intangibles which are based upon earning power, even if they favor revaluation of physical properties. If the purpose, however, is to show actual financial standing, the showing is manifestly incomplete if it presents merely physical properties and not the actual values of the going concern. As to the various purposes and policies, accountants tend to conservative positions; and, for the most part, hold that the purpose of accounting is to show costs, and not values. They argue that costs represent actual cash outlays which are accurately reported and can be definitely carried out through the entire system of accounts, both in respect to the allowance for depreciation and all charges to operation and manufacturing output, as well as in respect to property and source accounts shown in the balance sheet. If it were desirable to show values, they would make a separate determination which would set out independently of the accounts not only the physical values, but also the good will (or opposite) dependent upon earning power, and would present the reserves and surplus accordingly. Such showing, however, they would not incorporate with the regular accounting procedure, but would preserve as separate records.

In conclusion, it is important to emphasize that accounting has to do with fiscal records, and that all policies and methods depend upon the purposes to be achieved. In the first place, there is the distinction between properties affected with a special public interest and those not so affected. As to the first group, the accounting system must be based upon the character of the public interest, and upon the objects to be attained through regulation. In private business not affected by public interest, the accounting follows the purposes of the management; this applies particularly to the adjustments in values made subsequent to the recording of original transactions. The first records must, of necessity, represent what was actually done. What changes are made subsequently, depend upon the purposes of the management. The conceptions to be carried out must be clear, and the corresponding records must be kept accurately.

Accounting is an instrument of public policy and of private management; it is adaptable to any purpose and any condition. It is not a set of fixed rules or unbending principles to be followed without regard to public or business objectives. It is essential for public and private purposes, and it is a means for their achievement.

JOHN BAUER

See: ACCOUNTS, PUBLIC; COST ACCOUNTING; AUDITING; FINANCIAL STATEMENTS; MANAGEMENT; BUSINESS ADMINISTRATION; VALUATION; DEPRECIATION; APPRECIATION; GOOD WILL; RATE REGULATION; PUBLIC UTILITIES; BUSINESS ETHICS; BUSINESS EDUCATION.

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ACCOUNTS, PUBLIC

ACCOUNTS, PUBLIC, may be said to be almost as old as organized government. Of course in the ancient days they were very rudimentary in character. For almost two centuries after the earliest printed work on bookkeeping, which was written by a monk, Luca Paciolo, and published first in Venice in 1494, such development as took place in accounting (if it may be dignified at that period by the

use of this term) related mainly to the requirements of business and commerce. Perhaps the first real attempt to bring the accounting methods of government abreast with those of business was made by Colbert under Louis XIV of France during the latter part of the seventeenth century. By the end of the eighteenth century England had begun to develop a national financial system which laid considerable emphasis on the accounting features. This system was finally established on its present basis by the Exchequer and Audit Act of 1866. In the United States public accounting did not receive much attention until the opening of the twentieth century. Its development has been greatly stimulated by the movement for budgetary reform during the last two decades.

Before the introduction of budgetary methods in the United States, public accounts provided little more than a general record of financial transactions and served mainly as the means of enforcing, within certain limits, the provisions of law with respect to appropriations. They did not furnish the type of information that the executive needed in directing administrative work or that the legislative body might use in determining the fiscal policies of the government. But this situation has been considerably improved during the last twenty years. The accounting systems of several of our governmental units now comprehend all financial transactions and produce information relating thereto with promptness and accuracy. They provide, to some extent at least, the necessary data for planning and executing the government's work, thus serving, as they had not done before, the purposes of day-to-day administration.

Public accounting has been influenced in no small degree by the methods and practises followed in commercial accounting. In fact efforts have been made to carry the essentials of commercial accounting directly into government accounts. The capital balance sheet, for example, has thus been made a part of the accounting system of many governmental units. Perhaps this tendency has been due to the fact that oftentimes the responsibility for installing a system of public accounts has fallen upon accountants who were experienced mainly in commercial work and who did not fully appreciate either the scope or the financial requirements of government.

The purpose of a government is quite different from that of a business concern. The latter tries to make profits, while the former does not. The business concern keeps down its expenses in order to increase its income; the government keeps down its expenses in order to diminish its income. It would therefore seem that the accounting system of the business concern is not entirely suited to governmental needs. Indeed such system must be greatly modified or devised on a different basis when applied to the government. It must be designed not to show profits but to furnish the information required in maintaining a balanced relation between the income and the outgo of the government. Of course where undertakings of a business nature, such as utilities, are publicly owned and operated, it is often advisable to apply accounts of a commercial type, particularly when these undertakings are conducted on a self-supporting or profit making basis. But this is not true of the major departments of government; they are not self-sustaining and, besides, they are non-profit making.

The modern public accounting system comprehends a series of more or less related records which may be divided into general accounts and cost accounts, the latter being detailed accounts relating mainly to expenditures. The general accounts, which are largely of a summary character, are the means of exercising control over income and outgo; they also express the financial condition of the government. The cost accounts support the general accounts; they supply detailed information, principally with respect to operating expenditures, which is needed in conducting administrative work.

Cost accounting is a recent development which had its beginning in the rapid growth of industry starting about 1900. As applied to industry it has perhaps been developed more extensively in the United States than in any other country. But it is as yet not widely applied to governmental functions, being limited largely to public works activities, certain institutional services, and publicly owned and operated utilities. The present movement to improve the quality of public administration is, however, stimulating the wider application of cost accounting to governmental operations.

A detailed discussion of the actual forms and the day-to-day procedure of keeping public accounts is beyond the scope of this treatment. Suffice it to say that these are matters which are largely determined by the financial requirements of the government and the information that is to be produced. Modern devices and

appliances are now being used in connection with the accounting systems of many governments. For example, loose leaf and card ledgers have largely displaced the old bound ledgers; the former are more satisfactory and effect a material saving in time. Ledger postings are now performed mechanically, the account being posted, the items added up, and a balance struck by one operation. The number of operations in recording and handling financial transactions has also been greatly reduced. In the billing of taxes, for instance, sufficient copies of the original bill are made by a single operation on a machine to cover each successive step in the procedure of payment, thus saving time and reducing the possibilities of error. Tabulating machines are now regarded as being indispensable to the accurate and speedy production of cost data or any detailed accounting analyses, such as the distribution of expenditures by objects.

In common practise public accounts are usually kept on the cash basis, that is, they merely record the moneys actually received and disbursed by the government. They furnish information only with respect to settlement and liquidation; they supply no data concerning revenues and receipts due the government or expenditure obligations incurred by the government. The latter data are necessary to the exercise of real budgetary control. Such data, as well as the information regarding settlement and liquidation, are produced by accounts kept on the accrual basis. When the accrual basis is used, the accounts indicate just where the government stands at any time during the fiscal year in the realization of its income as authorized by the adopted budget; they also show the free and unencumbered balance of every appropriation.

The accrual basis of accounting has not yet been widely adopted in government, although it is almost universally used by business and industry. The English and French accounting systems are still on the cash basis. In the United States the accounting systems of the national government and of the majority of state and local governments are also run on the cash basis, although authorities on public finance have long recommended the adoption of the accrual basis. Accounting systems on the accrual basis have recently been installed in a few state governments and in several city governments.

There is no direct supervision on the part of the national government of the United States over the accounting systems of the state or local governments. However, several states supervise the accounts kept by local governments within their respective jurisdictions. This supervision relates mainly to the form of the accounts and to the procedure followed in rendering financial reports, the purpose being to bring about some uniformity. Frequently it extends to an audit of the local accounts by an officer or agent of the state government

From a structural standpoint a necessary feature of any government is the centralization of its accounts, particularly the general accounts, in a single office. This has been the recent trend of development in American cities, especially those with the centralized mayor or the manager forms of government. Today the most advanced type of organization for keeping the general accounts consists of an office under the control of the executive, which is usually a bureau or division in a larger department of finance. This office is headed by a chief accounting officer with the title of controller, since no moneys are paid into or out of the treasury without his approval. He is responsible for supervising the entire accounting system of the government and for supplying the executive and his budget officer with the information required in financial management. There is also an independent audit of the books kept by the controller, which is usually conducted by an officer or agent responsible to the legislative body.

This type of financial organization with respect to the accounting work has not as yet been widely adopted by the state governments of the United States, Massachusetts and Virginia being the only states that have so far accepted the scheme practically without modification. The national government is now in the process of devising a central accounting system. When completed it will no doubt be installed in the General Accounting Office under the direction of the comptroller general, an agent of Congress. The president and his budget officer will then have to depend largely upon an office over which they have no control for the general information needed in executing the budget. Furthermore the comptroller general will in effect be the auditor of his own accounts. This arrangement, it appears, will lack some of the safeguards and much of the effectiveness of the British system. In England the accounts are under the supervision of the treasury, which is

the great executive department of finance, and the comptroller and auditor general, an agent of Parliament, performs the independent audit of these accounts and reports his findings to Parliament.

A. E. BUCK

See: ACCOUNTING; AUDITING; COST ACCOUNTING; ADMINISTRATION, PUBLIC; GOVERNMENT REPORTING; FINANCIAL ADMINISTRATION; BUDGET; PUBLIC FINANCE; EXPENDITURES, PUBLIC; TAX ADMINISTRATION; MUNICIPAL FINANCE; GOVERNMENT CORPORATIONS.

Consult: *A History of Accounting and Accountants*, ed. by Richard Brown (Edinburgh 1905) pt. i, chs. ii–iv; Woolf, Arthur H., *A Short History of Accountants and Accountancy* (London 1912) chs. i–viii; Oakey, Francis, *Principles of Government Accounting and Reporting* (New York 1921); Morey, Lloyd, *Introduction to Governmental Accounting* (New York 1927); Smith, Darrell H., *The General Accounting Office, Its History, Activities and Organization*, Institute for Government Research, Service Monographs of the United States Government (Baltimore 1927); Buck, A. E., *Public Budgeting* (New York 1929) chs. vi–vii, xvi–xvii; Cleveland, Frederick A., *Chapters on Municipal Administration and Accounting* (New York 1909) chs. viii–xiii; Eggleston, DeWitt C., *Municipal Accounting* (New York 1914); Buck, A. E., and others, *Municipal Finance* (New York 1926) chs. v–vi; Durell, A. J. V., *Principles and Practice of the System of Control over Parliamentary Grants* (London 1917) chs. iii–v; Jèze, G., *Cours élémentaire de science des finances et de législation financière française* (6th ed. Paris 1922) bk. i, pt. vi, ch. ii; Schwarz, Otto, *Formelle Finanzverwaltung in Preussen und Reich* (Berlin 1907); Valentini, G. B., *Organismi finanziari contabili e di risconto nello stato*, with a preface by Alberto de Stefani (Milan 1924); Monetti, Ugo, *Le amministrazioni centrali dello stato e l'ordinamento dei controlli; i ministeri, le ragioneri centrali, la ragioneria generale dello stato, la corte dei conti*, Biblioteca di ragioneria applicata, vol. i, no. 1 (Turin 1926); Possaner von Ehrenthal, Benno, *Systematische Darstellung des osterreichischen Staatscassen- und Verrechnungswesens* (Vienna 1902); Maass, A., *Das Kassen- und Zahlungswesen des Staates im Konigreich Belgien* (Stuttgart 1911) ch. vi.

ACCUMULATION is, literally, a heaping up of good things; generally, a gathering together of valuables, as of cattle into herds, goods into stocks, lands into holdings, or securities into estates; and, technically, a setting aside of current resources to serve future purposes. In this stricter sense it is a process in both individual and social economy. The individual accumulates against a future contingency, such as unemployment, the education of children, dependency in old age; or he builds up an investment from which he expects an income. The community. through the acts of its several members, stores up "capital," or "resources devoted to further production." The forms, the processes and the ends of accumulation respond to the changing circumstances of society.

In pre-industrial communities the ways of accumulation present great variety. The group, or the individual, makes provision against a future emergency by conserving the fruits of a harvest to last until the next one; by hoarding the overflow of fat years to overcome the dearth of lean ones; by commuting perishable commodities into hides, tobacco, trinkets or other durable goods in which values can be stored until the purchasing power is wanted. The individual makes sure of a future living by establishing himself in a trade, buying an office, acquiring a privilege, building up a landed estate, or lending out moneys at usury. An organized society attempts to make less precarious its future by increasing its flocks or boats or tools, building a dam against a turbulent river, dispossessing a neighboring tribe of fertile lands, increasing its store of ceremonial objects, or maintaining sorcerers to propitiate the gods of fertility.

Under different methods of organizing the economic community, the ways of increasing productive wealth present a like variety. In a feudal society an exaction of customary dues produces manor houses, enriched estates and churches. In a craft system, where simple trades are skilfully practised, the spare time of workers is converted into the needed increment of tools. In a self-sufficient agricultural economy a distribution of tasks between seasons provides a time for the making of fences, the erection of barns, and the creation of other "improvements." In a communal regime, where all labor may be conscripted, a group is released from other activities and appointed to the construction of "mighty works." Always, everywhere, the ways of personal and social accumulation are rooted in trade practise, traditional lore, accepted custom and social organization.

In contemporary society accumulation takes its character from the structure of industry. The larger process breaks apart into the more or less distinctive activities of saving, investment, the equipping of industries, and capitalization. In saving, the active agents are the individual, the corporation and the state. The individual as of old may lay by goods or hoard coins; but his surplus is usually a sum of money to be put to productive use. The corporation sets aside a part of its earnings to be used in its business.

The state allocates a portion of its revenues to "public improvements." An enlargement of the province of government and an expansion of business have increased the demand for providence on the part of the state and the corporation; their current contribution to the volume of savings is estimated to be well above one third of the whole.

In the process of accumulation these savings are transmuted into the equipment of industries, or "capital goods," through investment. The conversion may be direct. An individual puts his money back into his business by increasing his stock or enlarging his shop. A corporation uses its surplus to improve its plant or to better its facilities. A state expends money in digging canals, erecting school houses and public buildings, and in making roads. Or the conversion may be effected indirectly through the agency of "the capital market." The investment broker, who is a middleman in handling accumulations, undertakes for a price to find productive uses for savings and savings for productive uses. Since many streams of savings must be coordinated with the needs of many businesses for funds, the activities which make up investment demand organization. Accordingly there has arisen a vast and intricate mechanism of stock exchanges, security markets and investment houses. It is through the mediation of this interlocking network of financial institutions that such accumulations as go to market are converted into the equipment of developing industries.

The practical test of the value of accumulations comes in the wake of investment. The value of the public works of the state is usually not set down in pecuniary terms; they are held of little or great account according as they are used and are appreciated. The accumulations of voluntary associations, in the form of churches, universities and hospitals, are appraised by those who control them in terms of the social ends they serve. But where industry is under business control, the market is called upon to evaluate the accumulations of individuals and of corporations. This ever continuous process is called capitalization. Accumulation has its beginning in the expectation of creating a valuable property; in the end this expectation may or may not be realized. If it is, the value is kept intact, and it may even appreciate. If it is not, the original saving is not easily to be withdrawn from the rather rigid stores, machinery, buildings and good will in which it is invested, and depreciates. As a result of this constant revaluation capitalized accumulations may have very different values from those they possess as savings. Yet it is the capitalized value which determines how well the end which prompted saving has been realized.

In the literature of the subject the urge to accumulation has most often been set down as "the effective desire of the individual to save." A prudent man distributes his income over a period of time in such a way as best to serve his needs. A bit of uncertainty ahead quickens the incentive to save; an assurance of adequate future income invites more generous spending. The urge is strong in the forward looking individual and weak in the prodigal. It is stimulated by a rise in the rate of interest and retarded by a decrease in the reward of thrift. The volume of accumulations emerges as the result of countless individual judgments in each of which the utility of saving is nicely balanced against its cost.

In current writings accumulation is increasingly charged to the account of social conditions. Its foremost compulsion has come to be the opportunity which modern industry affords for the use of savings. So long as a rural economy and a petty trade prevailed, the demand for industrial equipment was small. The individual laid by against his own necessity; he accumulated wealth that he might give again to relieve distress or exact an uncanonical increment from persons in need. But with the coming of industrialism there has arisen a great demand for funds with which to launch enterprises, build up businesses, and create markets. It has been ingeniously contrived, by those who must have capital, to tempt the most unlike individuals to bring to the investment-market generous shares of their incomes. The timid have been baited with stocks and bonds which have combined safety of investment with small returns; the adventurous, with uncertain securities, a few of which bring to their holders rich prizes and the rest little or nothing. The active person has felt the lure to go adventuring with his own funds; the passive one has had his chance at gain through vicarious enterprising. An ingenious device called insurance has combined provision for an emergency with the creation of an estate. A market for savings, with its aggressive salesmanship and list of offerings accommodated to every variety of mind and temperament, has been brought to everyman's door.

A corresponding change in social values has stimulated the urge to accumulation. In the earlier days of Christendom the getting together of possessions was frowned upon as self-seeking. The words of the Gospels had put it beyond doubt that the soul's salvation demanded abstinence from worldly goods. "Lay not up for yourself treasures upon earth" had been thundered from the pulpit and enforced in the penitential, and doctors in theology had not yet interpreted away the plain import of the words. The addition of the command to "industry" brought the beginning of the change. In time a developing technology and increased national resources caused personal industry to be rewarded by handsome returns; the injunction to frugal living kept expenditures down; and the emerging surplus was the church's unwitting contribution to accumulation. Little by little "thrift" was elevated to the dignity of a cardinal virtue in what has been called "a holy economy"; and Puritanism became a powerful instrument in the formation of capital. Eventually its reward came to be possessed of a like value with thrift itself, the possession of vendible assets came to be a badge of honor, and only gains from the most unsavory sources were cursed as "tainted wealth." The resulting prestige which attaches to having and holding is today a great incentive toward accumulation.

It follows that the urge upon the individual to lay by varies with circumstances. An increase in income, a ready opportunity for gain, an assurance of security, an exposure to the homily of thrift, a worship of possessions promote accumulation. A decline in earnings, an ignorance of tempting opportunities, a fear of risking hard earned savings, a way of life that disposes one to take each day as it comes, an absorption in activities to which the market gives little support retard accumulation. A lag of habits of life behind a rising income makes savings almost inevitable; a lag of income behind an established way of life renders them well nigh impossible. In competitive accumulation the newcomer, who does not have to keep up appearances, has one decided advantage over the native with an established position to maintain. The upgrade of the business cycle encourages saving, the downgrade retards it; the maintenance of industry toward full capacity, even though it invites freer spending, promotes accumulation. In a society at any time, in respect to the effectiveness of the urge, the population may be divided into a number of "thrift classes." To the captain of industry accumulation is inseparable from everyday activity; to the recipient of funded income it may be costless; to the professional man it may exact a toll in a loss of opportunity for personal attainment; to the unskilled worker it may mean a deprivation which is intolerable. But neither the classes nor the volume of savings is fixed; a statifying society is more likely to save than one which is statified; a period of transition is more favorable to accumulation than one of stability.

In like manner the savings of the corporation and of the state are rooted in opportunity, in value and in circumstance. The corporation cannot set aside a surplus unless its earnings permit, its directorate is sensitive to forward planning, and the business invites reinvestment. Earnings are of course not to go into improvements and betterments unless an adequate return is expected. But the matter presents no simple choice of the larger value; for, no matter how great may be the promised rewards, rarely are investments made outside the direct line of business. Moreover the discretion of those who decide is hemmed in by definite obligations to various classes of stockholders. Often reinvestment is due to sheer necessity; for, if funds can be found for expansion, there is opportunity for bigger things, while if they cannot, the corporation is likely to lose its business to a more enterprising competitor. Frequently a small group, who direct a capital many times their own holdings, have a chance to expand the business without the hazard of a loss of control which attends the sale of new securities. Always the creation of a surplus for reinvestment is an aspect of the policy of the corporation inseparable from its general aims and activities. The accumulations of the state are designed to meet clearly recognized needs of the population; they are rooted in considerations of public policy and are designed to serve ends which cannot be set down in pecuniary terms.

In the continuous and complex process of accumulation it is usual to find a social function. It is the way through which society "secures its capital," or "produced wealth is dedicated to future production." The discovery comes easily to those who see a single articulate process through which savings are without waste and with dispatch commuted into "capital goods." It comes with difficulty to those who regard saving, investment, the equipping of industry, and capitalization as loosely connected activ-

ities. It seems clear that the larger purpose is to be found within the myriad of individual, corporate and governmental doings; but the lesser activities do not serve the larger end with an undivided allegiance. Not all savings become investments. If there is a laying by for a future emergency there is a withdrawal to meet a present one. If personal income minus spendings equals savings, often personal income plus savings equals spending. In insurance it is the permanent fund, into which premiums go and out of which claims are paid, that goes to the capital market. In any period the increment in investments is to be found by subtracting withdrawals from savings. Nor are investments converted into a mass of industrial equipment of exactly the same value. In the capital market the broker takes his toll of the funds he handles, since even investment bankers must have a living wage. The use of commercial credit for investment purposes, the ratio of bank loans to deposits, the custom of paying for "financial services" in securities of a new corporation, the many usages which make of the capital market a distinctive institution, interpose between the number of dollars saved and the number which represents the value of the resulting "wealth devoted to further production." Nor do the initial values of consummated investments necessarily abide. There may be losses through the fallibility of human judgments, through a physical decay of goods whose values are not preserved through a charge for depreciation, through changes in technology which rob plant and equipment of their effective capacity to produce, or through a changed demand that will have none of the product. Thus between the initial savings of its members and a "permanent fund of social capital" there lies a network of institutions each of which has its wastes and its hazards. The current arrangements are a passing rather than a definitive provision for supplying the material equipment of the industrial system at a minimum of social cost.

The process of accumulation has often been called "social provision for the future." In the early days of industrialism, when it seemed that everything was possible if only funds were to be had, the term was not inexact. It is at least a question how much of a mass of capitalized values which primarily serves the gainful ends of individuals and corporations can be called social provision. Besides, there are other ways in which the community attempts to make the future more secure: by the promotion of knowledge, the encouragement of technology, the advance of the industrial arts; by the establishment of customs and habits, such as the shorter working day and the constructive use of leisure, which tend to enrich human life; by the discovery, development and conservation of human resources; by making economic organization a better instrument for ordering the material means of living to serve its ends. The "investment" of savings in the improvement of institutions which may be passed on from generation to generation is an ancient and established way of providing for the future. At this point accumulation loses its identity in the larger process of enriching a developing cultural heritage.

WALTON H. HAMILTON

See: ACQUISITION; HOARDING; THRIFT; ABSTINENCE; CAPITAL; WEALTH; CAPITALIZATION; INVESTMENT; SAVINGS; FORTUNES, PRIVATE; WEALTH, NATIONAL.

Consult: Bohm-Bawerk, E., *Kapital und Kapitalzins*, 3 vols. (4th ed. Jena 1921), vol. ii tr. by W. Smart as *The Positive Theory of Capital* (New York 1923) p. 100–18; Cannan, E., *Wealth* (London 1914) p. 120–38; Hobson, J. A., *Work and Wealth* (New York 1914) p. 89–105; Johnson, Alvin S., "Influences Affecting the Development of Thrift" in *Political Science Quarterly*, vol. xxii (1907) 224–44; Friday, D., articles in *New Republic*, vol. xxix (1921–22) 64–67, vol. xxxiii (1922–23) 270–73, vol. xxxvii (1923–24) 304–05 and vol. xlii (1925) 65–67.

ACCURSIUS (1185–1263), jurist, born in Florence, a pupil of Azo at Bologna and professor there of Roman law. Accursius' great work is the *Glossa (ordinaria)* on the whole *Corpus Iuris*, finally summing up the results of the Bolognese school of Glossators. In courts following Roman law it virtually superseded the text (*Quidquid non agnoscit glossa nec agnoscit curia*) nor was it displaced there when dethroned in the schools by the humanists. It is immensely important not only for this reason but also because it is the great storehouse of information as to the Glossators, information which is still valuable for the interpretation of Roman law. Opinions vary greatly concerning its intrinsic merits; the best view rates them high. This work of Accursius is easily accessible in all early editions of the *Corpus Iuris*, but its serious use requires technical knowledge.

F. DE ZULUETA

Consult: Savigny, F. K. von, *Geschichte des römischen Rechts*, 7 vols. (2nd ed. Heidelberg 1834–51) vol. v, p. 262–305; Landsberg, Ernst, *Die Glosse des Accursius* (Leipsic 1883) p. 52–63.

ACHELIS, THOMAS (1850–1909), German sociologist and anthropologist. He studied philosophy and philology at Göttingen and from 1874 taught at the gymnasium in Bremen. From 1898 he edited the *Archiv für Religionswissenschaft*. His studies in anthropology reveal a certain philosophical-psychological trend which formed a contrast to the materialistic-physiological emphasis prevailing in Germany at that time; for that reason he was attacked by the Berlin school. Except for the short essay, *Rechtsentstehung und Rechtsgeschichte* (Sozialer Fortschritt, no. 17, Leipsic 1904), the *Soziologie* (in Sammlung Göschen, 1st ed. Leipsic 1899, 2nd ed. 1912) is his most important work in the field of social science. Because it stands somewhat in opposition to the Hegelianism still dominant in German sociology, this treatise had less influence than it deserved considering the time of its appearance. According to Achelis, sociology is a study of the forms of human association, taking as its starting point man in his biological aspects and proceeding to a psychological explanation of associations. Above all, sociology must establish in basic outlines the structures of various social formations and, where possible, try to discover the underlying laws of relationship or at least the periodically recurring rhythms. For the most part, he would therefore proceed more inductively than had been done before him in Germany. However, he is by no means extreme; indeed, in concluding his chapter on principles and methods, he demands as supplementary the consideration of "teleological necessities," because in social life motives and purposes constitute a residue not to be explained by the principle of mechanical causality.

R. THURNWALD

Important works: *Die Entwicklung der modernen Ethnologie* (Berlin 1889); *Die Entwicklung der Ehe* (Berlin 1893); *Mythologie und Kultus von Hawaii* (Brunswick 1895); *Moderne Volkerkunde* (Stuttgart 1896); *Ethik* (2nd ed. Leipsic 1900); *Die Wandlungen der Padagogik im 19. Jahrhundert* (Berlin 1901); *Die Extase in ihrer kulturellen Bedeutung* (Berlin 1902); *Abriss der vergleichenden Religionswissenschaft* (Leipsic 1904); and the works mentioned in the text.

ACHENWALL, GOTTFRIED (1719–72), German statistician and student of public law. He studied first at Jena, where Smeitzel awakened in him a lasting interest in comparative politics and economics; then at Halle; and finally took his degree at Leipsic. After three years as tutor at Dresden he became *Privatdocent* in history, statistics and the law of nature and of nations at Marburg in 1746. Upon his call to Göttingen, two years later, he wrote his first notable essay, "Vorbereitung zur Staatswissenschaft der europäischen Reiche" (1748). This became the introduction of his influential *Staatsverfassung der heutigen vornehmsten europäischen Reiche und Völker im Grundrisse* (Göttingen 1749; 6th ed. edited by his famous pupil August L. von Schlözer, Göttingen 1781; 7th ed. edited by M. C. Sprengel, Göttingen 1790–98). This used, for the first time, the term *Statistik*; it was translated into many languages and was widely imitated. It won for Achenwall the title, "father of statistics." Nevertheless his work rested on that of Conring; and the school of political arithmetic, though quite different in method, preceded him.

By statistics Achenwall meant an inclusive description, comparative when possible, of the territory, population, industries, trade, social classes and political institutions of states. Its object was to enable statesmen to formulate policies of internal development and external relations in the light of definite knowledge. The "Achenwall school" relied mainly on verbal statement, and hence lost prestige with the accumulation of census and other numerical data. They made no contribution to what is now called statistical method.

FRANK H. HANKINS

Important works: *Naturrecht* (with J. S. Pütter, Gottingen 1750); *Grundsatze der europaischen Geschichte* (Gottingen 1754); *Jus naturae*, 2 vols. (Gottingen 1755–56); *Entwurf der allgemeineren europaischen Staatshandel*, a small work on European trade (Gottingen 1756); *Staatsklugheit nach ihren ersten Grundsatzen* (Gottingen 1761); *Juris gentium europaearum* (Gottingen 1775).

Consult: John, Vincenz, *Geschichte der Statistik* (Stuttgart 1884); Meitzen, August, *Geschichte, Theorie und Technik der Statistik* (2nd ed. Stuttgart 1903), tr. by R. P. Falkner in American Academy of Political and Social Science, *Annals*, vol. i (1891) supplement; Achilles, Georg, *Die Bedeutung und Stellung von Gottfried Achenwall in der Nationalökonomie und Statistik* (Bern 1906); Schiefer, Paul, *Achenwall und seine Schule. Ihre Bedeutung fur die heutige Entwicklung der Statistik* (Munich 1916).

ACKERSDIJCK, JAN (1790–1861), Dutch economist and statistician. From 1831 to 1860 he held a professorship in the faculty of law at Utrecht, lecturing on statistics, economics and history. He was a disciple of Adam Smith and spread free trade doctrines in Holland. Dutch

tariffs were modified in accordance with his views in 1845. He also effected a reminting of the coinage and pointed out ways of improving the state finances. In his travels he obtained an extensive knowledge of economic conditions in various countries and became greatly interested in statistics. As chairman of the government committee on statistics, organized on his initiative in 1858, and in other capacities he furthered the development of Dutch statistics, urging the publication of all data of importance from the social-economic point of view and the centralization of the various public statistical services.

F. PH. BICHON VAN IJSSELMONDE

Important works: *Bedenkingen over de Korenwetten* (Objections to the Corn Laws) (Utrecht 1835); *Nederlands financien*, 2 vols. (Amsterdam 1843); *Nederlands Muntwezen* (Utrecht 1845); *Over belastingen en bezuinigingen* (On Taxes and Savings) (Utrecht 1849); "Mouvement des idées économiques . . . en Hollande" in *Journal des économistes*, ser. ii, vol. xxviii (1860) 501–09.

ACLAND, JOHN (1699–1796), an early poor law reformer, born at Woodley, Beaford, Devon, and vicar of Broadclyst in that county from 1753 to the year of his death. His familiarity with the conditions of the poor and his conviction that the existing Poor Law encouraged poverty led him to publish in 1786 a pamphlet in which he expounded "A plan for rendering the poor independent on public contributions, founded on the basis of Friendly Societies, commonly called Clubs" (Exeter 1786). The plan was the establishment by statute of a central and national society which should make provision for the support of the dependent poor in sickness, unemployment and old age; marriage and maternity bounties were also to be provided. All adult workers of both sexes were to be required to contribute and the state was to make supplementary grants. A bill to this effect was introduced in the House of Commons but received little support. The scheme anticipated in every broad detail Mr. Lloyd George's great National Insurance Act of 1911.

W. H. DAWSON

Consult: Eden, F. M., *The State of the Poor*, 3 vols. (London 1797) vol. i, p. 373, 380.

ACOLLAS, EMILE (1826–91), French politician and jurist. He earned his living in Paris as a liberal professor of law, was an active member of the republican opposition to Napoleon III and was imprisoned in 1867. In 1870 he became professor of French law at the University of Bern, where in 1871 he proclaimed his sympathy with the Paris Commune. In 1876 he was a radical-socialist candidate for the Chamber of Deputies. He was not elected even though Garibaldi endorsed his candidacy in a eulogistic letter. In 1880 he accepted the office of inspector general of prisons from the French government and thenceforward renounced politics.

The idea that democracy must be realized in laws inspired his numerous juristic works. France was to undertake a complete revision of the Napoleonic codes. Laws pertaining to the family should protect the rights of women and children; property laws were to recognize labor as the single source of property rights; laws relating to municipal government were substantially to reduce the powers of the central government. For the true goal of democracy is individual independence. Acollas opposed the principle of popular sovereignty; he preferred individualistic to authoritarian democracy.

GEORGES WEILL

Important works: *Nécessité de refondre l'ensemble de nos codes, et notamment le Code Napoléon, au point de vue de l'idée démocratique* (Paris 1866); *Enfants naturels* (Paris 1871); *Loi générale de l'évolution humaine* (Paris 1876); *Philosophie de la science politique, et commentaire de la déclaration des droits de l'homme de 1793* (Paris 1877).

ACQUIRED CHARACTERS. *See* HEREDITY.

ACQUISITION is the word within whose confines is to be found the issue between private gain and public good. In every society an attempt is made to subdue personal advantage to the service of general welfare. A tribal commune sacrifices individual good to the necessities of the people; a feudal order invokes use and wont to restrict avarice to its due; a capitalistic society employs authority to keep business out of predatory activities. It is, however, only with the separation of the individual from the social economy, and with the distinction of the making of money from the production of a living, that the terms private gain and public good appear in clear cut relief. Accordingly the rise of commerce brings the question of the role of acquisition in social organization.

In the Middle Ages an antithesis was set up between private gain and public good. A feudal structure of society, in which each person held the station in life to which God had appointed

him, had little place for profits as a bait to get things done. The trafficking for gain lay upon fringes of a customary industrial system; its unworthy practitioners were beyond the pale of social respectability. It was taught that, since the value of an object was inherent within it, the trader could claim his ungodly reward only by buying at less or selling at more than worth. It was the duty of the Christian, as he would save his immortal soul, to keep himself "unspotted" from "the world" and his heart free from "covetous desire." He was permitted, eventually even encouraged, to provide goods against his own and his neighbor's necessities; but, since money was the root of all evil, the narrow path to heaven's gate was not by the way of affluence. The practise of the acquisitive arts was not unknown within the established system of fief, manor and church; but the structure of society, the judgment of respectability, the dialectic about value, and the Divine Word left to the calling of money making a scant and despicable place in the arrangements of man.

In the wake of industrialism acquisition came into an increased importance and an enhanced repute. The passing of otherworldliness endowed human nature with insatiable wants to be satisfied with material goods; the decline of feudalism and the decay of authority gave greater scope to the individual and invited a less stereotyped social order; the division of labor and the multiplication of goods made inevitable a market for their exchange and a pecuniary calculus for the measurement of their values. To the individual, profit or loss came to be "the beacon" which invited an increase or compelled decrease in production. A growth or decline in personal income, success or failure in business, was a blessing or a curse that came by way of the market. Thus acquisition came to connect individual productive effort with the maintenance of "the great industry."

In time popular thought made its customary accommodation to the changed role of money making in social organization. A trade, bad in itself or if pursued for gain, was to be allowed if its goods were used to relieve necessity. The danger to the public was not very imminent; a man knew what he wanted; the buyer was protected by the keenness of the rivalry between traders. Nor was it easy to fix the limits of tolerance; however harmful luxuries might be, their production made employment for persons who might otherwise become public charges. Besides, the rich man could eat and wear little more than another; his surplus wealth he must invest in productive industry. In short, as Alice in Wonderland put it, it is "each person minding his own business" that "makes the world go round." In time ends and checks dropped out of the picture, and acquisition came to be of value in itself. A man has "a right" to "pursue an honest calling in an upright way" and to "do what he will with his own." The taboo upon avarice gave way to tolerance, and tolerance to rightful acceptance; thus was one of the seven deadly sins transformed into a cardinal virtue.

The philosophers converted this crude justification of acquisition into an articulate system. Its basis was the discovery of an inevitable connection between the expression of an individual instinct and the fulfilment of a social purpose. Cicero was quoted: "Bees do not congregate for the construction of the honeycomb; but, being by nature gregarious animals, combine their labor in the comb." Blackstone discovered as a foundation for law that "the Creator . . . has been pleased so to contrive the constitution and frame of humanity that we should want no other prompter to enquire after . . . but only our self-love, that universal principle of action." The deists translated "the Creator" into "Nature" and won for "the inseparable connection of justice with the happiness of each person" the status of immutable law. Hume came upon the great truth that the individual in seeking his true and substantial good promotes the larger purpose without being aware of what he is about. Adam Smith held that while the trader, "by directing . . . . industry in such a manner as its produce may be of the greatest value . . . . intends only his own gain, he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention," and condemned merchants "who affected to trade for the public good." With this lead the scholars translated "self-love" into "profit-seeking," created an "economic man" motivated by a "felicity calculus," made of the laws of supply and demand "economic harmonies," and obtained from the limited resources of society "the economic maximum" of foods. Acquisition thus became "the driving force" of an automatic, self-regulating and beneficent industrial order.

A repute so high was not to be retained even in a capitalistic society. The dominance of self-

interest as a motive and the pecuniary form of its expression have alike been challenged. The love of gain is only one of the incentives to action; it must take its chances along with the thirst for fame, the demand for the regard of one's fellows, the motive of service, idle curiosity and the urge toward self-expression. The pecuniary incentive varies from group to group; its hold is greater upon the promoter than upon the manufacturer, the merchant than the physician, the adventurer than the established man of business. Its compulsion is not uniform even upon members of a trade; there are degrees of mercy even among money lenders. The lure is not in gain, but in the unlike and incommensurable things money will buy; vendible things must compete with pleasures that money cannot purchase. Ofttimes activity has its source not in a demand for money but in the zest for a game in which money is the symbol and the token of success: "the man who plays cards for cowries is not mastered by a desire for cowries." Man is not "a lightning calculator of pleasures and pains who oscillates like a homogeneous globule of desire under the influence of 'pecuniary' stimuli." Activity is an expression of a working scheme of habits; acquisition is compelling or not as it is embodied in the customary ways of everyday life. These various lines of criticism, without denying to acquisition a power over the activities of men, take away its exclusiveness as an incentive, hedge it about with limits, and make it inadequate as a key to the organization of industry.

A challenge has likewise been leveled at the capacity of acquisition to direct industrial activity. The elemental urge of self-interest is aimless and untamed; it may be impelled in many directions, but can impel itself in none. It is the institutional system within which it is spent that gives its character and imparts form to its results. The Arabian sheik preying upon his neighbors, the monk parading his humility, the general seeking glory, the merchant counting up his gains, the social worker doing good, may all be personally acquisitive; yet acquisition does not explain their respective activities. The slave owner and the industrial employer may have a like devotion to personal gain; yet it is not acquisition, but the legal status of the laborer which impels the former to conserve his investment in human chattels and the latter to exact as much wear and tear as he can for the daily wage. It is not a smaller regard for profits, but a larger appreciation of long-time values, which makes tne corporation of today more considerate of laborers and customers, and more concerned with long-time planning, than it was a generation ago. If currently acquisition leads to the production of goods for sale, rather than to the robbery of neighbors or the laying up of treasures in heaven, it may be because of the compulsion which lurks in the prevailing order of society. If today money making is the dominant activity, it is not of necessity because man is actuated by pecuniary motives; it may well be because the conventions of society as now organized impel his activities toward pecuniary ends. Always and everywhere values, institutions and arrangements such as these compromise the acquisitive motive, confine it within channels, and direct it toward objectives. Its character, its uses, its effects are what they are because of the rules of the game under which we acquire.

Nor has criticism stopped with limiting acquisition to this more modest role in social organization. The neo-canonists, standing in the direct line of ecclesiastical tradition, adapt the older condemnation of avaricious individuals to the newer commercial economy. They discover a subordination of great industries to the ends of private gain, a welter of unearned incomes rooted in privilege and property, and a failure of society consciously to provide for the larger needs of its members. They denounce modern industrialism as an "acquisitive society" and demand in its stead a "functional society." The proponents of the existing order retort that business is a scheme of arrangements for producing goods "to satisfy wants"; income is contingent upon the performance of service, a person gets what he produces and must produce what he gets; and capitalism is a "functional society." The words "acquisitive" and "functional" are used with ease and defined with difficulty. A mediaeval chronicler writes: "The House of God is tripartite: some work, some fight, and some pray"; a modern expositor insists: "Economic society is composed of four groups: some work, some save, some provide land, and some undertake the risks of enterprise." An initial commitment and a selection of detail may indifferently make of an industrial order a functional or an acquisitive society. The exchange of arguments results in the statement rather than the answering of the questions: What are the functions needful to be performed and what is the scheme of control that gives greatest promise of performance?

The question of the role of acquisition in human affairs is not yet resolved. At present some hold that desire for money is rooted in a "human nature" which "cannot be changed"; they are confident that in the long run acquisition must be a means to social welfare, and would let matters alone. Others make selfish activity an expression of antisocial habits; they would have the individual charge his conscience with his duty to his fellow men, make of business a profession with its higher ethical code, and replace the urge toward gain with the spirit of service. Still others find self-love a useful human possession, neither good nor bad in itself; they would so make over the values, arrangements and usages of society that individuals in pursuing their own interests are impelled in the way of general welfare. Thus in programs aiming alike at the larger good, acquisition is to be left alone, suppressed, and directed. Amid the uncertain and changing values of life private gain and public good bid fair to present an abiding issue.

WALTON H. HAMILTON

See: ACCUMULATION; ECONOMIC ORGANIZATION; BUSINESS; CAPITALISM; COMMERCIALISM; INDUSTRIALISM; ECONOMIC INCENTIVES; HUMAN NATURE; UTILITARIANISM; USURY.

Consult: Cooley, C. H., *Human Nature and the Social Order* (2nd ed. New York 1922); Leslie, T. E. Cliffe, "The Love of Money" in *Essays in Political and Moral Philosophy* (Dublin 1879) p. 1–8; Slichter, S. H., "The Organization and Control of Economic Activity" in *The Trend of Economics*, ed. by R. G. Tugwell (New York 1924); Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927) vol. iii, p. 2059–159; Tawney, R. H., *The Acquisitive Society* (New York 1921); Whately, R., *Introductory Lectures in Political Economy* (4th ed. London 1855) p. 58–69; Wicksteed, P. H., *The Common Sense of Political Economy* (London 1910) p. 13–211.

ACSADY, IGNAC (1845–1906), Hungarian historian and publicist. He was educated at Debreczin and Budapest, and in 1869 began his journalistic career as a contributor to the liberal political daily, *Századunk*; later he became a regular contributor to the *Pesti Napló*. With Charles Tagányi, Acsády was the founder of the modern school of Hungarian economic history. He made use of a great mass of unpublished archive material and was one of the first of the Hungarian historians to adopt the methods of the German *Kulturgeschichte*, a trend predominant in the last half of the nineteenth century. He specialized in the history of the sixteenth, seventeenth and eighteenth centuries, dealing at length with the history of economic classes, of state finances and with population problems of Hungary. His essays on the history of financial administration are of particular merit and are especially brilliant in the treatment of the Hapsburgs

JULIUS SZEKFÜ

Important works: *Magyarország Pénzugyei I. Ferdinánd uralkodása alatt* (The Financial Situation of Hungary under Ferdinand I) (Budapest 1888); *Kozgazdasági állapotaink a XVI. és XVII. században* (The Economic Situation of Hungary in the 16th and 17th Centuries) (Budapest 1889); *Magyarország népessége a pragmatica sanctió korában* (The Population of Hungary at the Time of the Pragmatic Sanction) (Budapest 1896); *A magyar jobbágyság története* (The History of the Hungarian System of Serfdom) (Budapest 1896); *Magyarország történetét I. Lipót é I. József Korában* (*1657–1711*) (The Age of Leopold I and Joseph I) (Budapest 1898); *A magyar birodalom története* (History of the Hungarian Nation) (Budapest 1904); *Zsidó és nem zsidó Magyarok az Emancipáczio után* (Jewish and Non-Jewish Magyars after the Emancipation) (Budapest 1883).

ACTION FRANCAISE, a French political group, highly critical of democracy and republicanism and striving for the restoration of monarchy and the intensification of nationalism. It has grown out of the Ligue de la Patrie Française, a committee formed in 1898, in the midst of popular excitement about the celebrated Dreyfus case, by persons of conservative and militarist tendency who were violently anti-Dreyfusard. In 1899 Henry Vaugeois, the leader in this movement, began the publication of the *Action française*, first as a weekly and after 1908 as a daily. Under the influence of its prominent intellectual leader, Charles Maurras, who joined Vaugeois, and with the special financial backing of a large legacy from the widow of Marshal MacMahon, it gained the adherence of most French royalists, traditionalists and other ultra-conservatives, chiefly Catholic in religion, until it has become the outstanding expression of reaction in France. The central organization supports a number of dependent propagandist societies, as well as publications, for city and countryside, for students and professional men; the interesting "Camelots du Roi" are a body of young men who police the meetings and lead the street demonstrations of the Action Française.

The popular influence of the group is difficult to estimate. Its direct influence on French politics is certainly slight; not a single professed member of the organization now occupies a seat in the French Parliament, and only one

(Léon Daudet) occupied such a seat from 1919 to 1924. Indirectly, however, its influence is considerable. Not only have young persons, particularly university students, been attracted to it in increasing numbers, but many of its nationalist activities have been acclaimed by journalists and politicians who profess abhorrence of its royalist principles. On the other hand the organization has suffered internal schisms as well as external setbacks. Two of its leaders, Louis Dimier and Georges Valois, have left it as a result of internal dissensions, the former in 1920 and the latter in 1925. More recently, moreover, the Catholic church has officially opposed it.

The organization has catered to Catholics by denouncing the "anticlerical" legislation of the French Republic, and it is estimated that at least three quarters of its enrolled members have been Catholics, including many priests. Its chief director, Charles Maurras, is, however, a positivist and an agnostic and has expressed anti-Christian opinions in some of his books. This fact has recently been seized upon by the ecclesiastical authorities as justification for their condemnation of a movement which must have appeared to them as alienating republican Frenchmen from the church. On August 27, 1926, Cardinal Andrieu, Archbishop of Bordeaux, publicly condemned many of the teachings of the Action Française and counseled Catholics to withdraw from it, and his action was endorsed by Pope Pius XI on September 7, 1926; on December 29, the pope went further, forbidding Catholics to belong to it or habitually to read its literature. Almost the entire hierarchy of the Catholic church in France, by a circular letter of March 10, 1928, recorded their support of the papal position, while emphasizing its moral, rather than political, implications. Since then new dissensions have existed among French Catholics, between those who have obeyed the pope and those who have disobeyed him.

The doctrine of the Action Française is essentially that of Charles Maurras and represents a curious admixture of the positivism of Comte, the traditionalism of DeBonald and the *élan vital* of Bergson. It is summarized in three formulae: integral nationalism, practical empiricism and the forceful blow. "Integral nationalism" means that "a national policy should be pursued, involving the multiplication and strengthening of institutions which benefit the greatest possible number of living organisms by maintaining national integrity and fostering the growth of national power (for a nation declines when it ceases to grow in power)." By "practical empiricism" is meant primarily the teaching that "order in society, no matter how it is obtained, is more important than the liberty of the individual." Concerning the "forceful blow," it is declared "that the supplanting of the republic by the monarchy (a condition necessary for the salvation of the country) will probably not be realized (unless extraordinary events occur) by the ballot, but rather that the existing government will be overthrown, like most preceding governments, by force; and that the preparation and organization of the needful *coup de force*, as well as the creation and diffusion of a state of mind which would assure success to the use of force, are essential and necessary elements of the program of the Action Française." The doctrine, as a whole or in its parts, seems to have elicited the sympathy of such different intellectual types as Maurice Barrès and Georges Sorel and has undoubtedly affected the thought of the younger generation in contemporary France, far beyond the enrolled membership of the organization. In particular the criticisms which it has leveled against individualism and democracy have been incisive and have contributed to the existence in France of an impatience with parliamentary republicanism akin to, though admittedly less influential than, that engendered by Fascism in Italy or by Sovietism in Russia.

The Action Française recognizes the Duke of Guise, the heir of the Bourbon and Orleanist families, as rightful king of France, and demands the restoration of the old monarchy with its supposedly traditional institutions and policies. The most important of these are regionalism, that is, local decentralization and some provincial autonomy within the country; a privileged position for the church and for the "syndicates" of social classes and economic groups; the substitution of a kind of syndicalism and functional representation for existing individualism and political democracy. The organization is militantly nationalist. Its tirades against Germany and its criticisms of the League of Nations are incessant. It preaches the necessity not only of adequate French security, but also of forceful French expansion in Europe and overseas. It perpetually accuses the French Republic of cowardice, if not of treason; and, since its condemnation by the pope, it has directed especially venomous attacks against what

it terms the pacifist pro-German and anti-French alliance of the papacy with the republican government of France.

CARLTON J. H. HAYES

See: NATIONALISM; MONARCHY; SYNDICALISM; DIRECT ACTION; FORCE; BOLSHEVISM; FASCISM; REPRESENTATIVE GOVERNMENT; AUTHORITY; CHURCH; ANTICLERICALISM.

Consult: Platz, Hermann, *Geistige Kampfe im modernen Frankreich* (Munich 1922); Hayes, Carlton J. H., *France: A Nation of Patriots* (New York 1929) ch. viii; Roux, Marie de, *Charles Maurras et le nationalisme de l'action française* (Paris 1927); Jones, Percy M., "Intellectual Reaction in France" in *Hibbert Journal*, vol. xxv (1926–27) 159–71; Gwynn, Denis R., *The "Action Française" Condemnation* (London 1928); Maurras, Charles, *Enquête sur la monarchie, suivi de Une campagne royaliste au "Figaro," et Si le coup de force est possible* (Paris 1927), and *Les pièces d'un procès. L' "Action française" et le Vatican* (Paris 1927); *Almanach de l'action française* (annual) (1923–); *Cours de l'Institut d'action française* (quarterly) (1923–).

ACTIONS, LEGAL. *See* REMEDIES, LEGAL; PROCEDURE, LEGAL.

ACTON, JOHN EMERICH EDWARD DALBERG, EIGHTH BARONET AND FIRST BARON (1834–1902), English historian. His education was remarkably cosmopolitan. As a boy he went to school in Paris; for five years he studied at the Catholic College of Oscott, in England, presided over by Dr. (later Cardinal) Wiseman; next he was tutored at Edinburgh by Dr. Logan; and thereafter for six years he resided at Munich as the guest, pupil and friend of the famous German historian Döllinger. He visited the United States in 1855, Russia in 1856, and Italy, in company with Döllinger, in 1857. To Döllinger's influence may be attributed Acton's subsequent devotion to scholarly erudition and to "scientific" history, to the ideal of exact and full truthfulness in historical investigation and writing. This ideal, together with a mastery of detail and a cosmopolitanism which made him master of many languages and at home in several countries, rendered Acton one of the outstanding scholars of his age. His amazing scholarship, moreover, he applied to causes which were always dear to him and which nicely reflected the spirit of the age; he was stalwartly liberal in politics, economics and religion; a foe of bigotry and persecution; an enemy of nationalism; and, although a practising Catholic to the day of his death, a severe critic of many papal policies.

In 1859 Acton settled definitely in England and for the next six years was a member of Parliament for an Irish constituency, voting with the Liberals and forming a close friendship with Gladstone, but taking little part in the debates. In the meantime he began to sponsor and write a great deal for a series of Catholic reviews by means of which he hoped to promote critical scholarship among his co-religionists. The extreme liberalism of these journals, however, gave repeated offense to ecclesiastical authorities and led to the discontinuance of one after another: *The Rambler* (1859–62); *The Home and Foreign Review* (1862–64); *The Chronicle* (1867–68); and *The North British Review* (1868–71). Acton was bitterly hostile to Pope Pius IX's Syllabus of Errors of 1864, and in 1869–70 he zealously opposed the projected definition of the dogma of papal infallibility by the Vatican Council. It was on Gladstone's nomination that Acton was raised to the peerage in 1869, but he later took issue with Gladstone's interpretation of the decrees of the Vatican Council and in 1875 expressed his concurrence with Newman's views of papal infallibility. That closed the polemical period of Acton's career.

Acton helped to establish the *English Historical Review* in 1886. In 1895, on the nomination of Lord Rosebery, he was appointed Regius Professor of Modern History at Cambridge in succession to Sir John Seeley. During 1899–1900 he projected the *Cambridge Modern History* in twelve volumes, the first of a very noteworthy series of cooperative surveys of world history, written by acknowledged historical specialists of various countries, and he lived to see most of the first volume and half of the second in type. Acton himself never wrote a book. He gathered a good deal of material for monumental works on the history of freedom and on the French Revolution, but his absorption in detail and his lack of requisite organizing ability prevented him from bringing any of his larger plans to fruition. High historical ideals, a leading part in the dissemination of German methods of scientific history in England, and a few valuable essays and suggestive fragments which have been collected since his death in volumes mentioned below, were the legacy which Lord Acton bequeathed to contemporary social science.

CARLTON J. H. HAYES

Important works: COLLECTED LECTURES, ESSAYS AND FRAGMENTS: *Lectures on Modern History* (London 1906); *Historical Essays and Studies* (London 1907); *History of Freedom and Other Essays* (London 1907);

Lectures on the French Revolution (London 1910); *Lecture on the Study of History* (London 1896).

CORRESPONDENCE: *Selections from the Correspondence of the first Lord Acton*, ed. by J. N. Figgis and R. V. Lawrence, vol. i– (London 1917–) correspondence with Cardinal Newman, W. E. Gladstone, Lady Blennerhassett, etc.; *Letters of Lord Acton to Mary, Daughter of the Right Hon. W. E. Gladstone*, ed. by Herbert Paul (London 1913); *Lord Acton and his Circle*, ed. by Cardinal Gasquet (London 1906).

Consult: Shaw, W. A., *Bibliography of the Historical Works of Dr. Creighton . . . Dr. Stubbs . . . Dr. S. R. Gardiner and the late Lord Acton* (London 1903); Fisher, Herbert, *Studies in History and Politics* (Oxford 1920) p. 86–112.

ACTS OF TRADE, BRITISH. This term is used in a historical sense to designate certain statutes of the English Parliament, chiefly in the seventeenth century, passed in the interest of shipping, mariners and trade. As commerce began to expand during the last days of Elizabeth's reign and the early years of the reign of James I, and as colonization became significant in the period before the Civil Wars, rules were laid down, characteristic of all the maritime states of Europe at the time, for the control of trade and the plantations. England had already defined her position in regard to the carrying trade in certain experimental and temporary statutes of Richard II, Henry VII and Elizabeth, whereby certain valued commodities were to be imported into England from the continent in English ships manned for the most part by English sailors. Moreover, in 1621, after the settlement of Virginia and Bermuda, the Privy Council extended the rule by ordaining that plantation commodities—in this instance tobacco—should be "appropriated unto his Majesty's subjects and not communicated to foreign countries but by way of trade and commerce and from hence only," inasmuch as they were English colonies and it was the custom of all colonizing countries to keep their plantation trade to themselves.

After the decade 1630–40, when the Dutch had succeeded in obtaining almost complete control of the carrying trade of the world, the Rump Parliament, partly in a spirit of retaliation and partly for the purpose of managing England's trade to her best advantage, in 1651 passed an ordinance of the Commonwealth commonly known as the first navigation act. By this ordinance all plantation commodities of Asia, Africa and America and all goods of the growth and manufacture of Europe were to be imported into England, Ireland, Wales, Berwick-upon-Tweed and other English possessions only in ships owned, commanded and manned by English subjects of the Commonwealth or, in the case of European goods, in such ships as belonged to the people of the country whence the cargo came or where it was produced or to people resident in the port of first shipment. This act, which was clearly designed to injure the Dutch carrying trade, was probably passed at the instigation of a few interested London merchants belonging to the East India and Levant Companies. It did little to impair the dominance of the Dutch in the commercial world, for they were almost as powerful in 1675 as they had been in 1650, and it undoubtedly hurt rather than helped England's trade as a whole.

Owing to the maladministration of the finances under the Commonwealth and the Protectorate, England in 1660 was on the verge of bankruptcy, with a debt estimated at £3,000,000—more than double the largest recorded crown liability before 1641. Trade was depressed and the merchants were filled with foreboding. On the restoration of Charles II the revival of trade became a matter of first importance to the king and Lord Chancellor Hyde (afterwards the Earl of Clarendon) as well as to both merchants and officials. Before the end of the year a council of trade and a council for foreign plantations were set up, and on September 17 the Convention Parliament passed an act—confirmed by the regular Parliament the next year—for the encouragement and increase of shipping and navigation. In its first seventeen clauses this act repeated the essential features of the ordinance of 1651 (which ceased to have validity on the return of the monarchy), differing from it only in one or two particulars. It removed all restraints upon the trade with continental Europe, except Russia and Turkey, but required that all plantation commodities brought into England be brought only in English built ships (foreign built ships were debarred by an act passed the next year), owned by Englishmen and properly certificated and registered, of which the masters and three fourths of the seamen should be English subjects. The Channel Islands, Scotland, construed as a stranger kingdom until 1707, and Ireland by a later act of 1671 were denied the privileges of this act. Its language, as well as that of subsequent acts, was so poorly chosen that many difficulties arose in the attempts that were made at enforcement. In some

cases decisions were not reached throughout the eighteenth century, and customs officials, both in England and the plantations were often perplexed as to what to do. They generally construed the acts as literally as possible, and in some cases of doubt threw the ultimate decision upon the treasury, the commissioners of the customs and the law officers of the crown.

The eighteenth clause of the act of 1660 revived a regulation that does not appear to have been enforced under the Puritan administration—the requirement that certain plantation commodities be brought to England only. The order in council of 1621 had required that "all tobacco and other commodities whatsoever" should be brought directly to England; the act of 1660 was not so sweeping, enumerating only sugar, tobacco, cotton-wool, indigo, ginger and such dyewoods of plantation growth as fustic, braziletto and logwood. In the following century the list was extended to include many other commodities that England wanted and valued, partly for promoting her shipping and manufactures, as in the case of naval stores, iron, copper and lumber, partly for purposes of revenue, as in the case of rice, and partly to injure France, as in the case of beaver and other furs and also of molasses. After 1764 the list was still further extended, and finally concerned the northern colonies as well as those of the south and the West Indies. In 1730 and 1735 rice, and in 1739 sugar, were in part relieved of the restraint, and eventually rice was allowed to be shipped to any point in Europe, Africa and America south of Cape Finisterre. It was always a debatable point whether coconuts, logwood from Honduras and Canary wines were enumerated or not. The customs officials said that they were; the law officers were inclined to think that they were not.

After the act of 1660 had been in operation for ten years it was discovered that the colonists were evading it in one important particular. Since enumerated commodities could be carried from one plantation to another, for the benefit of the colonists, New Englanders and New Yorkers thought staples thus carried and not consumed in the plantations had fulfilled the law and could be reshipped to Europe. This practise, which broke through the intended channel of trade and led to the diminution of the English customs revenue, called for further legislation. An act was passed in 1673 which contained a clause declaring that all vessels arriving at the plantations and intending to take on a cargo of enumerated commodities should pay a duty at the colonial port of clearance, unless their captains could show the governor (or later the naval officer or the royal collector) a certificate that they had given bond in England to carry their lading directly back to the mother country. This payment, which came to be known as the "plantation duty," was a penny a pound on tobacco and other sums for other enumerated commodities. Even if the captain paid the duty he was still obliged to deposit a bond with the governor, naval officer or collector, binding himself, if he did not unload the goods at another colonial port, to take them directly to England, where he would still have to pay in addition the usual customs duty.

Thus far the acts regulated the plantation trade in only one direction, that toward England. In 1663 an act was passed regulating the trade the other way, that is, from Europe to America, by requiring that all foreign goods wanted by the colonists must first enter at an English port and thence be shipped to America as if they were English goods. The idea was to make the realm—that is, England, Wales and Berwick-upon-Tweed—the center, staple and magazine of all commodities exported from or imported into the plantations. The purpose of the act was to augment the revenue and the carrying trade and also to maintain a better correspondency with the king's subjects across the sea, to keep them in a closer dependence on the mother country and to render them more beneficial and advantageous to her, objects frequently mentioned in the acts.

Owing to the many ambiguities found in these acts and to the fact that they were continually violated in the years before the Revolution of 1689, despite strenuous efforts on the part of the treasury and the commissioners of the customs to see that they were enforced, a final act was passed in 1696 as part of a general attempt of the government to make the whole system more rigid. Although this act made a number of important changes in phrascology and introduced many new details in matters of administration, it did not alter in any essential particular the rules laid down by the acts of 1660, 1663 and 1673. It increased the number of ambiguities, extended considerably the machinery of operation, provided for vice-admiralty courts, and granted greater powers to the customs officers in the colonies. A number of explanatory and supplementary acts were passed in the

eighteenth century, the most important of which was the Molasses Act of 1733, which vainly attempted to regulate the trade between the British northern colonies and the French and other foreign colonies in the West Indies. But no acts, proclamations or orders in council, of date later than 1663, changed in any way the fundamental principles upon which the navigation acts were based.

The objects of the acts were to increase England's shipping and to create for her an advantageous trade. An advantageous trade was one which encouraged navigation and added to the number of England's seamen; which exported England's products and manufactures and imported those raw materials that England needed either for consumption or to use in her industries or for the fitting out of her ships engaged in domestic and foreign trade; and which created a general balance of exports over imports in England's favor. The ultimate object was to render the realm the chief beneficiary of all commercial operations in which the British world was engaged. To this end the welfare of Scotland, until 1707, Ireland and the plantations was sacrificed in the interest of the leading partner, for the conviction was firmly held that an independent trade for any of the subordinate members would be injurious to the trade of the realm and would violate wholly the purposes for which such dependents existed. Of all the plantations settled by the English, Ireland was considered most inimical to England's prosperity and in the long run suffered more from the navigation and other acts than did either the Channel Islands or the American plantations. For her treatment of Ireland England was to suffer a heavy reckoning in the nineteenth and twentieth centuries.

In the American colonies the effects of the acts of trade were less conspicuous. Although the acts were restrictive, in the sense that they confined trade to English and colonial bottoms and endeavored to direct and protect the channels through which the plantation trade was to flow, it may be doubted whether they ever were a serious menace to colonial development. That inconvenience and loss were caused in many instances is doubtless true; but in time the colonists adjusted themselves to the conditions, and in the eighteenth century had largely ceased to find fault, except perhaps in the British West Indies, where the acts were a greater hardship than on the continent. But even there other causes must be assigned for the general decline. Where the acts manifestly worked an injury they were moderated, as in the case of rice and sugar and of the Greenland fishery and the Baltic trade; or they were successfully evaded, as in the case of the Molasses Act; or they were neutralized by smuggling and by the connivance of customs officials in America. The attempts to interfere with colonial freedom of commerce were much less significant in causing the revolt of the colonies than were the attempts of the British authorities to interfere with colonial legislation and the exercise of colonial self-government. In this respect the causes of the revolution were political rather than commercial.

How far the acts of trade were of advantage to England herself will always be a matter of speculation. Contemporary writers were not agreed as to their merits and many were strongly opposed to them, believing that they seriously injured England's own freedom of commercial action. Others, particularly of a later date, called them England's "Magna Charta Maritima" and "Commercial Palladium," and attributed her naval supremacy and commercial leadership to their influence. After 1783 the general situation was so far changed as to require their frequent suspension and they were greatly modified under Huskisson's influence in 1822 and 1823. The last navigation act was passed in 1845 and the final repeal took place four years later. England lost in consequence nothing of her naval importance or commercial prosperity, and there is reason to believe that the beneficial effects of the acts of trade upon England's own growth and expansion have been unduly exaggerated.

CHARLES M. ANDREWS

See: COLONIAL SYSTEM; MERCANTILISM; COLONIES; COMMERCIAL POLICY; MERCHANT MARINE.

Consult: Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Cannan ed., 2 vols. (London 1904) vol. ii, p. 96–115, 427–29; McCulloch, J. R., "Navigation Laws" in his edition of Adam Smith, *Wealth of Nations* (Edinburgh 1855) p. 534–42; Macpherson, David, *Annals of Commerce*, 4 vols. (London 1805); Reeves, John, *History of the Law of Shipping and Navigation* (Dublin 1792); Allen, Joseph, *The Navigation Laws of Great Britain* (London 1849); Osgood, H. L., *American Colonies in the Seventeenth Century*, 3 vols. (New York 1907) vol. iii, and *American Colonies in the Eighteenth Century*, 4 vols. (New York 1924) vol. i, chs. iv–vi; Beer, G. L., *Origins of the British Colonial System, 1578–1660* (New York 1908), and *The Old Colonial System, 1660–1688*, 2 vols. (New York 1912); Root, W. T., *Relations of Pennsylvania with the British Government* (New York 1912); Pitman, F. W., *The Development of the*

British West Indies (New Haven 1917); Ashley, W. J., "The Tory Origin of Free Trade Policy" and "England and America, 1660–1760" in *Surveys, Historic and Economic* (London 1900) p. 268–360; Clarke, G. N., "Acts of Trade" in *History*, n. s., vol. vii (1822–23) 282–86; Andrews, Charles M., "The Acts of Trade" in *Cambridge History of the British Empire*, vol. i– (New York 1929–) vol. i, ch. ix.

ACTUARIAL SCIENCE. *See* LIFE INSURANCE.

ACWORTH, WILLIAM MITCHELL (1850–1925), railway economist. He was graduated from Oxford in history and for a time served as English tutor to the ex-Kaiser and his brother. Later he became a master at Dulwich College, but in 1885 he gave up scholastic life. He was chairman of the Metropolitan Asylums Board and a member of the London County Council, and in 1890 was called to the bar. Railways became his paramount interest. *The Railways of England* (London 1889) and *The Railways of Scotland* (London 1890) led to a visit to America for the study of American railroad practise, of which he ever remained an admirer. In *The Railways and the Traders* (London 1891) he attacked the secrecy of British railway accounts, and fearlessly continued the fight until ton and passenger-mile statistics were achieved (1920). His lectures for railway students were embodied in his *Elements of Railway Economics* (Oxford 1905, revised Oxford 1924), which launched that subject in England. As a member of the Royal Commission on Accidents to Railway Servants (1899), the Vice-Regal Commission on Irish Railways, the Board of Trade Committee on Railway Accounts and Statistics (1906) and as a barrister at the parliamentary bar specializing in railway work, he amassed an unequaled knowledge of railway history and practise. Impartiality and sound judgment enabled him later to make much use of this knowledge.

Criticism of British methods alienated British railwaymen, but his reputation as a railway expert grew elsewhere. After 1915 his main work was abroad. His evidence before the Newlands Committee of Congress (1917) formed the basis for *An Historical Sketch of State Railway Ownership* (London 1920). Although he was opposed to the principle of state ownership he recognized its occasional use. As one of a commission of three he was largely responsible for the Canadian National system. His reports upon the railways of southern Rhodesia (Salisbury 1918), India (London 1921). Austria, undertaken for the League of Nations (Geneva 1923) and Germany, for the Reparations Commission (London 1924), materially affected social and industrial progress in those countries. He was a member of the Railway Rates Advisory Committee (1919–20). On his deathbed he was arranging details of an inquiry into the railways of Rumania. Acworth's great contribution to society was the instigation of a new relationship between a nation and its railways, by which he endeavored, successfully, to coordinate the benefits of government and private ownership.

CHARLES ELY ROSE SHERRINGTON

Consult: Stephenson, W. T., "Sir William Acworth" in *Economic Journal*, vol. xxxv (1925) 327–29; Paish, G., "Sir William Mitchell Acworth" in *Journal of the Royal Statistical Society*, n. s., vol. lxxxviii (1925) 467–70.

ADAMS, BROOKS (1848–1927), social theorist, brother of Henry Adams, undertook to extend to social processes the physical principle of the dissipation of energy. In *The Law of Civilization and Decay* (London 1895; 2nd ed. New York 1897) he held that societies dissipate their energies in movement and centralize as they accelerate. In *The New Empire* (New York 1903) he attempted to discover the laws of consolidation and dissolution of those administrative masses called empires, holding that the economic center of the world determines the social equilibrium, and that this international center of exchange is an ambulatory spot on the earth's surface, which shifts back and forth as discoveries in applied science and geography change avenues of communication and cause trade routes to converge. Adams wrote in *The Theory of Social Revolutions* (New York 1913) that consolidation implies equivalent capacity for administration, but since adaptation to changing demands of the environment is beyond an established type of mind, new governing classes arise until the limit of the administrative capacity of the race is reached, and disintegration begins. The rise of a new governing class is always synonymous with a social revolution and the redistribution of property. In his introduction to Henry Adams' *The Degradation of the Democratic Dogma* (New York 1919) he likened modern democracy, with its infinite mass of conflicting minds and interests, to a vapor which loses in collective intellectual energy in proportion to its expansion. Brooks Adams had great vigor of thought and expression, but probably his chief contribution

was in stimulating his brother Henry's speculations on a science of history.

HAROLD D. LASSWELL

ADAMS, CHARLES FRANCIS (1807–86), American diplomat and statesman. In 1840 he began his inevitable political career as Whig member of the Massachusetts legislature. He was essentially the balanced, moderate, instructed statesman, and slavery moved him, not to abolitionism, but into the ranks of the "Conscience Whigs." In 1848 he was nominated for the vice presidency by the Free Soilers. In 1859 he was elected to Congress by the Republicans.

His flawless record as minister to Great Britain during the Civil War constitutes his claim to fame. He did not, perhaps, embody the qualities of a constructive diplomat, but he knew his trade, and he represented the United States with a bold and honorable mien which won increasingly the respect of the British. The details of his mission are national history.

Returning to the United States in 1868, he declined the presidency of Harvard and escaped that of the United States. The chief Liberal Republican leaders were anxious to name him to run against Grant in 1872, and the Democrats were willing to endorse him. The convention, however, was stampeded for Horace Greeley, whose overwhelming electoral defeat is slight indication of how Adams might have run. During these uncertainties Adams was performing the most important service of his life. As United States arbitrator for the Geneva arbitration, he devised a method of disposing of the hopeless American claims for indirect damages, which saved the arbitration and its subsequent prestige.

CARL RUSSELL FISH

Important works: *Life of John Adams*, 2 vols. (Philadelphia 1871); an introductory "Memoir" to Adams, Abigail, *Letters*, 2 vols. (2nd ed. Boston 1840) vol. i, p. xiii–lxxxvi. He edited his father's *Memoirs*, 12 vols. (Philadelphia 1874–77), and a number of his letters are reprinted in *A Cycle of Adams Letters, 1861-1865*, ed. by W. C. Ford, 2 vols. (Boston 1920).

Consult: Adams, Charles Francis, Jr., *Charles Francis Adams* (Boston 1908); a compendious life is in preparation.

ADAMS, CHARLES FRANCIS (1835–1915), American economist and historian, brother of Henry Adams. After thirty-six years of rather casual existence he centered his attention on the study of railroad questions. Partly by way of providing a congenial place for himself in the life of his day he advocated the creation of the Massachusetts Board of Railroad Commissioners, of which he was a member for ten years from its inception (1869). President of the Union Pacific from 1884 to 1890, he continued for many years to head the Kansas City Stockyards Company, and speculated to advantage in Kansas City real estate. He recorded convictions on a variety of governmental and educational problems.

In general a believer in the efficacy of competition as a regulator of industry, with respect to railroads Adams early pointed out that it resulted in instability of rates at common points and extortion elsewhere. He was reluctant to accept government regulation as an alternative, underestimating, perhaps, its administrative possibilities. The effectiveness of the partial public ownership which he proposed instead—as a means of diffusing standard practises—has remained problematical. An Easterner of property, with Western interests of the kind noted, he indignantly defended judicial review of state rate-making. "Bad manners" and local discrimination, he thought, had brought down upon the railroad companies the blame for conditions attributable to "protection and paper money" or to the carelessness of settlement in the West.

The historical work of Adams was to some extent directed by his public and ancestral connection with Quincy, Mass., and by the service of his father as minister to England during the Civil War. His New England studies rest upon a general understanding of the period and a critical sense of cultural values. They exhibit an interest not merely in political development but in social relations, manners and modes of life. The investigations in diplomacy dramatically visualize the uncertain pendency of events. An essay on "The Era of Change" is a brilliant speculative example of economic determinism.

Adams was a diverting analyst of railroad finance in the buccaneering period. A flexible sense of humor and a forceful epigrammatic style mark his writings.

THOR HULTGREN

Important works: *Chapters of Erie and Other Essays*, with his brother (Boston 1871); *Railroads, Their Origin and Problems* (Boston 1878, revised ed. 1886); *Notes on Railroad Accidents*, lucidly analytical (New York 1879); *Three Episodes of Massachusetts History* (Boston 1892); *Studies, Military and Diplomatic* (New York 1911). Aside from *Charles Francis Adams, an Autobiography* (Boston 1916) there is no substantial account of his life and work.

ADAMS, GEORGE BURTON (1851–1925), American historian. Like other American scholars of the period he received his graduate training in Germany (PH.D. Leipsic, 1886) where he was especially influenced by the seminar method of Wilhelm Arndt which had been derived through Waitz from Ranke. As occupant of the chair of history at Yale (1898-1917) and as one of the organizers of the *American Historical Review* (1895) he was influential in applying to American scholarship the premises and animus of the German historical discipline.

Adams was probably led into the field of English constitutional history by his early interest in feudalism, shown, for example, in his well known *Civilization during the Middle Ages* (1894). He found the feudal period and the fact of feudalism to have been crucial in the development of the English constitution, and in the working out of that idea lies his creative achievement. He traced the development of English central government from the absolutism of the Norman monarchy to its present democratic results; the central fact in this process was the dominance of law over the king; the point where this dominance was decisively asserted was the Magna Carta in 1215; the vehicle for its assertion lay in the feudal character of that document —its identification of opposition to absolutism with the hallowed traditional forms of a disappearing feudalism.

At other points also Adams contributed to the scholarship of English constitutional history: the early history of Parliament, the splitting off of English and American democracies from the main trunk of the English constitution, the importance of the cabinet system, the effect of monarchic forms upon democratic actualities and the early history of councils and courts.

A dignified, graceful style and a substantial erudition made Adams a respected figure in the scholarly world. For a while he was a little troubled by the encroaching conception of history as a more complex and elusive process than it had been to the school in which he was trained. But in the main he rested in the conviction, expressed in his presidential address to the American Historical Association in 1908, that "history has been determined by forces which act according to fixed law."

MAX LERNER

Important works: *Civilization during the Middle Ages* (New York 1894); *The Growth of the French Nation* (Meadville, Pa. 1896); "Origin and Results of Imperial Federation Movement in England" in State Historical Society of Wisconsin, *Proceedings*, vol. xlvi (1899) 93–116; *Select Documents of English Constitutional History* (with H. Morse Stephens) (New York 1901); "The History of England from the Norman Conquest to the Death of John (1066–1216)" in Hunt, W., and Poole, R. L., *Political History of England*, 12 vols. (London 1906–10) vol. ii; *The Origin of the English Constitution* (New Haven 1912); *The Constitutional History of England* (New York 1921); *Council and Courts in Anglo-Norman England* (New Haven 1926).

ADAMS, HENRY (1838–1918), historian, grandson of John Quincy Adams and third son of the older Charles Francis Adams. He was born in Boston, graduated from Harvard College in 1858, went to Berlin to study civil law, listened to one lecture, spent two years wandering about Germany and Italy, and for want of something better to do became private secretary to his father, who was ambassador to Great Britain during the Civil War. He returned home with the vague intention of entering journalism on behalf of political reform. Disillusioned by the announcement of Grant's cabinet, he accepted an unsolicited appointment as assistant professor of history at Harvard (1870–77), where he imposed upon a few exceptional students a drastic training in historical research, the result of which was a volume of studies (*Essays in Anglo-Saxon Law*, Boston 1876) containing one by Adams himself on "Anglo-Saxon Courts of Law." During the years 1875–76 Adams was also editor of the *North American Review*. After retiring from Harvard Adams resided in Washington but spent much time abroad, especially in Paris, and although counted something of a recluse numbered among his friends and acquaintances many of the most distinguished persons of his generation.

Adams' career falls into two periods. Until about 1895 he was occupied chiefly with the study of American history, although he wrote also *Democracy*, *An American Novel* (London 1882). Besides special articles, *Historical Essays* (New York 1891), the results of these studies were: *Documents Relating to New England Federalism, 1800–1815* (Boston 1877); *The Life of Albert Gallatin* (Philadelphia 1879); *John Randolph* (New York 1882); *A History of the United States from 1801 to 1817*, in nine volumes (New York 1889–91). In recognition of the high quality of these works, Adams was chosen president of the American Historical Association (1894). The short address which he wrote (but was not present to deliver) for his inau-

guration shows, however, that he had already become skeptical of the value of writing history as he and his colleagues were writing it. During the second period of his life he therefore wrote no more history in the ordinary way, unless one should except the biography written for friendship's sake, *The Life of George Cabot Lodge* (New York 1911). For twenty years he was, on the surface at least, an amused and disillusioned observer of the human scene, engaged in what he ironically called the "search for an education." One may suppose, however, that underneath his sardonic humor Adams was seriously seeking for the significance of his own life and the life of humanity. What troubled him was the fact that a man of his opportunities and ability had been able to accomplish, as he saw it, nothing really memorable or important. The search for an education was therefore an attempt to discover the reason for his failure, to discover the "lines of force" that dominated his age, to discover, in a word, the secret of social evolution, a science or philosophy of history. His later works are largely concerned with this recondite problem: *Mont Saint Michel and Chartres* (p. p Washington 1904, pub. New York 1913); *The Education of Henry Adams: An Autobiography* (p. p. 1906, pub. Boston 1918) a sequel to the *Mont Saint Michel*; *A Letter to American Teachers of History* (p. p. Washington 1910); *The Degradation of the Democratic Dogma* (New York 1919), which contains the "Letter to American Teachers of History" and "The Rule of Phase Applied to History."

What chiefly troubled Adams was that his own achievements, whether worth while or not, seemed to be the result of accident rather than of purpose; and, so far as he could see, his own life was typical of that of humanity which, conscious of purpose, appeared nevertheless to be driven forward by blind forces which could be neither anticipated nor controlled. Far from solving this problem, Adams never succeeded even in stating it to his own satisfaction. After 1914 he therefore wrote nothing, judging that next to good humor silence was the chief mark of sense. The publication of his privately printed works was contrary to his expressed judgment, but it would be rash to say contrary to his secret desire. Adams will be known chiefly for his *History of the United States*, which is probably one of the ablest works produced by an American historian, and for his *Education of Henry Adams*, undoubtedly one of the most remarkable autobiographies in the language.

CARL BECKER

Works: The chief sources of information are the writings of Adams mentioned above, especially the *Education of Henry Adams*. In addition should be noted *A Cycle of Adams Letters, 1861–1865*, ed. by W. C. Ford 2 vols. (New York 1920), and *Letters to a Niece and Prayer to the Virgin of Chartres* (with *A Niece's Memories*, by Mabel La Farge) (Boston 1920).

Consult: Taylor, H. O., "The Education of Henry Adams" in *Atlantic Monthly*, vol. cxxii (1918) 484–91; Becker, Carl, "The Education of Henry Adams" in *American Historical Review*, vol. xxiv (1919) 422–34; More, P. E., "Henry Adams" in *Unpopular Review*, vol. x (1918) 255–72.

ADAMS, HENRY CARTER (1851–1921), American economist. His parents, who were of old New England stock, had settled as missionaries in Iowa in 1842. His antecedents and early training pointed to a career in the church, and in 1875 he entered Andover Theological Seminary. He was quickly convinced, however, that "clear thinking is more important than effective exhortation," and began to envisage a life of intellectual activity, with special reference to social and economic science. An opportunity for graduate study presented itself at the newly organized Johns Hopkins University, from which he received one of its first doctorates in 1878. Then followed a brief period at Oxford, Paris, Berlin and Heidelberg for the completion of his formal training, and in 1879 he was initiated into his academic career at Cornell University. In 1886 he was dismissed from Cornell, in direct consequence of a frank expression of his views on the labor problem. From 1887 until his death he held the chair of political economy at the University of Michigan.

His distinctive importance in the field of social science lies in his pioneering efforts, among Americans, as an investigator of the province of government in economic affairs and as an active agent in its development. His contributions along these lines, particularly through his long service with the Interstate Commerce Commission, have exerted a potent influence upon the prevailing principles and practises of public control.

In the beginning of his career Adams' major inquiries were largely in the realm of public finance. His doctoral dissertation on the history of American taxation was followed by a book on public debts which has since become a classic. His keenly analytic *Science of Finance* was the first comprehensive treatise on public finance

by an American. He rendered his most enduring service in the sphere of public control of private enterprise. His monograph on the relation of the state to industrial action was a forerunner of much of the theoretical speculation from which the emerging period of governmental intervention drew its impetus. Imbued with the necessity of subjecting economic institutions and their concrete manifestations to the test of ethical standards and social consequences, he pointed out the shortcomings of unrelieved laissez-faire doctrine and developed guiding principles for the assertion of state power. To these basic problems of public control he returned again and again in his subsequent writings; and he also found himself in a position to exert practical influence upon their solution.

Through public service in the statistical and accounting field he was enabled to develop concrete institutional arrangements for railroad control. Beginning in 1888 he served the Interstate Commerce Commission, in charge of statistics and accounts, for a period of more than two decades. Recognizing from the first the supreme importance of full, accurate and comparable data as a basis for effective railroad regulation, he sought to make the required reports of the carriers as informative and reliable as possible. Despite grave obstacles significant improvement was achieved. By the statutory amendments of 1906 the carriers were required to submit their reports under oath, and the commission was empowered to prescribe uniform accounting systems and to enforce compliance with its prescribed requirements. Adams played an influential role in securing this strengthened legislative structure, and he was the central figure in developing the classifications and regulations in pursuance thereof. Cooperating for a number of years with the Committee of Twenty-Five of the American Railway Accounting Officers' Association, he succeeded in evolving a uniform system of accounts which constituted the first mandatory regulations for the steam railroads of the United States. While many of these original classifications have been superseded, and new accounting and statistical expedients are constantly emerging, the basic principles established by these classifications have largely survived. In its fundamentals, moreover, this system has been extended to other carriers subject to federal jurisdiction, and has been widely adopted in the regulation of local utilities. The strongest evidence of Adams' influence is found in the universal acceptance of such prescribed accounting and statistical practise as an indispensable instrument of public control.

I. L. SHARFMAN

Important works: "Taxation in the United States, 1789–1816," *Johns Hopkins University Studies in Historical and Political Science*, vol. ii (1884) 263–341; *Public Debts* (New York 1887); "Relation of the State to Industrial Action" in American Economic Association, *Publications*, vol. i (1887) 465–549; "Economics and Jurisprudence" in American Economic Association, *Economic Studies*, vol. ii (1897) 1–48; *The Science of Finance* (New York 1898); *American Railway Accounting* (New York 1918).

Consult: Bigelow, S. L., Sharfman, I. L., and Wenley, R. M., "Henry Carter Adams" in *Journal of Political Economy*, vol. xxx (1922) 201–11, including a complete bibliography of his works; "Memorial to Former President Henry C. Adams" in *American Economic Review*, vol. xii (1922) 401–16.

ADAMS, HERBERT BAXTER (1850–1901), American historian. He was graduated at the head of the class of 1872 at Amherst College, studied in Germany, and in 1876 received the degree of Doctor of Philosophy at Heidelberg. He then went to Johns Hopkins University as one of its first group of fellows, soon began teaching there, and was successively associate professor and professor of history. In the seminar which he established he turned attention first to the study of the history of local government in America. The relations of church and state were also a favorite field of study with him. His strength, however, lay in organization rather than in research, and he deliberately chose to occupy himself with the building up of what became in his time the largest department of history in any American graduate school, instead of with historical writing. His only long book was *The Life and Writings of Jared Sparks* (2 vols., Boston 1893). Earlier he had broken new ground by founding the series of *Johns Hopkins Studies in Historical and Political Science*, and had written much on American educational history. His service to historical study in America lay not in doctrine but in the training and inspiring of a large proportion of the conspicuous historical scholars of the new generation, and especially in the organization in 1884 of the American Historical Association, of which he was the secretary until 1900 and the chief motive power from its foundation to his death.

J. F. JAMESON

Consult: "Herbert B. Adams, Tributes of Friends"

in *Johns Hopkins University Studies in Historical and Political Science*, extra vol. xxiii (1902), where a complete bibliography is given.

ADAMS, JOHN (1735–1826), lawyer, scholar, second president of the United States (1797–1801). He aided the cause of independence in Congress and helped draft the Declaration of Independence. It was as an apostle of equality and the rights of man that he expounded in *Thoughts on Government* (Philadelphia 1776) a liberalism tempered by a firm belief in checks and balances. He helped negotiate peace with England in 1783 and served as minister to England (1785–88). The disorders of the "critical period" following upon peace changed him into a conservative, and in *A Defence of the Constitutions of Government of the United States of America* (3 vols., London 1787–88) and *Discourses on Davilla* (Boston 1805), published originally in *The Gazette of the United States* (Philadelphia, April 28, 1790–April 27, 1791), he appears as our ablest defender of aristocracy. Discarding his early belief in the equality of man, he urged that government, though necessarily based upon popular sovereignty, must be administered by the rich, well-born and capable, under a system of checks and balances which would prevent the tyranny of majorities. He favored life tenure for office holders and a hereditary titled nobility. He served as vice president during the two Washington administrations and assumed the presidency in 1797, the exponent of a conservative New England Federalism and the leader of a badly divided party. While able, honest and fearless, his irascibility, stubbornness and want of tact rendered him unequal to the task of uniting the Federalists in the face of Hamilton's bitter emnity, or of saving them from blunders which caused their defeat at the end of his term. He rated among his greatest achievements the preservation of peace with France in 1798, and the appointment of John Marshall to the chief justiceship in 1801.

ROBERT E. CUSHMAN

Works: *Works*, ed. by Charles Francis Adams, 10 vols. (Boston 1850–56).

Consult: Adams, J. Q., and C. F., *Life of John Adams*, 2 vols. (Philadelphia 1871); Morse, J. T., Jr., *John Adams* (Boston 1884); Morse, A. D., "The Politics of John Adams" in *American Historical Review*, vol. iv (1898–99) 292–312; Merriam, C. E., *History of American Political Theories* (New York 1903) ch. iii; Walsh, C. M., *The Political Science of John Adams* (New York 1915).

ADAMS, JOHN QUINCY (1767–1848), American statesman and diplomat. He was the son of John Adams, second president of the United States. His public service began, after education at Harvard and travel abroad, when he was appointed in 1794 minister to the Netherlands and in 1797 to Prussia, with special commissions to Great Britain. He was retired upon Jefferson's taking office, and in 1802 elected senator from Massachusetts. Before his term was over he had become a Republican, and in 1809 he was made minister to Russia. He served as chief of the peace commission at Ghent, as minister to Great Britain, and from 1817 to 1825 as secretary of state. From 1825 to 1829 he was president of the United States.

Up to this point Adams was perhaps the most complete and ardent champion of American rights and American destiny. He upheld the violent action of Andrew Jackson in Florida, annexed that region and others to the west of it, and sought the acquisition of Cuba and Texas. He violently attacked the attitude and conduct of Great Britain, and was chiefly responsible for the formulation of the Monroe Doctrine, which was in large measure directed against that country. On domestic questions he was a nationalist, favoring a protective tariff and public works. But after his election to Congress in 1831, upon his retiring from the presidency, his interest came to center more and more on opposition to slavery, resulting in his wide popularity in the North as defender of the "right of petition." He was led also to reverse his former position on national expansion. Although he continued to be an independent he developed political connections with the Anti-Masonic, the National Republican and the Whig parties. He remained a member of Congress until his death in 1848.

His boundless vitality sought many other outlets. In 1806 he accepted a professorship of rhetoric at Harvard, and his published lectures did much to encourage the outburst of oratory which characterized the next generation. As secretary of state he edited, or supervised the editing of, many state papers which have proved foundation stones for our study of American history. One of his most important acts was to utilize the Smithsonian bequest for the creation of the institution bearing that name. His very numerous writings include state papers, a great many occasional publications, and more elaborate works, such as his lectures on rhetoric, his

lives of Madison and Monroe, and his books describing his travels in Silesia. Perhaps his most important work is his *Memoirs*, comprising extracts from his diary from 1795 to 1848, edited by C. F. Adams (12 vols., Philadelphia 1874–77). His *Writings*, covering the period from 1779 to 1823, are edited by W. C. Ford (7 vols., New York 1913–17).

CARL RUSSELL FISH

Consult: Morse, J. T., *John Quincy Adams* (Boston 1909); Ford, W. C., and Adams, C. F., *John Quincy Adams* (Cambridge, Mass. 1902).

ADAMS, SAMUEL (1722–1803), American statesman, cousin of John Adams. He was born in Boston and educated at Harvard (A.B. 1740; A.M. 1743). He inherited from his father Samuel a fair estate which he soon lost through neglect and mismanagement. Politics was his chief interest and after 1764 his only occupation. Skill as a political organizer and as a polemical writer gave him the leadership of the radical party. He was a member of the Massachusetts House of Representatives (1765–74), and as clerk (1766–74) wrote most of its state papers. He was one of the chief organizers of the opposition to the Stamp Act and the Townshend Acts, and by inflaming the popular dislike of the troops was a prime influence in bringing on the "Boston Massacre" (1770). When the controversy everywhere abated (1771–73), Adams revived it by his persistent attacks on Hutchinson, whom he regarded as a pliant tool of ministers. He organized the Massachusetts committees of correspondence to protect American rights (*Writings*, vol. ii, p. 348–50) when most people supposed they were at last secure. By some oversight he failed to foresee the importance of the Tea Act, but when the tea arrived he directed the opposition which ended by throwing it into the harbor (Wells, vol. ii, p. 110 *et seq.*). Adams was at first opposed to the belief that a continental congress would be the best means of supporting Massachusetts against the Coercive Acts (*Writings*, vol. iii, p. 115), fearing that it would prove too conciliatory, but he supported it eagerly when it was apparent that one would be assembled (*Ibid*, vol. iii, p. 126). As a member of the Continental Congress (1774–81) he worked effectively for the passage of a series of resolutions known as the Association, was an early advocate of separation, signed the Declaration of Independence, and served on the committee to draft the Articles of Confederation. In 1779 he was one of the committee that drafted the Massachusetts constitution, and author of its bill of rights. He at first opposed the adoption of the federal constitution, but was induced by clever manoeuvres to support it on condition that a bill of rights be added (Wells, vol. iii, p. 248, 260). He joined the Democratic-Republican party, served as lieutenant-governor of Massachusetts (1789–94), and as governor (1794–97).

Adams' effective work ended with 1776. Essentially a *frondeur*, he was never effective and rarely happy except in opposition. Skilled in the tactics of undermining authority, he was of little use in building it up. As a polemical writer his adroitness was all in attributing sinister motives to his opponents, while investing his own activities with a flavor of disinterested service in the cause of humanity. In political and religious faith, in the naive doctrinaire outlook of a limited but acute mind, in a genuine passion for liberty, Adams was representative of his century. Like Saint-Just and Robespierre, he loved humanity but suspected most men; and if, like Sieyès, he had mastered the science of politics, it was only because, like Madame Roland, he identified the activities of real men with abstract propositions about them.

CARL BECKER

Works: *Writings 1764–1802*, ed. by H. A. Cushing, 4 vols. (New York 1904–08); Massachusetts Historical Society, *Warren-Adams Letters*, 2 vols. (Boston 1917–25).

Consult: Wells, W. V., *The Life and Public Services of Samuel Adams*, 3 vols. (Boston 1865); Hosmer, J. K., *Samuel Adams* (Boston 1909); Harlow, R. V., *Samuel Adams, Promoter of the American Revolution* (New York 1923).

ADAMSON LAW. *See* RAILROADS, section on *Labor*.

ADAPTATION. The lack of precision in the use of this term in biological and sociological literature is due to the fact that it designates both a process and a state. It most frequently signifies those processes whereby a living organism is fitted to its physical and organic environments. The adaptive processes result in such modifications of structure and function as will facilitate growth and reproduction under the given conditions. The term "adaptation" is also used to indicate the end result of such modifications, or the state of being adapted. In this latter sense it is equivalent to "adjustment," or such harmonious relationship between organic traits and essential conditions of life as to

insure survival of the type. In the social sciences adaptation is used in both senses, though most commonly in the former. The term "accomodation" is also used to designate that part of the adaptive processes whereby conflicts are resolved and conflicting elements brought into a state of mutual toleration and hence of cooperative functioning. Conflict, competition, rivalry and emulation are as much parts of the processes of adaptation of individuals and groups to each other as are mutual aid and cooperation.

The modern uses of the term mark a revolution in scientific and philosophical thought. The theologians had found in the marvelous adaptations throughout nature most convincing evidences of an Omnipotent Designer of the universe. The biologist sought a naturalistic explanation of such harmonious interrelations. Lamarck found it in the inheritance of acquired characters, a doctrine now seen to be of limited value, if not wholly untrue. Darwin found it in the combined effects of variation, selection and heredity. He found that those variates of any plant or animal which more nearly fit the environment tend to live longest and leave most progeny. As Spencer said, there is a "survival of the fittest." Through inheritance their traits become more and more general, thus producing a progressively more perfect adaptation, or adjustment, to the requirements of the situation. Darwin's theory of variation has been supplemented by mutationism; and experimentation has shown that selection does not actually result in the production of new types but rather in the segregation of existing types and the preservation of mutant traits having survival value. Environmental selection does not produce adapted types; it preserves them. The Negro, for example, is black because dark mutant types occurring in his ancestral stock have been favored by climatic conditions. Mutations have also affected hair, eye color and skin texture so as to increase his adaptation to heat and sun.

Biological adaptation applies not merely to physical traits but to those reflexes and instincts which constitute an integral part of an animal's adjustment to the major elements of its environment. In man fixed inherited patterns of behavior have been very largely replaced by an unequalled capacity to learn, or to acquire habits suitable to his cultural medium. Adaptation is thus an organizing process, or the gradual development of an integrated scheme of structures and functions suited to a more or less definite mode of life under specific conditions. This process is the outcome of the stimuli and repressions of the environment acting on the potentialities of the organism and producing a greater or less degree of success in the struggle for existence.

The different races of men have obviously undergone more or less environmental selection, notably in adaptation to temperature, moisture, sunlight and altitude. The white, yellow and black stocks have different climatic optima and different ranges of climatic toleration. But such physical adaptations are necessarily more general than specific. They are achieved only over long periods of time, and hence through race mixture and migration tend to become so obscured that broad and true generalizations regarding them are difficult to attain. Moreover man adapts himself to his habitat not so much by mutational differences as by cultural achievements. There is consequently a striking and radical difference in the cultures of peoples living in such widely different habitats as arctic and desert, or wet and torrid. But here again we must note that migration, trade, travel and war diffuse culture traits over areas far distant from those in which they arose. Moreover man succeeds to a degree in adapting the environment to his own purposes. While, therefore, culture must always be adapted to insure survival in a given habitat, the environment is powerless to produce culture traits. Man alone is their architect; and the extent and manner of his utilization of environmental possibilities depends on the state of his cultural advancement. It should not be overlooked, however, that the intelligent adaptation which it is the mission of science to achieve does not free man from nature; rather it signifies an increasing harmony between his mode of life and nature's laws.

Social life and cultural evolution are carried on by means of complicated processes of mutual adaptation among individuals, groups and cultural traits. By education and training the habits of the rising generation are fitted to the prevailing standards of manners and morals. Powerful institutions of social control adjust the differences and rivalries of groups and classes. New culture traits are fitted into the general pattern of life, and revolutionary inventions, such as the capitalist system of industry, ultimately transform every feature of the culture scheme. Cultural evolution is thus a continuous process of mutual adaptation of all parts of an interrelated whole. Society, whether

local group, nation or international community, is a vast collection of elements mutually adapting and readapting themselves to each other so as to maintain themselves in a condition of moving equilibrium. Social adjustments are, therefore, never perfect, because of the conflicts of group interests and values, the extraordinary variability of human nature and the varying hold of social tradition on individuals and classes. Not only do individuals often become badly adjusted to the requirements of their times, but the competitions of groups may break out into open warfare, leading to new bases of mutual toleration and accomodation.

FRANK H. HANKINS

See: ACCOMODATION; ADJUSTMENT; ACCLIMATIZATION; ENVIRONMENT; STRUGGLE FOR EXISTENCE; BIOLOGY; HUMAN GEOGRAPHY; ASSIMILATION, SOCIAL; CHANGE, SOCIAL; CULTURE.

Consult: *Organic Adaptation to Environment*, ed. by M. R. Thorpe (New Haven 1924); Thomson, J. A., *Darwinism and Human Life* (New York 1910); Chatterton-Hill, G., *Heredity and Selection in Sociology* (London 1907); Huntington, Ellsworth, *The Character of Races* (New York 1924); Bristol, L. M., *Social Adaptation* (Cambridge, Mass. 1915).

ADDISON, JOSEPH (1672–1719), poet, dramatist, member of Whig governments and literary apologist therefor. He had a permanent influence on morals and journalism through his periodical essays in those admirable journals of society, the *Tatler*, the *Spectator* and the *Guardian*. He was the first English critic, in the light vein, of both morals and manners, and with Sir Richard Steele created a vehicle for instructive and entertaining comment that served as a model for many similar magazines and substantially influenced our later periodical literature. His method was that of wit and satire; his purpose to correct the affectations and licentiousness of his time. Vice and profligacy were painted in their true colors by Addison, who destroyed the idea that genius and wit had to depend upon indecency. He reconciled virtue and good sense, yet escaped the Puritan gloom. The wit of his social satire was humane and gracious, unmarred by malice, coarseness, the bitter contempt for humanity of Swift or the ironic cynicism of Voltaire. Good nature, good sense and good feeling mark his thought; and his wide range of interest in the daily problems of human life served both his own age and posterity.

He made his themes entertaining and edifying to a popular audience, bringing, as he says, "philosophy out of closets and colleges to dwell at tea-tables." This is his great contribution: he revealed the power for instruction and reform of what today we call human interest and the feature article. He created characters, used drama and allegory and spiced all with humor set forth in a style miraculous for a sweet clarity. He made literature a part of daily life, thus giving to journalism a new field between the daily news sheet and the controversial pamphlet, and a new technique that avoided equally the sensation mongering of street literature and the classic aloofness of the essay by Bacon or Milton. Addison (with Steele) also first discovered women as readers and discussed their interests, recognizing them as part of the popular audience, though with an unflattering criticism of their empty pursuits. His good sense and humanity, his moral purity and reverence for the sublime in man and nature, set him as a milestone in the progress of social criticism.

LEON WHIPPLE

Works: *Works*, ed. by G. W. Green, 5 vols. (New York 1853–54).

Consult: Courthope, W. J., *Addison*, English Men of Letters Series (London 1884); Paul, A., *Addison's Influence on the Social Reform of His Age* (Hamburg 1876); Escott, T. H. S., *Masters of English Journalism* (London 1911) p. 70–81.

ADELUNG, JOHANN CHRISTOPH (1732–1806), German historian, philologist and lexicographer. He was educated at the University of Halle and from 1787 until his death he was chief librarian at Dresden. In his *Versuch einer Geschichte der Kultur des menschlichen Geschlechts* (Leipsic 1782) Adelung brought into use the term *Kulturgeschichte* as a substitute for the old term *Geschichte der Menschheit*. History, for him, is not a record of military exploits or political affairs, but an account of cultural evolution. Only by the increase in enlightenment and in intellectual development can the progress of the times be measured. He was also the first to advance the theory that the highest stages of cultural growth were reached by the most densely populated countries.

Adelung is more important, however, as a philologist and lexicographer. No man before Jakob Grimm did so much for the German language. By means of his monumental *Grammatisches-kritisches Wörterbuch der hochdeutschen Mundart* (5 vols., Leipsic 1774–86) and his *Magazin für die deutsche Sprache* (Leipsic 1782–

84) he contributed greatly toward fixing the standards of the German language. Through his philological work he did much to stimulate German national feeling. In his *Ueber die Geschichte der deutschen Sprache* (Leipsic 1781) and in his *Ueber den deutschen Styl* (Leipsic 1785, 4th ed. Berlin 1800) he insists on preserving the purity of the German language. He maintains that borrowings from foreign languages come only as a result of ignorance of the richness of the original German tongue. Language is both the expression of the national character and the chief factor differentiating one nationality from another. He therefore calls for a more diligent study of the German past. In his *Mithridates oder allgemeine Sprachenkunde* (vol. i, Berlin 1806, vols. ii–iv edited and completed by J. S. Vater, Berlin 1809–17) he formulated the idea of an original Aryan language, a hypothesis which became important in the growth of the Aryan race theory in the nineteenth century. Adelung's work became the model for various Slavic scholars like Linde, Jungmann and Dobrowsky; thus he indirectly contributed to the national renaissance of the Slavic nationalities.

In addition to his more scholarly work Adelung was also active as compiler, translator and journalist.

KOPPEL S. PINSON

Consult: Schaumkell, Ernst, *Geschichte der deutschen Kulturgeschichtsschreibung* (Leipsic 1905) p. 110–13.

ADJECTIVE LAW. *See* PROCEDURE, LEGAL.

ADJUSTMENT has much in common in meaning and usage with the terms accommodation and adaptation. The word has been employed in several departments of human thought. Aside from common parlance the term is used in the fields of material phenomena, such as mechanics, in biology, in psychology and in the social sciences.

In mechanics adjustment connotes rearrangement of parts to produce better functioning, such as setting the screws of a lathe or setting the springs of some measuring device. In fact the term has been widely used to denote the fixing of precision instruments in order to make more accurate physical measurements. This in turn implies the determination of a standard or norm of measurement in reference to which adjustment is made. In natural science the norm of adjustment is fairly easy to calculate in terms of probabilities of observation and verifiability through repeated use of exact instruments.

In the biological world the term has had two usages: one rather narrow, exemplified by the cognate word "adjustor" in reference to certain muscule groups, especially the brachiopods, and by the phrase "adjustor neurone" in reference to the central neurone of the reflex arc; in the wider sense the word is used as practically synonymous with adaptation. Thus Herbert Spencer stated in his *Principles of Biology*: "Throughout all phases of Life up to the highest, every advance is the effecting of some better *adjustment* of inner to outer action." In biology, then, the term has been used, first, in reference to the balance between various organs or parts of the organism in their total functioning, and second, in the sense of the relationship of the total organism to its inorganic and plant and animal environment. The former phase is that of morphology and physiology, the latter that of ecology. In the latter sense the whole concept takes on a more dynamic meaning, as in the phrase "the process of adjustment" of the organism to its surrounding world. Nevertheless in the biological world the norm of adjustment is more difficult to determine than in the inorganic world. Perhaps the statistical average offers the best determination of this norm. But even so it is largely relative to conditions in the organism and in the environment.

In psychology the terms accommodation and adaptation were in far more frequent use than adjustment until the rise of a more distinctly objective, mechanical standpoint in studying the behavior of organisms. The word adjustment did appear in the quantitative manuals of laboratory exercises, but again largely in reference to mechanical fixation of instruments for exact measurements of the temporal phases of reaction, especially in experimental work which rested largely on physics, as in the field of vision and audition. So, too, the phrase "observational adjustment" was used in psychology with special reference to the statistical averaging of experimental findings.

The more frequent use of the term in psychology arose out of two recent influences—behaviorism and psychiatry. Watson employs the term in reference to kinesthetic-motor and other processes. In fact he uses the terms "adjustment," "response" and "reaction" almost interchangeably. Adjustments are both "partial," as in blushing, winking, "single habits," etc., and "complete" in the sense of

the consummatory responses of the whole organism in reference to the stimuli. Watson makes clear his usage of the word by reference to the cycle of the organism's responses, from physiological tensions, in the absence of food, for example, to the completion of the activity when the taking of food results in the release of these tensions. The correlation of the concepts of psychiatry, including psychoanalysis, with objective studies in behavior led, in such a field as education, to discussions of the "adjustment" of children to school environments, to parents, to teachers and to other children. On the pathological side there has been considerable employment of terms like "poor school adjustment," "unadjusted school child," "maladjusted child." The term has been in frequent use in the last decade among writers in the field of pedagogy. Here again the matter of norm or standard arises, and there is always an implicit if not explicit standard, often vague, of what constitutes normal adjustment. Statistical averages of behavior or more qualitative standards of social valuations have been used as the norms of adjustment.

In sociology, likewise, the term has grown up in two fields: in systematic sociology, where the term is used synonymously with adaptation of the organism to social environment; and in the field of social pathology, in which the word is employed with regard to the relations of the person to his family, community, political state or economic order in reference to some assumed standard or norm. In connection with systematic sociology the term has come into common parlance in the discussions of human ecology, in which emphasis is placed upon the adjustment of the personality to its geographical and social environment. In the latter field the term has been borrowed from clinical psychiatry and psychology in treating social problems of crime, delinquency, poverty and relief, feeblemindedness and the social implications of divergent personal life.

In anthropology the term "race adjustment" has appeared in treating racial and sub-racial group relations. In political science adjustment has been employed to describe functions and relations of governmental agencies. In economics it has been used in reference to insurance settlements, to wage and hour arrangements between employers and employees and, in loose usage, to supply and demand and price relationships.

KIMBALL YOUNG

See: ACCOMODATION; ADAPTATION; ASSIMILATION, SOCIAL; ENVIRONMENT; EVOLUTION; MALADJUSTMENT; BIOLOGY.

Consult: Wells, F. L., *Mental Adjustments* (New York 1917); Dexter, R. C., *Social Adjustment* (New York 1927).

ADLER, GEORG (1863–1908), German economist and historian of socialism. He was born in Posen and held professorships in economics at Freiburg i. Br., Basel and Kiel. His youthful interest in socialist ideas, which he later rejected as utopian, led him to write important critical works on the early history of socialism and on Rodbertus and Marx as the founders of scientific socialism. He was a severe critic of Marx but admitted the historical necessity of the socialist movement and its importance in bringing about social reforms which would lead eventually to a type of economic constitutionalism. Adler, in accord with his general social philosophy, was one of the first advocates in Germany of international legislation for the protection of labor. He also made contributions to economic history and was distinguished as a lucid writer and successful teacher.

K. DIEHL

Important works: *Rodbertus, der Begrunder des wissenschaftlichen Sozialismus* (Leipsic 1884); *Die Geschichte der ersten sozialpolitischen Arbeiterbewegung in Deutschland* (Breslau 1885); *Die Grundlagen der Karl Marxschen Kritik der bestehenden Volkswirtschaft* (Tubingen 1887); *Die Frage des internationalen Arbeiterschutzes* (Munich 1888); *Geschichte des Sozialismus und Kommunismus* (Leipsic 1899).

Consult: Jaffé, G., "Georg Adler" in *Historische Monatsblatter fur Posen*, vol. ix (1909) 169–79.

ADLER, VIKTOR (1852–1918), founder and leader of the Austrian Social Democratic party. He was born in Prague of well-to-do parents, but while he was a small child his family moved to Vienna, where he remained until his death. He practised medicine and, because of his early interest in the condition of the working classes, was anxious to become a factory inspector, but he did not succeed in securing an appointment from the reactionary government. Under the personal influence of Bebel and Engels he joined the Social Democratic party in 1885. A year later Adler founded a weekly, *Die Gleichheit*. In 1888, largely through his efforts, the hostile moderate and radical factions of the party were brought together at the Hainfeld convention and a united party was formed. In 1889 he founded the *Arbeiterzeitung*, published first as a weekly and converted into a daily in 1895. It

became the official newspaper of the party and today is still one of the leading organs of the Second International. In 1905 Adler was elected to the lower chamber and remained a member until his death. A year later his great struggle for universal suffrage was brought to a successful conclusion. As the leader of the party in 1918 Adler provided the driving force for the creation of a republic of German Austria; as its first foreign minister he declared its willingness in principle to join republican Germany. He was then already fatally ill and died on November 11, one day before the official declaration of the establishment of the Austrian Republic.

Adler has been falsely called an opportunist averse to theory because in the difficult pre-war situation he was constantly driven to mediation and compromise, first between the hostile factions of the party and later between the various nationalist movements of the polyglot empire. However, a thorough study of his tactics proves, and many of his pronouncements confirm, that he constantly sought to orient his tactics in the direction determined by Marxian theory. In addition to being one of the most distinguished Marxist political leaders, Adler wrote several very interesting articles on Marxism, found in the first volume of his collected *Aufsätze, Reden und Briefe* (10 vols., Vienna 1922–28).

MAX ADLER

Consult: Adler, Max, "Zur Würdigung Victor Adlers" in *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, vol. xi (1923) 174–83; Brügel, L., "Victor Adler" in *Neue oesterreichische Biographie*, ed. by Anton Bettelheim, vol. i–vi (Vienna 1923–) vol. iii (1926) p. 152–72.

ADMINISTRATION, BUSINESS. *See* BUSINESS ADMINISTRATION.

ADMINISTRATION, PUBLIC.

THE BACKGROUND OF MODERN ADMINISTRATION. Public administration is defined by modern writers as the art and science of management applied to the affairs of the state; the term is also used to indicate a branch of the field of political science. In the former sense public administration displays a history coextensive with organized government, and under changing forms marches through the centuries down to the specialized and highly developed systems which are characteristic of modern industrialized states. From some remote period beyond the Egyptian kingdoms, through classical antiquity, the feudal system and the absolute monarchy, into the era of the democratic state, it has been necessary to transact the business of politically organized mankind. These operations collectively are known as public administration.

Fundamental changes have occurred in practise and theory in this long evolution. The general character of administration has always been governed by the physical basis of state organization, by the prevailing level of social and cultural organization, by the development of technology, by theories of the function of the state and by more immediate governmental and political traditions and ideals. In the ancient world and among primitive cultures the circumstances of physical conditions counted heavily. The factor of distance in the administrative system of the Greek and Roman empires on the one hand, on the other the existence of the Nile traversing the administrative areas of the Egyptian kingdom, may serve as obvious illustrations of the point. But geography thrusts its influence straight into the modern administrative world as well, as may be discovered by any who care to dip into the recent literature on regionalism, or by the more technically minded who care to examine the structure of administrative areas in any contemporary government.

In the ancient world it was more nearly true that public administration tended to set the pace in the general improvement of social organization. In the modern world the state no longer pretends to the monopoly which it enjoyed in the ancient; corporations and associations reach far across the boundaries of the state and equal if not exceed the organization of public affairs in extent, complexity and variety. The International Red Cross, international cartels, great national industrial and financial organizations such as the United States Steel Corporation, the Allgemeine Elektrizitäts Gesellschaft, J. P. Morgan and Lloyds fling their organizations over the whole world; and the application of thought to problems of management is more systematic and sustained outside government than within. Governmental organization in the modern world follows rather than leads in the constant improvement of general technique of administration.

How completely the methods of administration have changed is nowhere better illustrated than by reference to some common technologies. For example, take communication, an essential and continuous phase of all

administration, public and private. In the ancient world rulers depended on a horde of slaves who darted hither and thither with messages to officials and tax gatherers. Now the assistant secretary of the British Home Office may be in constant personal communication with any official in the United Kingdom by telephone, and with officials in the outlying parts of the empire by cable or beam radio. Or compare the laborious writing on rolls by a fourteenth century English clerk, so gracefully described by Professor Tout, with the ubiquitous clatter of the modern typewriter or the reproductive capacities of the multigraph or planograph.

But it is not merely the advance in technology culminating in such devices as these which enables modern administration to exist; the invention and improvement of administrative procedures are equally significant. A great gulf separates the accounting of the eleventh century sheriff of Kent who proceeded to Westminster with his accounts and specie, and whose receipt was a notched stick split in two sections, from the elaborate financial and accounting procedures which control the handling of annual sums running into the billions of dollars. How shall we compare the methodology of the census of William the Conqueror, recorded in 1086 in the Domesday Book, with the electrically driven card punch and sorting machines which manipulated the facts about 100,000,000 Americans on the occasion of the thirteenth census? Or how can we assimilate the managerial duties of the mediaeval *échevin* of Saint-Quentin with those of the city manager of Cleveland, Ohio? Technology, in short, has made such strides that the process of administration seems almost to have changed in kind as well as in degree; and it is only upon technological improvements that administration of the intensity and continuous power of the modern state can rest.

Modern administration emerged from the feudal system along with the national state; and its scope has always been profoundly affected by prevailing theories of the function of the state. Mercantilism, with its insistence on public regulation of agriculture and industry and with its control of the fiscal system so devised as to secure a favorable balance of trade, built up an eighteenth century administrative system of considerable magnitude. Mercantilist theory combined with contemporary emphasis upon absolutist concepts of royal power to construct a powerful organization operating at the discretion of king and ministers. Abuse of power, often abuse of administrative power, weakened the authority of these organizations, in England in the seventeenth, in France in the eighteenth, and in Germany in the nineteenth centuries.

Their ultimate destruction, however, came through the change in political and economic philosophy attendant upon the first century of the industrial revolution. Laissez-faire as a guide to statesmen supplanted the interventionist ideas of mercantilism; and administration withered toward an ultimate minimum of keeping peace and order, collecting taxes and maintaining public works and buildings—duties which were often discharged by local rather than by state officials.

Such an administrative inheritance was received by the newly recognized American states in 1789. It fitted admirably the physical and social data of the period. Means of communication were tedious and uncertain; the population was scanty and dispersed; the movement of the population was at a minimum; the factory system was unknown, substantially the whole population being engaged in farming, fishing and simple commercial operations; money was scarce and the average income slender. For such a people a decentralized self-governmental and inexpensive system of administration was essential.

In the United States, as in England, France, Germany and other industrialized states, the industrial revolution which precipitated an era of laissez-faire politics eventually led to a new era of state intervention. A new world rapidly emerged in which old ideas led to such abuse that the state was required to step forward once more to the task of regulating the economic life of its people. The factory system created new industrial urban centers; the railroad enormously increased the mobility of persons; the steamboat expedited mass movements of population; modern problems of health were envisaged, as medical and sanitary science made the amazing progress of the last half century; unregulated industrial competition gave rise to the gravest social problems for the working class. In short the modern world with its complex of economic-social-political problems took the stage; and as it faced its problems the state turned largely to its administration for the solution.

Thus have flowered the diverse and ubiqui-

tous administrative systems of the twentieth century. The state has been compelled to inspect and regulate factories, to modify the competitive system of regulation of hours and conditions of work, by fixing minimum wages and by insuring individual and social protection against the hazards of modern life by extensive plans of social insurance. The state elaborately and minutely conditions the operation of public utilities or displaces them by various forms of state enterprise. The state assumes a positive role with regard to public health, destitution, defectives and delinquents. The state recognizes responsibilities, in America on a vast scale, for the education of its citizens. The state and its subdivisions embark on far reaching plans of construction of public works, conservation of natural resources and provision of facilities for recreation and the enjoyment of the arts. Finally the state undertakes to control conduct in many novel ways, whether by restricting freedom of movement and intercourse, as in certain European countries, or by restricting the use of alcoholic beverages, as in the United States, or by combating belief in certain political dogmas.

The administration of the affairs of the state has been deeply affected by various external conditions other than those to which reference has already been made. Political influence has handicapped public administration in most states, perhaps most lamentably in the United States. Here as elsewhere this handicap is gradually declining in importance. Competition with business administration disturbs the stability of personnel in the United States, particularly in the professional and technical service; this factor counts for relatively little in Great Britain or on the continent. There the prestige value of public employment is sufficiently great to be accounted a positive helpful influence in maintaining efficiency and esprit de corps. Everywhere the degree of public confidence in officialdom counts heavily in forming the character of the administrative service.

Administrative methods have been greatly extended and strengthened as the scope of state business has enlarged. The traditional clerk of Anthony Trollope dealt with papers in the seclusion of his office, and much nineteenth century administration was summed up in the activities of the writing assistant. Six of every ten modern civil servants spend their official life away from headquarters in the field service in actual contact with the world of affairs, inspecting, authorizing, prohibiting, encouraging, ruling and adjudicating. To the modern civil service have been granted powers of initiating new rules of conduct (rule-making power) and powers of determining liability in the first instance, sometimes conclusively (quasi-judicial power). The administration is thus acquiring ranges of influence which trench on the traditional duties of legislatures and courts.

PROCEDURES AND PRINCIPLES. This positive role of the state is responsible for the development and maintenance of the vast administrative structures which now characterize modern governments and which distinguish them so sharply from their predecessors. Their effective management gives rise to the modern problem of administration. But the existence of these organized bodies of permanent professional civil servants sets also significant problems of their control, as well as other problems of their most effective correlation with legislative bodies and courts. In the following paragraphs is presented a brief summary of this subject matter, which in its generalized form is common to the management of any organized group: business, philanthropy, education, the church.

The philosophy and procedures of scientific management, first stated by Frederick W. Taylor, have set up new ideals which government and business are now seeking to approximate. Taylorism is driving Jacksonian democracy into the limbo of outworn creeds in every extensive administrative system in America, and is exerting a deep influence upon European systems as diverse as the French and the Russian. Scientific management insists upon the one best way of performing any operation, the discovery of which is a responsibility of the higher officials, using strictly scientific technique. Scientific management therefore looks toward the elimination of waste, the standardization of processes, the improvement of technique and the most nearly perfect adjustment of the worker to his work. In the industrial world it envisages a constantly increasing productive power; in the governmental world it indicates reduction of taxation or extension of service.

Public administration has been less successful in adopting either the ideals or the methods of scientific management than have the more progressive industrial concerns. Governments are not engaged in mass production of standardized articles, the process in which scientific

management has made its most striking achievements. Many public enterprises are on so limited a scale as to prohibit any significant refinement of technique. The traditions of the public service are often unfavorable to scientific management, and trade union influence is frequently strong in opposition. Motivation among public officials is much less related to profit taking than in industry, and in the public service profits seldom serve as a measure of success. Nor does competition affect public administration to any substantial degree. In spite of these handicaps steady progress has been made in developing definite and well understood procedures, the more important of which are sketched below.

Historically perhaps the first which requires mention is the establishment of permanent tenure and methods of selection intended to secure competent officials and employees. A Prussian code of 1794 recognized permanent employment as a *fait accompli*; English pension legislation of the early nineteenth century made similar assumptions which were confirmed in 1855; in France no legislation has yet declared the principle, which is nevertheless generally recognized; in the United States the Pendleton Act of 1883 finally inaugurated the principle, which has now been extended to protect the bulk of the federal service, some of the states and most of the large cities. A recent decision of the Supreme Court of the United States (Myers *v.* United States, 272 U. S. 52), however, confirms the power of the president to remove any officer of the federal system, and almost nowhere in the United States are there jurisdictional guaranties similar to those which exist in France. Permanence of tenure nevertheless has come to be a distinguishing characteristic of the modern civil service.

The expectation of permanent service made inevitable greater care in selection. Progressive refinement has been made in formalized examinations, which have thus developed from simple pass examinations through free answer competitive tests to the standardized short answer tests and psychological tests of the present day. English examinations for the higher branches of the service have always been academic in character, intended to discover the finest brain power in each generation of university men, without specific reference to their knowledge of administration.

Recent developments in the United States are rapidly substituting tests of aptitudes, skills and general intelligence for tests of special knowledge. For the higher branches of the Prussian and German imperial administration a university examination gave access to a prolonged period of special training in law and administration which was concluded by a state examination. In Anglo-Saxon countries current disquietude as to the validity of the examination process is paralleled by persistent and significant attempts to improve the selective power of tests. After a protracted controversy there is, however, general agreement among responsible administrators that some type of examination is both feasible and essential.

As the variety, extent and complexity of public administration developed, and its costs mounted, the need for coordination and central direction became urgent. The Conseil d'Etat (*q.v.*) in France was one of the earliest modern inventions to meet this need. During the history of the German Empire the Bundesrat (*q.v.*) performed functions as the coordinating center of imperial administration. In Great Britain the Treasury has long exerted powers of coordination and control over the whole administrative system.

These powers include the formulation of the budget and the revision of departmental estimates; the specific approval of all departures from the financial votes of Parliament and approval of all new or increased expenditures; general control of such expenditures as those for supplies, printing, public buildings and quarters; and, since the war, specific control of establishments, fixing the number, salary and promotion prospects of employees in all departments. The British Treasury has now become one of the most powerful agencies of general management to be found in any system of public administration; its rationale may be read in the brilliant report of the Haldane Committee on the Machinery of Government (Cd. 9230, 1918).

Similar institutions have recently been established in the United States. Among these may be cited the Illinois Department of Finance (1917), the United States Bureau of the Budget (1921), the Massachusetts Commission on Administration and Finance (1923) and the executive department of the state of New York (1926). These agencies are primarily fiscal in character, exerting a general control over administration through fiscal mechanisms. With variations in emphasis they deal with budget making, current control of expenditures, cen-

tralized purchasing, supervision of printing and, to a less degree, control of personnel.

They are in fact a civil general staff, deriving their real authority from the chief executive and operating to make effective his constitutional position as general manager of public business. In some American quarters fears have been expressed lest so powerful an agency should be abused by politically elected chief executives. The danger exists here and there. In any case those who believe in the democratic faith must place confidence in the beneficial effects of public education, gradually developing higher standards of public morality; they will be profoundly reenforced by the very nature of the modern administrative process, which constantly becomes more technical and more pregnant with social good or ill.

In such administrative systems as that of Fascist Italy, standards do not depend on popular vote, and this problem does not arise. Fascist administrative organization in fact stands at the opposite pole from the American. The contrast between the underlying principles of the two systems brings out the types of organization which are characteristic of the modern world. On the one hand are centralized systems in which administrative authority is concentrated in the hands of national officials, in whom is vested the responsibility for all administrative action, central or local, who appoint, supervise and at will remove local agents to execute orders issuing from above. Richelieu developed this system into full vigor, Napoleon renewed it after the revolution, and with variations it has conquered the Latin world. On the other hand are decentralized systems, inherent in the structure of federal states and characteristic of Anglo-Saxon civilization, in which local autonomy prevails over the demands of central control, yielding in the face of modern economic problems but retaining a powerful vitality well displayed in the home rule movement for cities in the American commonwealths. These contrasting types are more than diverse solutions of administrative problems, for they are based on dominant and settled points of view involving the whole relation of citizen to government, and are affected by the role each state plays on the stage of international affairs. Strong centralized administration is often in part the outcome of international fear.

The centralized type of administration is related to the bureaucratic (i.e. the professional), the decentralized type to the self-governmental (i.e. the amateur). Fascist Italy has eliminated the amateur from her administrative system in favor of a politico-professional bureaucracy; the United States, in spite of the technical nature of many aspects of administration, is still powerfully influenced by preference for amateur self-governmental forms. It is estimated that over 750,000 public officials are still elected by the American voters in local, state and national elections. This is a reflection of the rural character of vast areas of the United States as well as of a special theory of democracy; in the urban regions popular election and the theory of rotation in office are slowly disappearing from the administrative hierarchy.

Historically the British administrative system has been decentralized and self-governmental. Throughout most of the nineteenth century the counties and boroughs performed services of local administration without intervention from Whitehall, although considerable responsibility for the management of poor relief had been transferred to government officials in 1834. The country gentry, in the guise of the justices of the peace, controlled rural administration until the end of the century; in the boroughs the modern system of representative councils and administrative committees was introduced in 1835 although with a limited franchise. The justices of the peace still share responsibility for police with the elected borough and county councils; but the process of central supervision and direction has gone far to create a national minimum standard of efficiency. In Great Britain the tendency is toward both centralization and professional administration.

The administrative system of the modern state is in fact tending to conform to certain general principles of organization, the effectiveness of which is being tested in business and military organization as well as civil administration. There is a strong tendency toward unity in the whole system, combined with the intent to concentrate responsibility in a single official. This has always been characteristic of the continental centralized systems, and the principle is now rapidly being recognized by American cities (strong mayor or city manager form), by the reorganized American commonwealths (Illinois, New York) and by the federal government through the notable development of the administrative powers of the president of the United States. The administrative organization of English boroughs is now the chief stronghold

of the contrary principle; there is some evidence that even here the need for unity is being felt, especially as new duties are heaped upon local government by act of Parliament.

Modern administration also gives wide expression to the principle of specialization. Rural systems remain an exception in part, but here also technical operations, such as highway construction and public sanitation, are deeply influenced by specialization. This principle involves not merely the progressive establishment of administrative units for different types of work organized by functions, but also the employment of experts of many kinds to perform the work. In large municipalities and in most national systems administration has become the work of the expert to a measure infrequently realized. The whole process of government needs to be reconsidered from the point of view of the expert, to determine the most effective means of utilization of his techniques.

This consideration raises the problem of the proper function of different types of administrative officials. It is obvious that the duties of a chief executive are not those of an accounting officer, and that the responsibilities of a junior clerk are different from those of a bureau chief. The most reasoned allocation of function is perhaps to be found in the British system. There a sharp distinction is drawn between the duties of the political and those of the permanent head of the department. The former is primarily concerned with the external contacts of the ministry, relations with ministries, with the cabinet, with Parliament and its committees, with the press, parties and the public. He is a buffer between the political and the administrative worlds; but also he has to keep his staff out of a rut and alert to the most advanced administrative methods.

The permanent head of the ministry is the official responsible for the organization, direction, supervision and management of the staff, acting always in harmony with the policy of the cabinet and of the minister. He also has to advise the minister on all matters of concern to the department, and often exerts the most powerful influence on the actual conduct of affairs. The contact between the political and permanent head is in the English system the effective contact between amateur and professional, between politician and expert.

A bureau chief has specialized and often highly technical duties to perform. The bureau (i.e. the primary subdivision of department or ministry) is the fundamental unit of administrative organization, homogeneous, compact and specialized. Two types can readily be distinguished: those performing duties essential to the maintenance of the organization as organization (purchasing bureau, recruiting agency, disbursing officer) and those performing the operations for which the organization exists (detective bureau in a police department, income tax unit in treasury department). The former are termed institutional, the latter functional. In either case the bureau chief tends to be a highly specialized officer, intimately acquainted with the duties of his bureau. He is not concerned with policy further than to call to the attention of his superiors the need for legislation. His contacts are administrative and he looks within rather than without the administrative machine. In Great Britain special recruiting of officers of general administration (assistant secretaries, bureau chiefs, etc.) is deeply deplored by the professional-technical group, who are generally barred from this range of duties.

In lower levels the specialist is the dominant figure. American theory and practise tend to recruit the specialist already formed; English to recruit potential ability which (excepting the professions) is then trained within the service.

Simple administrative organisms which are adequate for rural or undeveloped communities do not present a difficult problem of coordination, but the complicated structures necessary to carry forward the activities of great cities or industrial states require elaborate machinery of coordination in order to prevent duplication, lost effort and internal friction. In the United States the most elaborate machinery developed for this purpose is found in the Bureau of the Budget, in the person of the chief coordinator and in a considerable number of coordinating committees. These committees, representative of the departments and independent establishments, lay down rules and understandings which govern administrative operations. The will to coordinate in the first instance was imposed by the director of the Bureau of the Budget; an unfortunate tradition of departmental autonomy was formerly unfavorable to voluntary cooperation.

In Great Britain coordination is secured chiefly through the oversight of the Treasury, partly by the operation of the Whitley Council for the civil service and partly by interdepartmental committees. The general extension of

the institutional services (purchasing, provision of quarters, recruiting, etc.) has also operated in the same direction.

Modern administration proceeds in fact on the basis of very highly specialized operations. Management has itself become a profession, touching all the sciences from chemistry and mechanics to psychology and medicine. It is employing lawyers and doctors, accountants and artists. Most of the professions play their role within public administration, and many occupations become highly specialized. The specialization is not merely in a set of procedures, but is even more a specialization in laws, rules and regulations, judicial decisions and customary practises which guide the official when he applies public policy to the particular case. Years of study and experience alone can form such a specialist.

A professional status has long been accorded responsible public administrators in European countries, and is eagerly sought by many groups intermediate in the official hierarchy. Such organizations as the Institute of Public Administration in Great Britain institutionalize this status. In the lower ranks of the public service, however, the tendency is rather toward the formation of trade unions, with normal trade union aspirations.

The trade union movement in the public service is an evolution substantially of the twentieth century, with roots in the postal service reaching down into the last decades of the nineteenth century. In Soviet Russia "civil servants" are a part of the general clerical trade union; elsewhere the public service is separately organized, with varying degrees of affiliation with the general labor movement. The fundamental issue which this novel situation presents concerns the part which organized masses of civil servants are destined to play in the administrative systems of the future. Syndicalist theory assigns them a dominant role, expecting them to maintain the esprit de corps and inventive capacity of the future by endowing them with autonomous responsibility for the conduct of the public services. The Joint Council for the Administrative and Legal Services of the British government already forecasts a type of employee cooperation which may become highly significant.

These councils, established both for the service as a whole and by departments, comprise equal numbers representing the official side and the staff side. They are empowered to reach agreements on most phases of personnel management and have cooperated fruitfully in such matters as the reorganization of the service, reduction of expenditures, fixing the basis of pay, operating the promotion system and making provision for the further education of civil servants. Although harassed by internal dissension, their achievements are of first rate importance.

The maintenance of efficiency is a concern of primary importance to those officials responsible for the operation of the administrative machine. They must restrict entrance to the public service to candidates whose moral and intellectual fitness is assured, and watch every aspect of the whole employment situation to insure that their full potential capacity is developed and applied to the work of the state. The first task is usually vested in the hands of a civil service commission; the second is vested primarily in the higher officers of the several departments. Progressive leaders in employment policies in government and business agree that efficiency can only be secured by bringing into play every means to develop esprit de corps and morale.

Morale is both an index of a sound employment situation and a positive means of building an efficient organization. It reflects a social psychological situation, a state of mind in which men and women voluntarily seek to develop and apply their full powers to the task upon which they are engaged, by reason of the intellectual or moral satisfaction which they derive from their own self-realization, their achievements in their chosen field and their pride in the service.

In the absence of systematic and thoughtful attention to the esprit de corps of the public service, conditions develop which make it impossible for the state to capitalize the energy, inventive capacity and driving power which await the magic touch to bring them to life. A complex employment situation must be based, if efficiency is to be secured, on justice in the conditions of employment, on recognition for superior employees, on stimulation of leadership and personal and institutional loyalties, on agreeable social contacts and on effective personal adjustment to the job.

The scientific ascertainment of the means by which the necessary psychological environment can be built is one of the main tasks of research in the field of public administration and will call for the united efforts of psychologists,

psychiatrists, engineers, political scientists and sociologists. The actual achievement of an effective psychological environment need not wait for the discovery of its scientific foundations, for already skilful administrators are applying the art of administration to secure first class results.

Ultimately much more will be known as to the relative advantages of various psychological types for given categories of employment. By way of illustration, such a general classification as introversion-extraversion may serve as a preliminary basis for employment preference, the extraverts being directed into posts involving contacts with the public, the introverts being absorbed in office work. Standards of emotional stability are essential for the effective selection of policemen; and tests of honesty are already at hand to aid in protecting the integrity of public offices. Standards of intellectual ability need to be developed, so that the minimum necessary intelligence may be assumed, and so that the intellectually gifted may be quickly inducted into responsible positions, while the intellectually mediocre may be restricted to routine operations. The progressive refinement of these psychological bases of differentiation and their application in public offices are fundamental to high morale and efficient service

THE CONTROL OF ADMINISTRATION. These broad considerations are fundamental to modern public administration. Specific consideration of administrative technique may be found in related articles. One important set of considerations remains, however, to be dealt with: the relations of public administration to the legislature and to the courts. These connections are partly formalized in constitutions and statutes and common law; they are partly customary and traditional, fluctuating from time to time as personalities shift and change.

Considering first the relations between legislatures (Congress and Parliament, state and provincial legislatures, city councils) and the administration, we may note that constitutionally the legislature is placed in a superior position as the ultimate representative of the sovereign people (except in such systems as now prevail in Spain, Italy and many colonial governments). In the modern democratic state, after a long constitutional struggle, the executive has been constitutionally subordinated; the administration now looks to the legislature for its organization and structure, its funds, its tasks, often its methods; and it accounts to the legislature for its acts and expenditures. Legislatures have invented many devices to insure that this responsibility shall be a real one; yet one of the paradoxes of modern administration consists precisely in that the more the legislature strains to control administration, the less it succeeds. Fascist Italy has foregone the attempt; liberal England finds the task too great for systematic performance; but in France the parliamentary commissions perform their duties with such aggressiveness that the stability of the government is weakened.

It is clear that the task of legislative control has to be simplified and generalized to the utmost in order to make it tolerable. Administration has come to such a varied, extensive and technical state that no body of men deriving from a political environment, rapidly changing in personnel, meeting intermittently and absorbed with pressing issues of public policy, can expect to act effectively as a board of directors. Control to secure efficiency and economy is probably not at all an appropriate function of the legislature, but should derive from the internal organization of the administration itself.

The legislature does, however, have a legitimate function to perform *vis-à-vis* the administration. It may properly undertake to require the administration to operate within the limits of general legislative policy, to inquire into the propriety of expenditures and criticize the whole range of administrative operations, to insure that the administrative control is operating to secure efficiency and to inform itself thoroughly of the conditions of administration in view of remedial legislation.

There is much evidence that the constitutional role of the administration is in process of reconstruction. Legislatures are now faced with an almost superhuman task of dealing with a range of social problems, the intelligent solution of which depends less upon broad intuitions than upon masses of data from which conclusions emerge only by scientific treatment. In their solution the advice of administration is often the most significant that legislatures can call upon. Hence it results that legislative texts are frequently written by anonymous officials, sponsored by the executive and agreed to by the legislature. The latter become adjudicators of social policy rather than initiators.

The parliamentary system institutionalizes this process in large part, while in American

municipal government the tendency of city managers to suggest, formulate and guide the decisions of city councils parallels the movement in national circles elsewhere.

On a broader scale it has to be recognized in representative governments that administration, like legislation, must proceed on a basis of consent. The public enters as an influential party. It may strengthen or weaken administration from the jury box or at the polls (election of sheriff, prosecuting attorney). The special public concerned with particular phases of administration often secures a more definite recognition by assignment of its representatives to advisory boards or to responsible commissions (workmen's compensation commissions). Croly has pointed out that the most doubtful and difficult question connected with the administrative organization of a progressive democracy concerns its ability to obtain and keep public confidence. As administration extends its compass and refines its technique, the difficulty increases; but a healthy recognition of the underlying objectives of administration in terms of service goes far to maintain a proper balance.

The administration and the courts are in constant contact with each other, thus giving rise primarily to questions of administrative law. But considerations of efficient conduct of public affairs are also frequently engaged. Historically local courts have carried the brunt of local administration, as in Great Britain until the reform of local government in 1888 and 1894; even today the courts share responsibility for the British police system. In the United States the county courts of the southern states perpetuate this English inheritance.

Broadly speaking, however, the judicial system now stands as a controlling agency, holding the entire administrative system within the bounds of law and offering redress to those whose rights may have been infringed by official action. In Anglo-Saxon jurisdictions the ordinary courts perform this function; on the continent a separate series of administrative courts prevail.

The development of the regulating functions of administration, as well as the determination of the limits of official discretion, is governed by the views of courts concerning the proper limits of administrative action. In the United States diverse tendencies are at work, resulting on the whole in a recession of judicial interposition. This has developed in part by statutory extension of official power, as in the enforcement provisions of the Eighteenth Amendment, in part by more tolerant attitudes on the part of the courts. In each case there is a better appreciation of the peculiar qualifications of administrative officials to deal with the diverse and delicate situations which modern government attempts to regulate. Courts are specialists in law and in Anglo-Saxon jurisdictions rely on precedent; officials are specialists in social situations and look toward the future rather than the past.

The courts retain ultimate power of control in most circumstances; and in cases of excess of power, failure to observe procedural requirements or abuse of power, will regularly intervene to protect individual right. A very significant tendency of the twentieth century is, however, the assumption of quasi-judicial powers by administrative commissions (utility commissions, compensation commissions, minimum wage commissions, valuation boards, etc.). Modern administration is based more and more on general legislative texts which presuppose that officials will define and redefine their content; it is thus freed from the necessity of observing the detailed requirements which were formerly imposed by statute, and the occasion for judicial interference has thereby been lessened.

TRENDS. The underlying trends of modern administration are not always easy to segregate and define. Some, however, seem reasonably clear. There is yet no conclusion to the growth of administrative functions, although there has been a recession from the abnormal situation induced by the war and a general slowing down of the expansion of function by reason of financial stringency. The intensity of administration, a factor unrelated to extent, increases year by year and may be expected to develop gradually for an indefinite period. The scope and intensity of public administration are both functions of a prevailing socialized philosophy of government which seems to be characteristic of such widely diversified systems as the American and Russian, the British and the Italian.

As these trends move on from decade to decade, they emphasize the decline of the amateur and the dominance of the expert. The amateur administrator long ago lost his hold on the national services and is disappearing in the larger local services as well. The reform of English local government in the last decade of

the nineteenth century, the establishment of the American city manager plan in the twentieth, are indications of a continuing process by which specialization, permanence and professionalism are conquering the public service. From another point of view this marks the transition from self-governmental institutions to bureaucracy.

The center of gravity of modern administration is moving from periphery to center. This shift is rendered feasible by technological improvements in communication and transportation, and is rendered wise by virtue of savings in outlay and expenditure, by improvement in many specialized forms of public service (institutional care of insane, defectives and delinquents) and by greater ease in supervision and control. Certain phases of administration remain localized and by their nature would seem likely to continue so; for instance, family care, mothers' pensions, recreation in large part, baths, protection of person and property. Here, however, as elsewhere, the case for central agencies giving thought to administration seems unimpeachable. Lord Haldane's brilliant suggestion for a Minister of Research and Information remains to be made effective, but the Privy Council Committee on Research and in America such semi-official agencies as the National Research Council and the Social Science Research Council are distinct indications of possible developments.

In America, especially, there has emerged in recent years a pronounced tendency to enhance the administrative power of chief executives, including the president, governors, mayors and managers. Two types of executives are competing for supremacy, the political and the professional, and it is much too early to indicate which will prevail. Whichever ultimately predominates, it is safe to conclude that the integrity of a professionalized service will be assured.

Following the war came a distinct tendency to modify the autocratic management of personal relations within the public service. The democratization of business had its repercussions in government, most notably in Russia, but also in a significant manner in Great Britain. Reaction soon overtook the hopeful surge of feeling which succeeded the armistice, and it is unlikely that democratic or radical theory will introduce any marked innovations in the practises of personnel management.

There is, nevertheless, a decided tendency in continental systems to grant a jurisdictional protection to rights of employment, which are less extensive in Great Britain and uncommon in the United States. This takes the form of an administrative appeal from official decisions by employees whose interests have been injured. In America public employees are in this respect more nearly on the footing of industrial employees.

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See: GOVERNMENT; MUNICIPAL GOVERNMENT; ADMINISTRATIVE LAW; COURTS, ADMINISTRATIVE; ADMINISTRATIVE AREAS; REGIONALISM; COMMISSIONS; BOARDS, ADMINISTRATIVE; ADVISORY BOARDS; JUDICIAL REVIEW; EXECUTIVE; CIVIL SERVICE; PUBLIC EMPLOYMENT; PERSONNEL MANAGEMENT; APPOINTMENTS; ACCOUNTS, PUBLIC; FINANCIAL ADMINISTRATION; BUDGET; REVENUES, PUBLIC; EXPENDITURES, PUBLIC; TAX ADMINISTRATION; PUBLIC FINANCE; BUREAUCRACY; CENTRALIZATION; EXPERT; ORGANIZATION, ADMINISTRATIVE.

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ADMINISTRATIVE AREAS. Administrative activity is as old as government itself. Greek, Roman and mediaeval analogies offer instructive comparisons to the modern administrator. The emergence of a separate function or machinery of administration, however, is a product very largely of the nineteenth century. The new tasks thrust upon or assumed by government as a result of the new conceptions and broader requirements of communication, education, public health and public welfare hastened the process of political reorganization and functional differentiation which marked the progress of the industrial revolution. A comparison of the effects of this process upon administrative areas and their proliferation in the larger states will indicate its general outlines.

In the United States the federal government has developed its relatively few administrative districts—treasury, judicial, customs, federal reserve, etc.—without interfering with state boundaries. The states, which have complete constitutional control over their own territory, have, on the other hand, elaborated a great variety and complexity of areas. The traditional subdivisions of the state are the county and, for local government, the town (New England) or township (south, middle and west). There are over 3000 counties in the country, varying greatly in size (25 to 30,000 square miles) and population (65 to over 3,000,000). "The typical county may be said to have an area of 600 square miles and 20,000 population" (Dodd, p. 348).

The disparity between the traditional county boundaries and a realistic remapping of administration in accord with the shifting of population and rapid urbanization which has taken place all over the country has led to two expedients: the setting up of new areas for new functions, and the sanction of county unions for special and limited purposes.

Practically every state has for its own purposes types of administrative areas—fiscal, electoral, judicial, park, public health, police, road, education, conservation, etc.—which overlap the county division or disregard it altogether. In addition to these are the many local areas and metropolitan districts which have grown up during the last century. Only a few states, on the other hand, have, hesitatingly enough, allowed counties to cooperate, under home rule or county manager charters or by special legislation, for joint administration of such services as roads and hospitals. The reorganization of state administrative areas on a logical plan has received very much less support in practise than it has in project (see Governor Smith's Messages, Albany, New York, Jan. 5, 1927; Jan. 4, 1928).

Local administrative areas have gone through the same process of dissection at the hands of the states. Not only have they been chopped up into various unrelated and often conflicting areas for special purposes—for example, schools, roads, parks, water, drainage—but the rapid growth of cities has added confusion to the existing puzzle map. Various plans have been tried to overcome the anomalies of anachronistic political boundaries: the merging of city-county areas and functions, the erection of an expanding city into an independent county, the limited control by the city over adjacent territory, the federation of cities for special purposes, the creation of metropolitan districts, the consolidation of urban areas with local autonomy for limited purposes, or the complete unification of such areas (Dodd, Maxey). Meanwhile state boundaries have offered similar obstacles to efficient administration of newer

regional activities such as flood control or power development. Numerous interstate "compacts" have been sanctioned by Congress, the most notable of which is that creating the Port of New York Authority (Frankfurter).

The great acts reforming local government in England began with the Poor Law Amendment Act and the Municipal Corporations Act of 1835. For a half century afterwards the same process as in America of creating *ad hoc* areas for special purposes resulted in the same "chaos of areas, of authorities and of rates." Consolidation of areas began with the Public Health Act of 1875 and has continued to the present; the Act of 1929 removed the last serious anomaly by the complete transfer of poor law functions from some 640 old poor law unions to the 142 counties and county boroughs.

The present administrative areas of England are as follows: administrative counties, 62; county boroughs (large cities), 82; metropolitan boroughs (old crown charters), 253; urban districts, 782; rural districts, 602; parishes, 14,300. Many joint authorities have been set up under permissive acts, such as those for roads, town planning and electricity supply. Central control is for the most part consolidated in the Ministry of Health, thereby insuring responsibility to Parliament. This ministry succeeded the Poor Law Commissioners (established in 1834), the Poor Law Board (1847), the Board of Health (1848) and the Local Government Board (1871).

In contrast to the American, and in large measure to the English, theory of local administration, France, Germany, Italy and Japan have highly centralized systems of national control. The details of the hierarchy of districts vary in the different countries. Germany has 18 states, each divided into separate groups of districts, Prussia, for example, being composed of provinces, administrative districts, counties (urban and rural), cities, rural communes and manors. France has 90 departments, 279 arrondissements, 3019 cantons, 37,981 communes (of which over 22,000 have a population of less than 500). In these and other centralized countries the focussing of control at the political center follows naturally from the fact that it is the center of gravity of the administrative system; in England and the United States central control has been elaborated at the expense, and often in the face, of the persisting tenacity of local loyalties.

The growth in the range of international administration has already created what may be termed international administrative areas Tangier, the sanitary councils, the river commissions, etc., are pre-war examples, while the direct territorial responsibilities of the League of Nations (Danzig and the Saar Valley), its work in Greece (exchange of populations), in Austria and Hungary (finance), in Poland (health) and the mandates are indications of a great future expansion in this field (Sayre).

The real problems arising from the increase in administrative areas result from the "lag" in the changing of boundaries to meet the facts of human migration and shifts in economic activity. Differences in size, population and taxable capacity between different areas subject to similar responsibility create intolerable situations which are still further accentuated by changes in wealth and population and by differences in the political institutions of different countries. Moreover, as administration is a function of locality, its form and technique must change with the locality. As locality is a function of space, so is space a function of time; with the profound changes in the speed and ease of communication in the past century, the whole problem of administration has been modified and the area of effective control broadened.

Various plans for reorganization have been suggested. Their variety and ingenuity may be indicated by a reference to the Webbs' scheme for the "cellular" organization of England, "county boroughism" (Finer, "Neue Entwicklungstendenzen"), the "regionalist" movement in France (Brun, Hennessy), and the regional planning and power projects in the United States.

Others have suggested more fundamental reform by striking at the root of the separation of economic and political interests. The Soviet and Fascist states, the German Economic Council (Finer, *Representative Government and a Parliament of Industry*), the guild socialist and other programs (Cole and Laski) are protests of this sort. A functional organization of administration appears to offer great difficulties, although its benefits would be real and are perhaps essential to any final solution of the problem of administrative areas. Meanwhile it is becoming evident in practise that with the increasing mobility of man and his products the area of administration must enlarge. In the words of the Webbs, there must be "aggregation to secure segregation."

PHILLIPS BRADLEY

See: ADMINISTRATION, PUBLIC; ORGANIZATION, AD-

MINISTRATIVE; LOCAL GOVERNMENT; MUNICIPAL GOVERNMENT; COUNTY, UNITED STATES; INTERNATIONAL ORGANIZATION; BOUNDARIES; CENTRALIZATION; URBANIZATION; COUNTY-CITY CONSOLIDATION; COMPACTS, INTERSTATE; METROPOLITAN AREAS; HOME RULE; REGIONAL PLANNING; REGIONALISM; GUILD SOCIALISM; ECONOMIC COUNCILS.

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ADMINISTRATIVE BOARDS. *See* BOARDS, ADMINISTRATIVE.

ADMINISTRATIVE COMMISSIONS. *See* COMMISSIONS.

ADMINISTRATIVE COURTS. *See* COURTS, ADMINISTRATIVE.

ADMINISTRATIVE LAW.

Administrative Law on the Continent of Europe. The central idea of administrative law in French and German jurisprudence is the differentiation of civil and criminal justice from other functions of government. For the adjudication of controversies between private persons and for the punishment of crimes there exist courts which are surrounded by constitutional guaranties of independence; but the executive power is not, in principle, subject to their jurisdiction. Inevitably, however, the exercise of governmental powers in matters of police, revenue and public services will, by reason of the silence or the ambiguity of statutory texts or by reason of disputed facts, give rise to controversies; and unless private parties are to be subjected to an unregulated official discretion, there must be devised orderly processes, as part of the executive power, for the determination of these controversies, and these in their turn will produce principles analogous to those administered or evolved by the ordinary courts.

This body of law, controlling the exercise of governmental power outside of traditional civil and criminal justice, is designated as administrative law. It covers both regulative legislation and its interpretation, and the inherent principles of official power. The exclusion of the jurisdiction of the ordinary courts leads to a demand for a substitute; and in France and many other continental states special administrative courts have been established. The development of a theory of administrative law is greatly stimulated by a distinct organ of jurisprudence and by the necessity of marking off the jurisdiction of administrative from that of ordinary tribunals. Administrative law has thus become on the continent of Europe a major department of legal science, and has accordingly a status equal to that of civil and criminal law.

Administrative and Judicial Powers in the Anglo-American System. Under the common law of England, received in America, the jurisdiction of the regular courts over controversies involving the validity of official acts, with power to grant relief against organs of the administration, was never lost. Moreover, where legislation had to operate through official powers over individuals of a compulsory or determinative nature, such powers were apt to be vested in courts (in England locally in the justices of the peace) and not in administrative officers The old common law executive officer, the sheriff, was a ministerial officer of the king's court. England and the American state governments lacked the bureaucratic organization characteristic of the continental monarchical systems as the latter developed during the seventeenth and eighteenth centuries. It is true that in America the organization of local governments separated administrative from judicial functions, and the important power to grant licenses for the sale of intoxicating liquors, which was in England vested in the

justices of the peace, was in most American states exercised by local administrative authorities; and questions in connection with this licensing power compelled the courts to consider the problem of administrative discretion. But administrative orders were not a conspicuous part of the machinery of government, and on the whole administrative law, as we know it now, until the later part of the nineteenth century remained undeveloped, and the term meant nothing to the legal profession. Among jurists there was a tendency to regard it as something foreign to the common law, and Professor A. V. Dicey in his *Introduction to the Study of the Law of the Constitution* (8th ed. London 1915) contrasted the *droit administratif* of France with the "rule of law" in England. The great treatises of the German Professor Gneist on English administrative law apparently received little, if any, attention in England. In America there were well known treatises on the law of officers, the law of municipal corporations and the law of extraordinary legal remedies; but to the present day the term "administrative law" is not to be found in legal digests and is uncommon in judicial decisions.

The Rise of American Administrative Law. As a subject of instruction administrative law obtained a status in university departments of government or political science before it gained a foothold in law schools. Political science teachers emphasized problems of organization (Goodnow, *Comparative Administrative Law*), and the more purely legal aspects of powers and remedies did not become dominant until professional law schools gave the subject a place in the curriculum, which was done only very slowly. Even today it does not occupy the same position as constitutional law. The scientific study of the subject received a new stimulus when the Commonwealth Fund in New York placed it among the research topics to be systematically pursued and subsidized.

In America the awakening of the legal profession to problems of administrative law is associated with the regulation of public utilities, operating through commissions vested with power to issue orders. It was only after the beginning of the present century that this branch of the law was really developed. In the sixties of the nineteenth century a similar order-issuing power had been given to the Metropolitan Board of Health of the county of New York, and its constitutionality, questioned by lawyers, had been sustained by the courts. The novelty was that a power such as traditionally under the common law system had belonged only to courts of justice was to be exercised administratively by organs of the government not hedged in by the old established checks of judicial processes, i.e. not proceeding "according to the course of the common law." Was this "due process"? The familiar licensing (as opposed to order-issuing or directing) power had presented no similar problem, for according to its nature it tended to be exercised in a routine fashion, and on the whole the interests subject to it found it easily possible to accommodate themselves to its exercise. An administrative order according to its nature is not quite a routine matter; it places itself in opposition to the independent conduct of business; and hence the authority issuing it tends to assume the character of a tribunal and appears to represent a method of law competing with the common law.

As an instrument of legislative policy this method of controlling private interests became conspicuous through the Interstate Commerce Act of 1887. This act operated with terms ("unreasonable," etc.) practically unenforceable without administrative determinations prior to judicial enforcement, and the making of these determinations was entrusted to the Interstate Commerce Commission, an "independent agency in the executive branch of the government" (to use a term more recently introduced into the language of Congress), i.e. not a court of justice but a body whose members were made removable by the president. While the next act of congressional economic legislation, the Sherman Anti-Trust Act of 1890, was a purely penal measure without administrative determinations, Congress, in 1914, by the Federal Trade Commission and the Clayton Acts, and by the Shipping Board Act of 1916, again utilized administrative commissions; and although in 1920 the Packers Act entrusted analogous functions to the secretary of agriculture, the commission vested with determinative powers had become established as an important organ of law administration. The copying of the model of the Interstate Commerce Act in the public utility laws of the states made the method familiar to the entire American legal profession, and administrative law became a recognized branch of the legal system.

The state public utility laws operate through licenses and certificates as well as through orders; and important licensing powers (new

construction, security issues, etc.) were given to the Interstate Commerce Commission in 1920. License or permit requirements were also the traditional method of the legislative regulation of such classes of business as banking, insurance, the liquor traffic, etc. As before stated, the tendency of this form of power to become a routine function had prevented it from becoming a nucleus for the growth of administrative law. Under the Transportation Act of 1920, however, the requirement of notice and hearing as a condition precedent to the issuing of permits promises to invest this type of function likewise with a quasi-judicial character, and to raise in connection with its exercise important questions involving private right, administrative power and judicial control.

Sources and Problems of Administrative Law. If we describe administrative law as the law of official power and of its subjection to judicial control, we also indicate its two principal phases and aspects. On the one hand the law is concerned with statutory provisions and their construction; on the other hand, with common law principles of remedial law (official liability, extraordinary legal remedies, equitable jurisdiction). But common law also enters into statutory construction, and legislation is controlled by the constitutional principle of due process to which the exercise of power over private rights must conform. It is neither necessary nor profitable to determine how much of administrative law rests on legislative, and how much on judicial, action.

The main problems of administrative law relate to the nature and operation of official powers (permits and orders, ministerial and discretionary, scope of discretion and legitimacy of underlying considerations), the formal and procedural conditions for the exercise of powers, official and communal liability, the specific remedies for the judicial control of administrative action (legal, equitable and statutory), jurisdictional limitations of powers and the question of administrative finality.

The constitutional problems of administrative law relate to the delegability of legislative power, due process in administrative power and due process as involving subjection of administrative power to judicial control. Where the course of administration is in accordance with traditional methods, it is generally assumed that it is not contrary to constitutional limitations or requirements (summary powers, finality of discretion, absence of common law remedies such as the non-suability of the sovereign). On the other hand common law principles generally work out in such a way that fundamental requirements of justice are respected and operative. Thus if the administrative process in itself falls short of what due process may seem to demand, the application of common law remedies (mandamus, official liability, etc.) by way of correcting the administrative process may supply the defect.

The judicial development of administrative law proceeds mainly through a gradual liberalization of the two remedies respectively applicable to permits and orders, namely mandamus and certiorari; but the courts cannot remedy every defect of the common law, and particularly the harsh operation of official liability cannot be relieved without corresponding hardship to private rights. With regard to this last matter adequate relief may depend upon the legislative substitution of the corporate liability of municipal or state government. The legislature may also do much in the way of simplifying the common law system of remedies, which is perhaps unduly encumbered with technicality, and it may give added protection to private right by throwing safeguards around the administrative process itself, both by circumscribing the substance of discretion and by prescribing appropriate forms for its exercise. In these respects the development of regulative legislation has incidentally brought in its wake also a development of administrative law.

The Law of Administrative Practise. So far as the statutes are silent and are not aided by well-established rules of construction or of the common law, administrative authorities must themselves determine in the first instance how they will exercise their powers; and the practises which they observe will control private interests except as they may be checked or overruled by successful appeal to the courts. Administrative practise will thus always have an important place in the actual functioning of government. Voluntary and long continued administrative practise has many of the characteristics of law and, under favorable conditions, inherent guaranties of fairness may approach those which are generally associated with courts of justice. We are inclined to accord to the courts a law creating monopoly, and administrative law is to us primarily judicial law controlling the administration. The term

might, however, also be applied to a body of principles produced by the administration; and with the growth of administrative tribunals, and particularly of a practise of publishing reports of administrative decisions and of abiding by precedents, there is every reason to suppose that such a body of commission or departmental administrative law will gradually establish itself.

The quality of such administrative law as the administration itself may produce will greatly depend upon the character of its organization. In the modern constitutional state this organization is in the main fixed by written law, and the principles which guide this organizing legislation are also legitimately designated as administrative law; French and German and American writings on the subject are perhaps primarily given to the discussion of organization. There is now, however, a tendency to differentiate the study of organization and the study of powers. The former, involving public administration, aims to discover the conditions reconciling efficiency and economy with avoidance of the drawbacks of bureaucracy. The latter, involving the principles making for the protection of right and justice, is viewed as the more strictly legal discipline of administrative law, using the narrower sense of the term.

Law Enforcement. There remains a further important aspect of administration which is concerned with law enforcement. The process of enforcement is to such an extent dominated by the courts, and also so closely associated with criminal or penal justice, that it seems to fall almost outside of the province of administration, considered as a branch of government distinct from the judiciary. Yet the initial and the final stages of enforcement—prosecution and execution—are entrusted to organs of government which, while closely allied to the courts, are technically part of the executive government. A complete view of the field must not fail to take account of the important problems connected with the organization and action of administrative enforcing powers; but in the United States at least that aspect of administrative law has not so far received adequate systematic treatment.

ERNST FREUND

See: PUBLIC LAW; JURISPRUDENCE; ADMINISTRATION, PUBLIC; COURTS, ADMINISTRATIVE; BOARDS, ADMINISTRATIVE; COMMISSIONS; JUDICIAL REVIEW; RULE OF LAW; DELEGATION OF POWERS; SEPARATION OF POWERS; STATE LIABILITY; REMEDIES, LEGAL; WRITS, LEGAL.

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THE RECENT GROWTH OF ADMINISTRATIVE LAW IN ENGLAND AND AMERICA: Baty, Th., "The Supersession of the Law Courts by Bureaucracy" in *Law Magazine and Review*, series v, vol. xxxviii (1913) 139–49; Dicey, A. V., "Development of Administrative Law in England" in *Law Quarterly Review*, vol. xxxi (1915) 148–53; Berle, A. A., Jr., "Expansion of American Administrative Law" in *Harvard Law Review*, vol. xxx (1917) 430–48; various authors, *The Growth of American Administrative Law* (St. Louis 1923); Frankfurter, Felix, "The Task of Administrative Law" in *University of Pennsylvania Law Review*, vol. lxxv (1927) 614–21.

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ADMINISTRATIVE ORGANIZATION. *See* ORGANIZATION, ADMINISTRATIVE.

ADMIRALTY. *See* MARITIME LAW.

ADOLESCENCE literally means growth, but as the term is used in biology and psychology it defines the period of human development from the beginning of puberty to the end of the maturation process. Its physiological characteristics are now well understood. Its chronological boundaries vary with race, climate, nutrition, social status and inheritance, and may include some individuals as young as eight and others as old as twenty-five. The status of an age group in society may be determined by studying, first, the scientific knowledge available concerning its physical and mental development; second, its position in the laws regulating social relationships, duties, immunities and privileges; third, its participation in social and economic activities and the problems resulting from the degree of adjustment or maladjustment; fourth, the moral and religious ideas that evolve concerning its conduct and status.

Thus infancy has been studied. In the pre-

natal period weight increases almost a billionfold, in all the years after birth only about twentyfold. Most of the growth momentum, according to Minot, is lost at the time of birth (98 percent). The physical and mental progress of the first three years of life is in this sense infinitely greater than from six to nine or from puberty until twenty-one years. The significance of the growth rate in the life of the individual cannot, it appears, be stated accurately in terms useful for education, but there is a growing conviction that the period of infancy and childhood should be surrounded by special immunities and protection, and that its prolongation has significance for the more complete higher evolution of human beings. The status of the child in a given society is therefore held to be an index of social well-being. Undoubtedly the scientific study of child life has had a profound effect upon our modern social organization.

To set forth the position and the influence of the adolescent is a more difficult matter. Physically and mentally the normal adolescent is capable of approximating the adult role, as he frequently does among primitive peoples and pioneer groups. The adolescent can win his bread, produce offspring, fight and participate in social and religious activities. His immaturity comes to light in the more subtle phases of social life. He appears to be an adult yet he is not, and both primitive and civilized peoples have denied him complete political participation and have extended to adolescence some degree of immunity from adult legal and social responsibilities. Scientific evidence to support this "common sense" policy is vague because of a lack of systematic research into the norms of adolescent development. A scientific description of the normal adolescent in society remains to be written.

A study of adolescence has passed through four phases: first, interest in problems of physical growth and anthropometric measurements, which has resulted in the concept of physiological age; second, interest of the psychologist in individual differences and progressive development, leading to the concept of psychological age; third, the interpretation of these findings in terms of evolution, the "recapitulation theory," and the doctrine of adolescence as a "storm and stress" period; fourth, the definition of the problems of the adolescent in terms of the social situation.

Pioneers in the physiology and anthropometry of adolescence were L. A. J. Quételet in Belgium (*Sur l'homme et le développement de ses facultés* in 1835, and *L'anthropométrie, ou mesure des différentes facultés de l'homme* in 1871); in Germany, K. von Vierordt (*Physiologie des Kinderalters* in 1877) and H. Vierordt (*Anatomische, physiologische und physikalische Daten und Tabellen zum Gebrauche für Mediciner* in 1888); H. R. Malling Hansen in Denmark (*Perioden im Gewicht der Kinder* in 1886); Charles Roberts in England (*Manual of Anthropometry* in 1878); N. Wiazemsky in Russia (1907); and Franz Boas, W. T. Porter, F. D. Burk, H. P. Bowditch and C. W. Peckham in America. G. Stanley Hall summarized these in *Adolescence*, a monumental work with extended interpretations as to phylogenetic and pedagogic significances. The most complete summary and analysis of physical growth studies was made by B. T. Baldwin, utilizing 5,385,400 recorded cases from all available sources in various countries. He found that oscillations in growth, in height and in weight occur before puberty. There is retardation in growth at the end of the pre-school period, a slight acceleration at about seven for girls and eight for boys, a marked decrease in the yearly percentile increment for girls at nine and boys at eleven, followed by the adolescent growth spurt which in boys culminates at the average age of fifteen and in girls from twelve and a half to thirteen years. The greatest mean variations in growth rate for both sexes are found during the characteristic adolescent ages for each. In a typical American rural community the pre-pubescent boys ranged in age from eight and a half to sixteen years, the pubescent boys from nine and a half to fifteen and a half years, the post-pubescent stage from eleven and a half to twenty-four years. In an analogous city group of boys the pre-pubescent ages were nine and a half to seventeen and a half, the pubescent ten to eighteen and the post-pubescent from twelve and a half to twenty-four years. The age of first menstruation for normal American girls ranges from ten to seventeen. Thus any study of the adolescent in society is complicated by its tremendous range.

Throughout the adolescent period there is acceleration in height, weight, breathing capacity and strength traits, with profound modifications of bodily organisms. Pubertal growth affects more or less simultaneously every part of the body, but not in equal ratio; for example, the muscles, the heart and the reproductive organs increase with great rapidity, the brain

hardly at all. Early puberty is followed as a rule by rapid cessation of growth in stature, although physiological processes of maturation may continue until the middle twenties. Growth statistics are of value for comparative study of masses of children in relation to age, sex, race and environment, but the growth status of an individual child cannot be evaluated from a study of growth averages, and therefore these early scattered investigations without uniform procedure or continuity have slight value for an understanding of the processes of normal physical development.

The experimental study of children of the pre-school age has been carried on by Baldwin in the University of Iowa and by Gesell in Yale, resulting in the establishment of norms of physical and psychological growth. Nothing of like nature exists for the adolescent. Helen Thompson Woolley in 1915 undertook in Cincinnati, Ohio, a study of 5483 adolescents from fourteen to eighteen, divided into two groups, at work and in school. Physical and mental tests were given to the same children each year for five years. The study was restricted to native born white children. For the first time in history records were kept of the physical and mental status of representative adolescents from year to year, their school or industrial histories, home conditions and where possible their social histories. The results of this study more nearly represent the situation in the community at large than any other ever undertaken with reference to adolescents. Formerly scales of mental development for adolescents were based almost entirely upon the selected group that remained in school. (Lodor, however, had previously studied the girl in the continuation school, and Leaming had developed tests and norms for vocational guidance at the fifteen year performance level. These studies compared school and work groups.)

The Cincinnati study included measurements in height, weight, vital capacity, strength of hand, steadiness, rapidity, eye-hand coordination, and a wide range of standard mental tests involving memory, perception, recognition, association, abstraction, reasoning, space perception, mechanical ingenuity. Comparison of working children with school children showed that in both physical and mental scales the latter are superior at every age level from fourteen to eighteen years. There is some evidence that mental growth continues to a greater age in the case of school children than among working children. However, the information given by this study as to the laws of yearly growth in the mental development of adolescents is far from conclusive. The rate of growth, both physical and mental, is related to the various factors of age, sex, home background, degree of ability and type of measurements.

In fundamental physical capacities girls complete their period of rapid growth by fifteen or sixteen and gain very little after seventeen, thus reaching a status which is approximately that of the adult from one to two years earlier than boys. In mental growth no such sex difference appears. Boys and girls are closely comparable in their yearly gains in the few tests for which we have records. At present we have no data which set a limit in years to mental development for either sex, although the rather meager data from surveys of group mental tests incline some observers to think that average mental growth ceases at about fourteen or fifteen (Toops, Pintner, Ballard). The Woolley results indicate that improvement goes on up to sixteen or seventeen years. That social conditions play a part is evident. "It is a striking fact that the differences of home background, in these extreme cases, can not only counteract differences in mental ability, but can give to inferior children an advantage of three years in educational progress by the age of fourteen years" (Woolley, *An Experimental Study of Children*, p. 541). Degree of ability also conditions mental growth after sixteen; superior children tend to continue in mental progress longer than the inferior.

Although the concept of psychological age has been valuable in the field of education it has thrown little light upon the problem of the adolescent in society. The earlier writers, while noting that the death rate is comparatively lowest at this period, that growth abnormalities tend to diminish at puberty and that infectious disease is relatively rare, described adolescence as a period of marked instability and maladjustment. The dramatic appearance of puberty suggested that it was a new birth in which the higher human traits emerged. The disproportionate rate of growth of bones, muscles, various organs and glands suggested a corresponding mental and emotional disharmony, involving special dangers. In accordance with the doctrine of recapitulation, the adolescent was regarded as "neo-atavistic, prone to storm and stress," with "ancestral prepotencies struggling with each other for predominance." G. Stanley

Hall and his students circulated thousands of questionnaires on the subject of adolescent interests, diet, imagination, day dreams, recreation, love life, religious conversion and special abilities. Biographies of great men and women were studied and characteristics of their youth noted. From the studies Hall listed ten specific characteristics of puberty: first, inner absorption and reverie, "a double housekeeping of consciousness"; second, birth of the imagination, frequency of illusions, dreams, visions; third, self-criticism, skepticism and scruples; fourth, over-assertion of individuality; fifth, imitation at its acme; sixth, dramatic role at its height, poses, affectations, mannerisms; seventh, folly, absurdities, freakishness; eighth, new speech consciousness; ninth, absorption in friendship; tenth, impairment of orientation in time and place, intense fluctuations in energy, great emotional and intellectual plasticity. In summary, "we must regard the adolescent stage as especially characterized by . . . . a loosening of the bonds between the manifold factors of our ego, somatic and psychic" (Hall, *op. cit.*, vol. i, p. 241). Thus the manifestations of adolescence were likened to the symptoms of hysteria and insanity. The recorded cases of religious fanatics are "adolescents in whom the tendencies and characteristics normal to this age are here seen only in persistent or exaggerated forms" (*ibid.*, vol. i, p. 266).

A more recent phase in the study of adolescence is the emphasis on its social aspect. The literature of the child guidance clinics and juvenile court studies points out that maladjustment occurs frequently in infancy and early childhood and is not more characteristic of adolescence than other periods. Where maladjustment is pronounced in the healthy adolescent it is now thought to be due to the social situation. W. I. Thomas gives evidence that when social norms and structures evolve more slowly than activities and inventions the result is a stage of disorganization, apparent alike in personalities and in society. When old habits are no longer adequate they break down, and before new habits are learned there is instability. Thus in the twentieth century youth appears to be in conflict with the standards of behavior in home, school, church and community. To add to the confusion, the dress, habits, activities and mood of youth are copied by adults so that the value of youth appears to have an exaggerated significance in social life, and the young have few recognized goals of maturity to follow. At present infants and preschool and school children are better cared for than in the past with reference to scientific programs of diet, sleep, exercise, physical safety and "chaperonage," while the adolescent is prematurely exposed to self-regulation.

More direct evidence that adolescence in itself is not a period involving special adjustment comes from the study of primitive youth, particularly that undertaken by Margaret Mead. The difficulties which we have ascribed to fundamental human traits are apparently nonexistent among such a group as the Samoans. Civilization imposes restraints on the one hand, and increased stimulation on the other. There is absolutely no evidence that the conflicts and difficulties of adolescence are inevitable. The behavior of adolescents in modern society, the symptoms of unrest and maladjustment, are no proof that these are normal characteristics of the age group.

Primitive peoples have often paid marked attention to the appearance of puberty in girls and boys and have endeavored through physical mutilations, ordeals, fasting, initiation, festivity, seclusion and instruction to mark it as an important threshold of life. Ceremonials of some sort are found in Africa, Asia, Indonesia, Australia, Polynesia, North America and South America. There are also groups of primitive peoples in the same areas who pay no attention to puberty. A systematic account of social activities among these peoples affords very little insight into the actual life of the individual. The picture is too standardized. How a given personality reacts to the prevailing culture is a matter for further research. The framework of primitive society appears to some observers to stereotype the youthful individual by powerful institutional devices which prevent him from self-expression. The anthropologist doubts the correctness of this assumption. Wherever a primitive culture has been studied intensively by one who knows the language and can penetrate into the life and feeling of the group, it is evident that the primitive treatment of adolescence takes account of the individuality of the adolescent and his need for independence. The new social status is seen ir a variety of ways: change of dwelling, entrance into youth societies, ordeals, tests of personal skill and endurance, acquisition of a guardian spirit, the importance conceded to adolescent dreams and visions, separation from the family group, disappearance from home into forest or desert,

initiation into sexual life, freedom from childhood restraints, use of decorations, mutilations, serve as symbols of the enlarged status. The assimilation of the adolescent into the life of the primitive group is equally stressed by means of various modes of sexual, physical, social and spiritual initiation which tend toward the general phenomena of social symbiosis (Van Waters, *The Adolescent Girl among Primitive Peoples*, vol. ii, p. 90–91).

The more recent standards of adolescent conduct are difficult of scientific description. Programs of child welfare have been largely of extra-academic origin. It is not the scientist who has been directly confronted with problems of personal and social demoralization, but the parent, educator and social worker. The psychologist and sociologist have concerned themselves not with the difficulties the child makes but with the difficulties the child has. This has profoundly altered the method of approach.

Recent neurological studies have indicated that maturation is a subtle process, extending long after gross size and weight have been attained. Lawyers have recognized this and have hesitated to allow young persons the full management of large estates until they have reached the age of about twenty-five years. Legislation has lagged behind in matters of criminal responsibility, so that we see youthful individuals of fourteen, sixteen or eighteen held completely responsible for their deeds. Strict proof is lacking, but all studies seem to indicate that the integration of the nervous system is not complete until the middle twenties, whereas the conventional view that youth is mature at the time of political majority (twenty-one) prevails to the detriment of the individual adolescent. What we call wisdom and discretion are certainly not to be expected of the normal adolescent in his 'teens.

Among European and American civilized peoples the age of compulsory education has been extended to sixteen or eighteen. The state has definitely undertaken the academic and vocational guidance of adolescents. Youth is now definitely interested in programs of social betterment, war and peace, economic equality and democracy. The social situation is complicated, but youth remains the same—a period of life when physical and mental energy is at its height, when charm dominates, and the adult role is eagerly anticipated, yet when complete social participation is impossible because of fundamental biological immaturity. As long as our social situation is somewhat pathological, youth will remain in conflict with prevailing social standards.

MIRIAM VAN WATERS

See: CHILD PSYCHOLOGY; MENTAL HYGIENE; INTELLIGENCE; CHARACTER; PERSONALITY; MENTAL TESTS; INITIATION; SECRET SOCIETIES; YOUTH MOVEMENT; SEX EDUCATION; VOCATIONAL GUIDANCE; CONTINUATION SCHOOLS; PARENTAL EDUCATION; CHILD WELFARE; CHILDREN, LEGISLATION FOR PROTECTION OF; CHILD MARRIAGE; CHILD LABOR; DELINQUENCY; CHILD, DELINQUENT; JUVENILE COURTS.

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ADOPTION.

PRIMITIVE. Adoption is the legal fiction by which an individual belonging by birth to a certain kinship group acquires novel relationships that are reckoned as equivalent to congenital ones and either wholly or partly supersede the old ties.

Primitive conditions sometimes foster wholesale adoption of children. When a mother dies in childbed, the surviving infant must die of starvation unless a tribeswoman able to give suck is willing to adopt it. If there are no such women, the child is usually buried with the mother. At a later age a child may be easily orphaned by a war raid or the dangers incident to daily economic pursuits. Frequently the adopters are close relatives, such as uncles and aunts, but this is by no means essential. Among Plains Indian tribes a stranger who has lost a child bearing a real or fancied resemblance to the orphan may feel prompted to adopt it as a substitute. Other motives enter. Thus, where the concept of property is well devel-

oped, as among some of the reindeer herding Siberians, a childless man of wealth may find intolerable the thought of having his wealth dissipated and will accordingly take pains to find an heir.

In some regions of the globe, however, adoption is practised on a scale wholly disproportionate to any rational grounds therefor. In one of the islands of the Eastern Torres Straits group, children are adopted even before birth and brought up entirely in the family of the adoptive parent; often they never learn their real parents' identity. In the Banks Islands (Melanesia) similar customs hold sway. A newborn infant "becomes the child of the man who pays the chief helper or midwife at the birth." Since the father's sister determines the midwife, the father usually enjoys the best chance to establish his claims. But if he should lack the requisite fee or happen to be away, another man is likely to arrogate paternity and the true parents are not legally entitled to retain the infant. In theory the real father might indeed redeem his offspring at a later period, but practically the payments traditionally exacted—involving double the amount expended in the child's interest—prove prohibitive. This applies especially after the adopter has paid the boy's initiation fee for entrance into the men's society. Rivers interprets this extravagant tendency to adopt unrelated children as a sign of pristine community of children—itself connected with a one-time sexual communism. However this may be, Oceania as a whole represents a main center for adoption carried to unusual lengths. In Polynesia childless Tahitians adopted children, and those blessed with progeny took over additional ones while giving away some of their own. In such cases the practise cemented the friendship of the households concerned, and the children themselves divided their time happily between their two homes. In this extreme form the custom inevitably modifies the principle of the universality of the individual family.

Adoption of adults occurs in a number of ways. A common one in North America is that connected with ceremonial affiliation. When a Hidatsa (North Dakota) buys entrance to a military society with his age mates, the group of sellers are collectively the purchaser's "fathers," irrespective of the magnitude of the difference in age between the groups, and each buyer has an individual "father," from whom he buys the relevant paraphernalia and instruction.

The logical consequences of adoption are generally carried out with astonishing rigor. If a man X adopts a boy Y in a matrilineal tribe, Y is reckoned as a member not of the adopter's clan but of his wife's: that is, he automatically falls into the group to which X's own children belong. Further, other individuals at once apply kinship terms to the newcomer in consistency with the assumption that he is X's son. In other words, X's brother (according to the common form of terminology found with clan organizations) calls Y "son" and expects to be called "father" by him; X's sister calls the boy by a distinctive nephew term and is reciprocally designated as an "aunt," and so forth. Adoption naturally leads to a fusion of diverse blood lineages, and the transition from a maternal family to a clan composed of two or more unrelated maternal lineages is most readily understood on this basis. Their distinctness is ultimately forgotten, and the fiction of a common descent welds all individuals into a single unit—just as in modern civilization community of political allegiance is constantly confounded with racial community. In latter day Hopi villages there are actually clans formed by a combination of several such lineages, both types being rated equivalent, regardless of the blood homogeneity or heterogeneity of their membership.

Primitive adoption customs rest on a mental attitude difficult to conceive for those nurtured in western traditions. Savages commonly have a generic love of children that is in no way dependent on a sense of consanguinity. A South African Negro insists on claims to his wife's offspring even when they are demonstrably begotten in adulterous intercourse. A Toda in southern India establishes his paternity by a fixed rite, and his wife's son, begotten ten years after the husband's death, becomes the deceased man's heir unless some other man has subsequently performed the ceremony. From all accounts the adopted child by legal fiction is in every case treated with all the loving-kindness lavished on a real child. If anything, he becomes the object of exaggerated tenderness.

ROBERT H. LOWIE

See: KINSHIP; FAMILY; MARRIAGE; ANTHROPOLOGY.

MODERN. Adoption was the ancient, as it is the modern, method of creating by law the relationship of parent and child It is an old

institution in India and Japan. In Rome, since the religious headship of the family and the inheritance of property passed from father to son, the motive recognized by the law providing for adoption was the desire for an heir who would promote or continue the prestige of the family. The abstract rule was that adoption should imitate nature, and in consequence the civil law required that the adopting parent must be at least fifteen years older than the child adopted and must not be a relative within the prescribed limits of consanguinity. Adoption was carefully considered in the preparation of the Napoleonic Code, and with limitations the Roman provisions were followed. Other countries of Europe whose codes are based on the civil law have also with statutory modifications and with new safeguards followed the Roman law. Legal provision for adoption is now practically universal in Europe, Great Britain, the United States and Canada, but not so universal in South and Central America. The modern motive, however, is not the strengthening of the family but, as W. Clarke Hall puts it, the conferring of the "privileges of parents upon the childless and the protection of parents upon the parentless."

Legal adoption was unknown to the common law and was not authorized by statute in Great Britain until 1926. In English law the child had no absolute right to succeed to any part of the parent's property, but could be disinherited by will in favor of either relatives or strangers. It was possible, therefore, without resort to adoption, for family titles to be continued and family estates kept together when there was no direct male descendant. Provision for care of dependent children by means of adoption was probably delayed by the development of the relation of master and apprentice. By means of this arrangement orphans and children of indigent parents could be bound out, while the rights of the master and of the parent under this relationship were defined by law.

In the United States the first statute legalizing adoption as we now think of it was passed by Massachusetts in 1851. With local modifications the Massachusetts statute became the model for the laws which followed in other states, in Illinois, for example, in 1867 and in Kansas in 1868. Provisions for adoption by deed certified and filed as in a transfer of property were formerly not uncommon in the southern states and have been only recently repealed in Iowa and Pennsylvania.

Although the provisions of the present statutes regulating adoption vary from state to state, there are many similarities. The age of the adopting parent is seldom specified in the law. Louisiana, however, reflecting the influence of its early settlement, follows the civil law in providing that the person adopting shall be at least forty years of age and fifteen years older than the person adopted. A few states, among them Illinois, Minnesota, New Mexico and Virginia, provide that a person may adopt only a child not his own by birth. Almost all the states require the consent of the living parents of a child born in wedlock, and the consent of the mother of a child born out of wedlock, or the consent of the legal guardian of children whose parents are mentally incompetent, guilty of desertion or found by the court to be unfit to retain the custody of their children. In many states the consent of the legal guardian must be supplemented by that of a public official, the agency to which the child has been previously committed or someone appointed as a next friend by the court. As for the authority of the adopting parent over the adopted child, the laws usually provide that adoption establishes the legal relation of a parent to a child born in wedlock, including reciprocal inheritance.

The laws of the states make the welfare of the child of paramount importance in adoption, but with advancing standards of child care the concept of what constitutes a "fit and proper" home for dependent children has greatly changed. The best children's agencies now require that adoption be preceded by a careful investigation with a view to determining whether the child's physical needs will be met in the adoptive home, whether he will be morally safeguarded and given an opportunity for an education and the development of his capacities. They are also seeking with the help of the psychiatrist and the psychologist to determine whether the psychological conditions in the new home will not warp the child's development. This involves an examination of the compatibility and personalities of the adoptive parents and of the child. A trial period of a year or six months in the adoptive home is considered a necessary safeguard. In only a few states is the jurisdiction over adoption lodged with the Juvenile Court or Court of Domestic Relations. It has frequently been pointed out by students of the subject that the judge who is given this responsibility should understand

the problems which follow breaking up family ties and the transfer of children, and should have the resources for obtaining the information necessary for an intelligent decision as to what is in the interest of the children.

A movement to increase the safeguards established by law and provide administrative machinery for making these safeguards really effective has developed in recent years. A Michigan law enacted in 1891 was one of the first to require that the judge make an investigation before entering the decree of adoption; it was later amended to provide that the investigation should be made for the judge by the county agent or a probation officer. In Minnesota the court is required by statute to notify the State Board of Control when a petition for adoption is filed, and the board in turn must inquire into the condition and antecedents of the child and the suitability of the proposed adoptive home, and must submit a report of the investigation in writing to the court. New York requires investigation by some person or agency specifically designated by the court. In Massachusetts any judge of a probate court may appoint a guardian *ad litem* to find the facts in any proceeding relating to the care, custody or maintenance of minor children, while in Pennsylvania the court may cause investigation to be made by some person or agency specifically designated.

With the increased interest in safeguarding adoptions in the United States there has been at the same time a decrease in the number of children available for adoption and an increase in the number of foster parents desiring to adopt children. At present in the United States the practise of taking children from their parents solely on the ground of poverty is rapidly disappearing. Better wages, improved health conditions and workmen's compensation laws have prevented the break-up of many families. The so-called "mothers' pensions" or "funds to parents" acts passed in the United States and many European countries during the past twenty years, and the expansion and improvement of the work of children's agencies and family welfare societies, have also been major causes of this change in policy. Foster home care for children, as distinguished from institutional care, has greatly increased, and the work of children's aid societies in home finding, investigation before placement and supervision after placement has greatly improved. As a result the practise of receiving children in family homes has increased, and foster parents have felt that the probability of a happy outcome in the event of adoption is greater. This has led to an increase in the demand for children to adopt. Although provision for legal adoption was not made in Great Britain until 1926, the practise of receiving children into their homes and rearing them as their own was not uncommon among the British, and such children were called "adopted" children. According to the report of the Committee on Child Adoption, 1921, there was concurrence among the witnesses who had experience in social work regarding a greatly increased demand for children to adopt, and hence a growing need for legal protection in adoption. The war and the epidemic of influenza in 1918 increased the number of orphans and of childless parents in many countries and led to an increased interest in adoption.

Records of child adoption are not as a rule separately kept by the courts in the United States of America, so that it is not possible to say how many petitions for adoption are approved each year in the United States. In Minnesota, where investigation of all petitions by a state department is required by law, the State Board of Control reports 701 adoptions in a two-year period from 1924 to 1926. Recent studies of adoption have given the information for several important urban centers. These indicate local variation in the numbers seeking to adopt children. Thus the report of the Children's Commission of Pennsylvania for 1925 points out that Allegheny County (Pittsburgh) has twice the number of adoptions in proportion to population as Philadelphia. On the other hand comparison of records of adoption in Suffolk (Boston) and Norfolk counties in Massachusetts with those in Cook County (Chicago) in Illinois shows approximately the same rate of adoption per 100,000 population for these counties.

While the percentage of children adopted in the United States who are of illegitimate birth is large, it varies greatly. Thus the studies referred to above showed that approximately 35 percent of the adoptions in Philadelphia County involved children born out of wedlock, in the state of Minnesota 44 percent, in Cook County, Illinois, 51 percent and in the Massachusetts counties 61 percent.

Incomplete reports from other countries indicate that adoption is probably much less frequent elsewhere than in the United States,

but is increasing since the war, and especially since the enactment of new legislation in recent years. For example, in France from 1910 to 1913 the average number adopted per year was 129; from 1919 to 1922 it was 267. In 1923, when new legislation facilitating adoption became operative, the number was 613, and in 1924 it was 1700. In Berlin, which has a population one third greater than that of Chicago, the average number adopted for the four-year period 1923–26 was 179. Pre-war figures for Berlin are not available. In Württemberg the number of adoptions per year averaged 55 from 1909 to 1912, but had reached 157 in 1919. For Sweden, which did not legalize adoption until 1917, the average number of annual adoptions from 1923 to 1926 was 941.

GRACE ABBOTT

See: FAMILY LAW; GUARDIANSHIP; FAMILY; ILLEGITIMACY; CHILD WELFARE; CHILDREN, INSTITUTIONS FOR CARE OF; JUVENILE COURTS; SOCIAL CASE WORK; PLACING OUT; PARENTAL EDUCATION; MOTHERS' PENSIONS; APPRENTICESHIP; INDENTURE.

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ADOR, GUSTAVE (1845–1928), Swiss statesman. Until the World War his career was typical of that of a successful Swiss politician. Having been elected a member of the municipal legislature of his township Cologny in 1871, he joined the cantonal legislature three years later and the federal parliament in 1878. For over thirty years before the war he played a prominent part in all Genevese affairs as a member and several times as head of the government, or as leader of the opposition when the conservative party, to which be belonged, was out of power.

When the war broke out he organized, as president of the International Red Cross Committee, the so-called "Agence des Prisonniers de Guerre" for the search of missing soldiers and for the establishment of relations between prisoners of war and their families. In 1917 he became a member of the federal government under somewhat dramatic circumstances, his predecessor Hoffmann having been obliged to resign because his attitude had been deemed incompatible with the recognized policy of Swiss neutrality. In 1919 Ador was chosen by his colleagues in the government to be president of Switzerland and in that capacity he visited Paris during the Peace Conference. He took an active part in the negotiations which led to Switzerland's joining the League of Nations while retaining her military neutrality. Ador resigned his federal executive office in 1919. Having completely retired from Swiss politics, he remained a Swiss delegate to the Assembly of the League of Nations from 1920 until 1924.

Being politically active all his life, Ador, whose main characteristics were honesty, practical common sense, fearlessness and tact, rather than original constructive statesmanship, found no time for scientific research or for writing of any kind.

W. E. RAPPARD

Consult: Traz, Robert de, *Gustave Ador* (Lausanne 1919).

ADULT EDUCATION is an inclusive term which, as it is currently employed, embraces within its meaning the following varieties of activity: continuation education; corrective education; functional-group education; and folk

schools or people's colleges. A term which includes so many varieties of educational endeavor must necessarily be ambiguous. There is, however, a marked trend in the direction of limiting the use of the term to projects concerned with functional-group education and folk schools or people's colleges.

Continuation education is a projection of education from adolescence into adulthood. In most cases continuation classes are conducted under the auspices of the public school system; since those taking advantage of this form of education are for the most part young workers, the classes are usually held in the late afternoon or evening. There is no settled policy regarding the curricula for such classes, but the trend in the United States has been predominantly vocational; academic, cultural and social objectives have gained during recent years.

Corrective education represents an attempt to offer adults an opportunity for the compensation of deficiencies in their earlier education. The emphasis here is again largely vocational; adults discover the need for some specific knowledge or skill which for some reason or other they did not acquire during childhood or adolescence; they begin learning in adulthood in order to relieve this deficiency. They may, of course, find these opportunities in continuation classes.

Functional-group education is frequently motivated by the desire of adults to secure education because of some urgency arising from their membership in a group. Danish farmers, for example, embarked upon a program of adult education shortly after the middle of the nineteenth century; they had been defeated in a disastrous war; they had lost their market for wheat and were hence compelled to make radical adjustments in agricultural production; at the same time they realized that these momentous adjustments could not be made by an illiterate population. Consequently they undertook to educate themselves as adults, as farmers and as citizens impelled toward a new nationalistic orientation. Likewise industrial workers of England in the early part of the same century recognized the necessity of further education, not merely to enhance their vocational opportunities but to render them more effective as trade unionists. Workers' education has since spread to all industrial areas.

Folk schools or people's colleges originated in Denmark and have continued as the most conspicuous form of adult education in the Scandinavian countries and Germany. Similar institutions have lately come into existence in England, the United States and other countries. The folk school is a resident institution appealing largely to adults who are passing through the later stages of adolescence. The content is predominantly cultural and the objective is to orient students with respect to social, economic, aesthetic and historical factors of their environment. These institutions stand outside the academic system, require no entrance examinations and offer no degrees.

In addition to the above classifications are numerous other educational ventures for, by and of adults, which are usually regarded as a part of adult education. Those demanding special attention are: women's clubs, Chautauquas, lyceums, university extension, correspondence schools, libraries, museums and discussion groups. One of the latest groups belonging to this miscellaneous category is composed of parents; the bulk of parental education at present consists of groups organized for the purpose of child study. There is, however, a decided trend toward including all of the functions of parenthood in such education.

Adult education crosses the path of the social sciences at three points: its general philosophy, or, more particularly, its motivations, objectives and aims; its content, or the relation between its subject matter and existing cultural patterns; and its method, or its pedagogical and psychological foundation.

There is no unified philosophy of adult education, no agreement with respect to objectives and aims. This is, of course, not to be wondered at, since general educational philosophy is forever in flux. The debate continues between those who insist that all education, including adult education, can have but one legitimate aim, namely the intellectual growth of the individual, and those who with equal persistence contend that the aim should be social. The argument, stated in these terms, will never end. An individual's primary motivation to seek education as an adult may be conceived in individualistic, personal terms, but once he begins utilizing this education he finds himself in a social milieu. Indeed he cannot even participate in the educational experience without responding to, and initiating, social stimuli. The acute problem in this area of motivations and objectives is not rooted in the inquiry as to how the adult's education is to be

ultimately used but rather in what specifically motivates him at the moment. Adults seek intellectual growth because they believe in its effectiveness to endow them with greater power, with increased facilities for expressing themselves as personalities, with larger freedom; they wish to create, to appreciate; they desire to become better specialists or to reach beyond their specializations. Adult education needs no truer philosophy than to be alert in responding to this wide range of motivations. And if a special group, a collective unit, wishes to educate its members in order to enhance the total group's welfare, the result is merely a reenforcement of motivations.

The content for adult education is derived from individual and group needs; it is influenced by the sponsoring agency, the local setting, the availability of teachers and the intellectual capacity of adult students. In many instances the content for adult education represents merely an adaptation of academic curricula; in other cases adult classes and institutions have evolved their content by a process of conscious opposition to academic traditions. The exceedingly wide variation in subject matter existing at present makes generalization impossible.

The chief debate in this area of content revolves about the question: Shall adult education be cultural or vocational? The term "cultural" is used in this connection to denote subject matter which has no direct utilitarian purpose but which is intended to enrich intellectual and appreciative life. In Denmark, for example, the people's colleges undertake to teach only non-vocational subjects; their curricula are made up of such studies as literature, music, art, economics, history, etc. In the United States, on the other hand, the efforts of adults to improve their knowledge in order to enhance their vocational status are called adult education. Moreover, many subjects which are taught from the cultural point of view are discovered to have later vocational applications. The line of demarcation between vocational and cultural subjects is not as sharply defined as many believe. Any subject may eventually prove to have utilitarian value, and by the same token a vocational subject may lead to cultural considerations. The real essence of the problem of content lies in discovering what adults are prepared to learn rather than in determining what should be taught. From the sociological point of view, the curriculum should be derived from the impending adjustments which adults are called upon to make in any given cultural situation. From the pedagogical point of view, subjects should begin where interest is alert and acute. And, from the psychological point of view, subjects for adult classes should be compatible with the intellectual levels of the prospective students.

Since adult education proceeds under the auspices of so wide a number of institutions and agencies, it is to be expected that there will exist also a wide variation in pedagogical method. An assemblage gathered within a huge tent listening to a noted lecturer is classified under the heading of adult education, and an individual pursuing a correspondence course is likewise placed in the same category. But between these two extremes lies the great bulk of that educational activity which is slowly coming to be called adult education, namely, small study groups or classes following a definite sequence of subject matter. Each of such groups is supplied with a teacher, and the method of learning is one in which students are stimulated and guided by the teacher. Often the teacher uses the same methods as are employed in ordinary schools and colleges. If there is anything distinctive about method in adult education, it is derived from the growing use of discussion. The discussion method has come to be the accepted learning process for large numbers of adult classes. It is, of course, a method admirably suited to adults; the teacher and the students are often on the same level of experience, and through discussion this experience is utilized as educative material. Moreover, adults are likely to desire a participating share in their education; they can achieve this much more advantageously through discussion than through reading, recitation and listening to lectures. The discussion method represents a social process; the entire group reveals through discussion not merely its knowledge but its feelings, interests and prejudices. It is, in short, a method of cooperative learning.

The so-called adult education movement assumed form and substance in the United States during the decade following the Great War. The Carnegie Corporation brought into existence an advisory committee, and in addition conducted several exhaustive surveys; a national conference was held in Cleveland under its auspices in 1925, at which time the decision was taken to organize an American Association for Adult Education. This organization has maintained headquarters in New York City

since October, 1926. Its functions are not primarily promotional or operative; it serves as a "clearing-house" for general information, sponsors studies, researches and demonstrations, and acts as a national coordinator for the movement as a whole. The researches which have resulted from both the Carnegie Corporation's activities and those of the American Association for Adult Education are listed in the bibliography below. From the point of view of the social sciences, the two significant aspects of research sponsored by the American Association for Adult Education are: community surveys conducted for the purpose of discovering the available educational opportunities for adults; and psychological experiments designed to reveal the educability of adults. With respect to the latter problem, Professor E. L. Thorndike concludes that general ability to learn rises until about the age of twenty and then, perhaps after a stationary period of some years, slowly declines; the decline is very slow, perhaps one per cent per year, and it is probably safe to say that adults under fifty should not be deterred from learning anything which they really need to learn.

EDUARD C. LINDEMAN

See: EDUCATION; VOCATIONAL EDUCATION; WORKERS' EDUCATION; CONTINUATION SCHOOLS; CORRESPONDENCE SCHOOLS; UNIVERSITY EXTENSION; PEOPLE'S UNIVERSITIES; FOLK SCHOOLS; CHAUTAUQUAS; PARENTAL EDUCATION; WOMEN'S ORGANIZATIONS; LIBRARIES; MUSEUMS.

Consult: Evans, O. D., *Educational Opportunities for Young Workers* (New York 1926); Fisher, D. C., *Why Stop Learning* (New York, 1927); Hart, J. K., *Adult Education* (New York 1927); Kallen, H. M., *Education, the Machine and the Worker* (New York 1925); Keppel, F. P., *Education for Adults and Other Essays* (New York 1926); Hall-Quest, A. L., *The University Afield* (New York 1926); Lindeman, E. C., *The Meaning of Adult Education* (New York 1926); Martin, E. D., *The Meaning of a Liberal Education* (New York 1926); Peffer, N., *New Schools for Older Students* (New York 1926); Robinson, J. H., *The Humanising of Knowledge* (2nd ed. New York 1926); Sheffield, A. D., *Joining in Public Discussion* (New York 1922); Yeaxlee, B. A., *Spiritual Values in Adult Education*, 2 vols. (London 1925); American Library Association, *Libraries and Adult Education* (Chicago 1926); Carnegie Corporation of New York, *Office Memorandum*, nos. 15, 18, 20 (New York 1925–26); World Association for Adult Education, *Annual Report* (London 1920–); American Association for Adult Education, *Annual Report* (New York 1927–); British Institute of Adult Education, *Handbook and Directory of Adult Education* (London 1927–); American Association for Adult Education, *Journal* (New York 1926–28), *Journal of Adult Education* (New York 1929–); British Institute of Adult Education, *The Journal of Adult Education*, semi-annual review (London 1926–); American Library Association, *Adult Education and the Library*, issued quarterly (Chicago 1924–).

ADULTERATION is the debasing of a commodity by admixtures of foreign, inferior or harmful material or by reducing its grade below that which it is represented to be, to the loss or disadvantage of the user, either in money or in service rendered.

Adulteration may increase weight or bulk, improve or alter appearance or flavor to simulate an article of higher grade or different kind. Sometimes a valuable substance is extracted and substitution made of a color or flavor which conceals the loss (e.g. skimmed milk given the appearance of creaminess by addition of a yellow dye). Sometimes one commodity is sold under the name of another (e.g. a mixture of low grade white flour and bran sold as graham flour).

In another class of cases poisonous, tainted or diseased material is mixed with sound (decomposed salmon tinned with fresh salmon). Defects may be concealed by special processing or packaging (tainted sausage disguised by strong spices). Factory made furniture is very commonly modified and finished to simulate antiques. Sometimes even worm holes are introduced into new lumber by ingenious devices, and a close imitation of the wear and tankard dents of centuries of European wassailing is produced on table tops in American mass production plants.

Recorded practises of adulteration date from the earliest times and have been in frequent evidence throughout the civilized world since the early Middle Ages. The methods and devices used have at all times drawn from the most advanced ideas of science and the arts, and important discoveries in chemistry have formed the basis for a whole system of adulterative practises—the use of artificial preservatives in foods, for example.

The reasons for adulterative practises are constant, and plain enough, but the technique is continually changing. The protection afforded the ultimate consumer (who is given no practicable redress under the common law) varies from no protection at all in some countries and states to fairly effective safeguards for commodities that enter into interstate commerce and which, moreover, affect life or health. These include food and drugs, but not cosmetics; seeds and fertilizer and insecticides, involving the

welfare of a large agricultural population; and a few kinds of goods, such as soap, when infrequently the question of unfair competition brings the matter into issue before the Federal Trade Commission in the interest primarily, not of the public, but of competitors who are put at a disadvantage in the market.

In a very limited class of commodities, such as meat and milk, a considerable degree of protection is afforded, in a very few states, even when production and distribution are intrastate. In many jurisdictions, however, such control activities as exist are dealt with by public authorities more as a political football than as a problem for technicians.

Adulteration appears as a factor in every kind of merchandise. Fugitive and water-soluble dyes are substituted for permanent pigmenting materials in ordinary writing ink and in textile fabrics; castile soap is made with fats far different from, and cheaper than, olive oil; inoperative or "dummy" vacuum tubes are introduced into radio sets because such sets are commonly valued by the buyer on the basis of the number of tubes employed; illuminating gas is reduced in heating value by admixture of inert gases; electric lamp bulbs of the inefficient carbon filament type are made to simulate the modern efficient tungsten lamps; and reworked wool, or shoddy, is used as a cheap and non-durable substitute for virgin wool in clothing. Most of such adulterations go undetected by an overwhelming majority of consumers, but are not likely to elude inspection by the government or by the few hundred of the more progressive manufacturing corporations which conduct elaborate and costly tests to protect themselves against commercial cheating. Against such large scale frauds as the substitution of inferior woods for mahogany in furniture, of inferior, split and artificial leather for real leather in luggage, and of hare and woodchuck furs for sable, fox, mink and skunk, the ultimate consumer has no practicable mode of protection under the going structure of law, administrative government and industry. Unfortunately middlemen or retailers, who nominally act as the purchasing agents for the consumer, have only to a negligible degree offered him assistance in his increasingly varied and difficult problems of purchase.

The amount of technical and legal activity required even for the moderate amount of food and drug control work that has been carried on in the United States since 1906 can be judged from the fact that, under federal control alone, which is limited to interstate commerce and imports, about 25,000 cases have been reported to the legal arms of the government for court action, and decisions have been handed down in 16,000 cases. Imported goods have been proceeded against in nearly 200,000 cases; 300,000 food and drug samples have been collected and examined.

The practical control of adulterative practises of all kinds depends first upon standards—that is, accepted uniform definitions and requirements; and second, upon an active and coordinated system of inspection, examination and test based upon those standards. The common adulteration of paint, for example, with all sorts of inferior oil vehicles and mineral "extenders" and inert powders, like whiting and ground flint, remains impossible to control in the public interest until a proper paint for a given purpose has been described and defined in precise and reproducible terms in the form of a standard specification. As yet comprehensive specifications for paint are practically available only through their use by the federal government in its purchases.

Such a national system of specifications already exists for many of the more important food and drug products. For other consumers' goods, standards are largely lacking or, if in existence, are not in common and recognized use. Their growth in the future will probably depend largely upon such national and governmental standardizing agencies as the U. S. Bureau of Standards and the American Standards Association, a federation of forty organizations made up of seven government departments, twenty-three national industrial and trade associations and ten technical societies.

It seems probable that the wide development of such standards must wait upon a considerable and articulate public demand. The development of this demand will very likely depend upon educational activities conducted by one or more of the great foundations. There is not—and perhaps there cannot be, with the present American political structure—any other powerful organized group of a sort having a predominant and financially potent economic interest in the improvement of the consumer's status as to the quality of the goods which he buys. Reform, where it has occurred in the past in a few special fields, has followed exposure of very bad practises so extensively pursued as to characterize, in effect, a whole industry or group of industries, and so to lead to a radical legislative remedy

in the protection of public interest and welfare.

F. J. SCHLINK

See: FOOD AND DRUG REGULATION; INSPECTION; FRAUD; UNFAIR COMPETITION; GRADING; STANDARDIZATION; BUSINESS ETHICS; CONSUMERS' LEAGUES; ADVERTISING.

Consult: Monier, F., Chesney, F., and Roux, E., *Traité théorique et pratique des fraudes et falsifications*, 2 vols. (Paris 1925–27); Chase, S., and Schlink, F. J., *Your Money's Worth* (New York 1927); Blyth, A. W., Blyth, M. W., and Cox, H. E., "History of Adulteration" in *Foods, Their Composition and Analysis* (7th ed. London 1928) p. 3–54; American Medical Association, *Nostrums and Quackery*, 2 vols. (Chicago 1912–21); Wiley, H. W., *1001 Tests for Foods, Beverages, and Toilet Accessories* (New York 1916); U. S. Federal Trade Commission, *Annual Reports* (Washington 1915–); U. S. Bureau of Standards, *Standards Yearbook* (Washington 1927–); a bibliography for 1901–25 of food inspection decisions of the Bureau of Chemistry, in U. S. Department of Agriculture, *Miscellaneous Publication no. 9* (Washington 1927) p. 93–96; articles by F. J. Schlink, A. S. McAllister and R. A. Brady in American Academy of Political and Social Science, *Annals*, vol. cxxxvii (1928) 231–52.

ADULTERY. *See* MARRIAGE; FAMILY LAW.

AD VALOREM AND SPECIFIC DUTIES. A duty levied as a fixed percentage of the price of an imported article is called an ad valorem duty. A duty levied as a fixed number of cents or dollars per pound, gallon or other unit is called a specific duty. The duty on the standard grade of sugar when imported from Cuba—1.7648 cents per pound in 1928—is a specific duty. The equivalent ad valorem duty, when the selling price in Cuba is 2.2 cents per pound, would be about 80 percent. If, however, the price should advance to 3 cents per pound, the equivalent ad valorem duty would be reduced to about 59 percent.

Specific duties are sometimes supposed to be more acceptable to protectionists and ad valorem duties to free traders. There is no necessary connection. Ad valorem duties may accord a high degree of protection, and specific duties may be very moderate. However, in the United States tariffs enacted or proposed by the political parties advocating high protection have in general been characterized by a preponderance of specific duties, while the reverse has been true of the tariffs enacted or proposed by their opponents. One reason is that a high measure of protection may appear less offensive when expressed as a specific rather than as an ad valorem duty. For example, consumers may not appreciate so keenly the burden of the duty on sugar when expressed as 1.76 cents per pound as when expressed as 80 percent ad valorem.

There are two other reasons why protectionists prefer specific duties. First, when prices are falling and in consequence the need of protection is more keenly felt, an unchanged specific duty assures a constantly increasing rate of protection, as indicated by the ad valorem equivalent. Second, when the price of the protected article is subject to violent fluctuations, an ad valorem duty gives the least protection, as measured by the difference between the domestic and foreign price, when prices are low and protection is most needed; and the greatest protection when prices are high and protection is least needed. That is, the benefit from an ad valorem duty varies inversely as the need for such benefit.

The bearing on protection of these two methods of assessing duties is not the only factor to be considered in choosing between them. Ease of assessment and lessening of the likelihood of fraud are factors. The amount due when the duty is assessed by the pound or other unit is easily ascertained and is unequivocal. On the other hand, when the duty is ad valorem the amount due the government may be open to doubt. Such duties are usually assessed on the foreign price as shown by the invoice. But this may be based on a false valuation, and cannot be checked by an independent survey except at considerable trouble and expense.

To overcome the danger of fraud the domestic price has been suggested as a basis for computing ad valorem duties. A strong effort was made in the Act of 1922 and again in 1929 to substitute American valuations. As proposed by advocates of the change, American valuation may be based on the "United States selling price," that is, the price which an importer would pay for the article laid down at an American port before the duty was paid, the price of a similar competing article in the United States or the cost of production in the United States of a similar competing article. It is to be observed that these three bases are not identical. The value arrived at by the last two methods should exceed that arrived at by the first method by approximately the duty.

Advocates of American valuation stress the alleged frauds of undervaluation arising from our present method, the difficulties which appraisers experience in checking the foreign prices submitted by importers as a base for

reckoning the duties which they propose to pay, and the virtual espionage on foreign soil frequently involved in making this check. Such methods, they claim, are a source of international friction.

Opponents of the change minimize the importance of fraudulent undervaluation. They assert that custom house statistics reveal that less than one tenth of one percent of the entries were intentionally undervalued. They deny that the change would contribute to efficiency, asserting, on the contrary, that whether the merchandise is purchased outright (in which case the invoices are documentary evidence of market value) or sold on consignment, the appraisers are in a position to determine more speedily and accurately the base on which the duty should be computed than under any plan of American valuation. They point out that a large part of the imports are of goods that are not comparable with any goods being sold in the markets of the United States. They claim that the change would work a serious hardship to merchants and importers: under American valuation the latter would be unable to estimate the duty in advance and hence their business would become hazardous and speculative. Finally an abstract argument against American valuation is that it would give an administration biased in favor of manufacturing interests a dangerous power of "flexing" the tariff in their behalf.

Back of all these arguments is the fact that under American valuation a high duty may be concealed under an apparently moderate rate. American valuation therefore appeals to protectionists. It is significant that at the congressional hearings the advocates of American valuation have been representatives of manufacturing interests, while those opposing the change were representatives of importers and commercial interests.

However, aside from any question of fraud, some articles lend themselves to one type of duty and some to the other type. Standardized articles, such as wheat, pig iron and sugar, lend themselves to specific duties. On the other hand articles presenting a wide range of qualities and values, such as textiles, lend themselves to ad valorem duties. Frequently to secure the uncompromising precision of the specific duty and yet retain something of the flexibility of the ad valorem duty, a series of specific duties, each limited to a range of values, is imposed. For example, in the United States Tariff Act of 1922 the duty on steel bars, valued at not over 1 cent per pound, is 2/10 of 1 cent per pound; valued above 1 cent and not above 1½ cents per pound, 3/10 of 1 cent per pound; and so on by ascending steps to a value exceeding 16 cents per pound, when the duty becomes 20 percent ad valorem.

PHILIP G. WRIGHT

See: CUSTOMS DUTIES; PROTECTION; FREE TRADE.

Consult: "Ad Valorem and Specific Duties" in United States Tariff Commission, *Dictionary of Tariff Information* (Washington 1924) p. 14–15; Higginson, J. H., *Tariffs at Work* (London 1913) p. 47–74; Gregory, T. E. G., *Tariffs* (London 1921) p. 116–43; U. S. Senate, 50th Cong., 1st sess., *Reports*, vol. ix (1887–88) pt. i, p. 5–7, and appendix, p. 51–53, in which are given opinions on ad valorem and specific duties by nine secretaries of the treasury; United States Tariff Commission, *Information concerning American Valuation as the Basis for Assessing Duties ad Valorem* (Washington 1921); U. S. House of Representatives, 70th Cong., 2nd sess., Ways and Means Committee, *Hearings*, vol. xvi (1929) p. 10194–273.

ADVERTISING. Originally the term signified communication or the conveying of information, but advertising is now most commonly thought of as involving persuasion of some sort as well as information. It is impossible in discussing modern advertising and its institutional arrangements to keep political, religious, educational and other propaganda wholly separated from trade publicity.

As communication rather than persuasion, or at least persuasion to buy, advertising had its earliest recorded use in ancient civilization. Descriptions of runaway slaves and proffered rewards for their return, written on papyri more than three thousand years ago, have been uncovered in the ruins of Thebes. Advertising communication was not limited to written forms, however, in early civilization. The crier of goods for sale and of rewards for the discovery of possessions or persons lost appears to have been common in ancient Greece. Venus herself, according to tradition, engaged Mercury for the latter purpose. The Romans made no small use of advertising. Professional men publicly offered their services on their house walls. Painted notices that property was for sale or lease appeared on doors of buildings. Excavations in Herculaneum and Pompeii have disclosed painted wall signs picturing gladiators and urging attendance at their exploits. Other walls advertised plays, and still others baths—"warm, sea and fresh water."

The general illiteracy of Europe in the Middle

Ages and the limited channels for the movement of ideas of any sort made criers the chief medium of trade publicity. Criers became a national institution in England and also in France, where they formed an organization as early as the twelfth century, perhaps an early illustration of an advertisers' association. In both countries they were employed by shop and inn keepers. The wine criers of Paris not only attracted attention with their horns and their voices but also offered samples of the ware proclaimed.

The seventeenth century in England must be stressed even in a brief history of advertising, for it foreshadowed nearly all that has come since. In the early part of the century billing was the chief form used, with St. Paul's Cathedral, according to Sampson, as the most popular place for posting, and personal services, runaway servants, quack medicines and books as the most frequent subject matter. Ben Jonson, with a ridicule for book advertisers which amusingly contrasts with certain current book selling efforts, enjoined his bookseller to sell his works for wrapping paper rather than by the common means. The earliest advertising in newspapers in England came also in the seventeenth century with the rise of the "mercuries," as the newspapers of the day were called. Among early examples is one with a rather modern sound: "Warhams Excellent Mouthwater, which . . . preserves the Gums and Teeth, takes off all smells proceeding from bad teeth, etc. Is prepared and sold only by W. Strode . . . Tottenham Court Road. . . . " It is interesting to notice the extent to which early English trade advertisements proclaimed nostrums which could not fulfil the claims made for them; and books which no man can describe accurately for another; and new commodities to which, if they were to be sold, favorable attention had to be drawn by such devious devices as the testimony of imaginary physicians.

The modern manifestations of advertising are to be accounted for only in terms of the patterns of economic and social life of which they are parts. Modern advertising is part and parcel of the whole set of thought movements and mechanical techniques which changed the mediaeval into the modern world. In its full history it must be related to the Renaissance; account must be taken of the growth of reading, the development of schools, the advent of public education and the eventual development of an all but general literacy. Advertising is related also to that decreasing commercial use of pack horses throughout the seventeenth century which made transport by wagon and cart "wonted practise" by 1700. It is related to the continued development of transportation by clipper, steamer, train and airplane. The history must include the inauguration of a postal system, another great feat of seventeenth century England, and its expansion and improvement. The growth of publications must be followed from the meager beginnings mentioned above to the present number and variety. The story of these changes must be interwoven with that of changes in knowledge and techniques. The development of road materials, of iron, of steel, of paint, of paper, of ink must all be included, and also a consideration of the significance of steam, electricity, radio, photography, and expanding skills in printing, etching, plate making, news gathering, appealing. All of these, in both their early and later development, are important because they make possible the economic basis of advertising—because they are features of the economic order of which advertising is a part.

The rise of advertising coincidentally with the reorganization of industry in the seventeenth and eighteenth centuries indicates its economic basis. In a world of self-sufficing individuals or groups it is of little importance that one knows what others do or plan to do. In a world where producers specialize, it is all important. Without such knowledge specialization cannot be carried on. In so far as advertising is relied upon for information, it may be said to be fundamental to specialization, for information is fundamental in relating and integrating the specialized units of our production system. Advertising furnishes significant information in two areas. One may be called the trade area. Business men advertise to other business men. As business always involves buying and selling materials or goods or services or some or all of them, mine operators, railroad companies, farmers, manufacturers, merchants, financiers, risk takers and advertisers are anxious to be informed of sources and outlets. Chiefly through trade publications all of these advertise to give or secure this information. The second area in which advertising furnishes information is the consumer area. The consumer, being a specialist, often producing nothing which he himself can use, needs information as to what has been made available for him. His trust that information and goods will be available is what makes it possible for him to specialize. Even considering the wide display of possible purchases now put before most consumers by de-

partment stores and other retailers and the army of specialty salesmen, advertising in printed form provides more information than any other agency. The necessary reliance of business man and consumer upon advertising raises the possibility of a misplaced faith. A discussion of this is best postponed until we have considered the organization for creating and distributing advertising.

The institutional machinery of advertising is massive and complex, since the conveying of economic information has become as much a business as those businesses which it serves. The advertising mechanism in America consists of three chief divisions: first, those enterprises which devise and operate media for carrying publicity; second, the agencies which relate the advertisers to the media; third, an unclassifiable list of supplementary businesses. The media through which advertising may be carried to prospective buyers are many, but they are chiefly newspapers, magazines, outdoor facilities, car-cards, theater films and programs, radio and direct mail material. All except the last are called the media for general advertising. Each of the media of general advertising is itself an enormous business. There were in the United States in 1927 some two thousand dailies, eleven thousand news weeklies and several hundred semi-weekly newspapers. There were approximately seven thousand magazines and periodicals, of which about four thousand were monthlies. The value of a periodical for advertising varies with its circulation and its quality. The latter, for a specific purpose, depends upon many factors, varying with the article for sale and the age, sex, taste and purchasing power of readers. The specialization of magazines aids the advertiser, such magazines as *Furniture Age* and *The National Grocer* reaching different readers from those subscribing to *Farm and Fireside*, *Advertising and Selling*, *The Dental Digest*, *Golfers' Magazine* or *The American Boy*. Announcements of the extent of periodical circulation are now usually dependable. The chief agency for authoritative statement in this field is the Audit Bureau of Circulations, an organization comprising advertisers, advertising agents and publishers.

The most important forms of outdoor advertising are posters, painted and electrical displays and occasionally sky writing by airplane. Posters are now usually of certain standard dimensions adapted to standard poster boards, of which there are several hundred thousand in the United States. Painted display, a highly organized business, is the modern elaboration of the advertising with which the residents of Pompeii were familiar. The "wall," which is still frequently used literally, has in many other cases become a "bulletin"; that is, a wall constructed solely for the purpose of painted signs. Many of these are now built of small sections that may be taken down and painted indoors. "Painted copy" usually "runs" for several months. Electrical displays in their many bizarre forms and sky writing need no description.

Car-card advertising has been made significant by the developments which compel thousands of people to travel upon street cars or suburban trains every working day. Development of the business of confronting travelers with urgent proposals for expenditure has led to a standardization of cards and "runs." Advertising on theater programs and more recently on moving picture films constitutes a large business. The advent of the radio has reintroduced the crier, galvanized and glorified. "Time" is purchased from radio broadcasting companies and is utilized usually for the broadcasting of excellent programs with minor comment of an advertising character. To these media might be added many miscellaneous types of general advertising, including window display, novelties and business shows.

Advertising which goes directly from advertiser to prospect is called direct advertising. Its technique consists first of selecting likely prospects and second of devising mailing pieces calculated to secure the desired results. Mailing pieces are often planned as a series which, directed to the prospect one after another, are intended to find any possible weakness in his disinclination to buy or take advantage of impressions earlier made. Direct advertising is the sole instrument of some advertisers, although it is more commonly used in conjunction with general advertising. Special concerns are equipped to plan and execute any or all phases of direct advertising.

The most important single unit in the American advertising machine is the advertising agency. This institution has become a highly specialized middleman acting between the advertisers as buyers and the media as sellers of space. While some advertisers carry on every function of the agency for themselves, the larger ones usually rely on agencies. The agency in America had its beginnings before the Civil

War in certain "agents" who, contracting for space in publications, resold it to manufacturers or other advertisers. The agency now represents the advertiser rather than the space seller, buying for his client such space in media as he believes useful in any given case. The agency, however, receives its remuneration from the publications in the form of a recognized 15 per cent commission. The fully developed modern agency is far more than a middleman dealing in space. It has become an institution which carries all the advertising tasks of the advertiser. Agency operations commonly include: first, securing the "accounts" of advertisers; second, conducting investigations of the products concerned and of markets, media and methods; third, planning the advertising, which often takes the form of a campaign or a series of campaigns and may be combined with a merchandising plan also devised by the agency; fourth, preparing the copy; fifth, selecting the media, giving attention, among other matters, to size and dates of showings and relationships to other aspects of the merchandising plan; sixth, constructing the plan of illustration, type, lay-out and the like, and often looking after the physical production of drawings, etchings and type plates; seventh, aiding in "merchandising the advertising," which consists of interesting salesmen, dealers or others involved in the merchandising activities.

The advertising agencies have been responsible for a very large part of whatever degree of science has found its way into advertising. Their research departments, manned in some part by men trained in the tools of the social sciences, have seriously endeavored to reduce guess work. Together with certain periodicals they have gathered, and encouraged governmental agencies and trade associations to gather, data which make it easier to estimate the needs, wants and abilities to pay of various parts of the population. All of this, however, has not always made advertising profitable. Although numerous examples of great success achieved through advertising are cited, the possibilities of determining in advance the profits to be derived from advertising leave much for the business man to desire. The statement of one leading agency that it "practises advertising as an almost exact science," is reminiscent of Dr. Johnson's statement in 1759 that "the trade of advertising is now so near to perfection that it is not easy to propose any improvement." Advertising is probably no nearer an exact science now than it was near to perfection then. It remains a matter of strategy rather than of scientific certainty.

The adjuncts of the principal advertising mechanisms include businesses or industries concerned with printing, paper making, copy writing, advertising art, electrotype manufacture, photography and many other activities. Any of these may be integrated with a medium or an agency or may operate independently. Trade associations bind together for mutual benefit several divisions of the advertising world. The most inclusive is the International Advertising Association. This organization has recently established a Bureau of Research and Education for purposes implicit in its title.

Although the institutional machinery of advertising is more developed in the United States than elsewhere, it has advanced in all countries that have been touched by western economic methods, taking patterns similar to those described. English styles are closest to our own. The complete sales appeal is less developed in continental advertising; but in publicity, especially through distinctive posters, Germany and particularly France are notable. Trade publications are better in Germany than elsewhere in Europe. The farming out of space is still common, and Americans find circulation figures less satisfactorily checked than at home. In South America and the Orient advertising is expanding; Japan, in fact, is on a footing with England and the United States.

The usual measure applied to advertising costs is the gross amount paid for the various media. There are no authentic figures to be had, but persons in a position to have reasonably accurate information estimate the total outlay in the United States for 1928 at between one and a half billion and two billion dollars. The same sources make more detailed estimates as follows: newspapers, $765,000,000; magazines, about $191,000,000; business papers, $95,000,000; outdoor media, $80,000,000; theater, $1,600,000; direct mail, $450,000,000. This leaves street car, radio advertising and samples uncounted. From such figures of the "white space sales" of media, erroneous conclusions are frequently drawn. They are used to illustrate the high cost of selling. This neglects the cost of alternative methods. Advertising is ordinarily used because it is relatively inexpensive. The same deduction overlooks the space bought by educational, religious, charitable and political organizations for propaganda purposes. In a campaign year the latter is large. Moreover, a

large offset must be made for other services performed by the same expenditure. Much of the cost of newspapers and magazines, for example, is paid for in advertising receipts.

It has been suggested above that selling takes place in two areas: selling to the trade, that is, to extractors, manufacturers, railroad companies, financiers, risk takers, advertising institutions, merchants and other specialized producers; and selling to consumers. In the first of these areas there has been little questioning of the social merit of advertising. It is assumed that the trade buyer is sufficiently pecuniarily minded and sufficiently informed to protect himself.

Against consumer advertising, however, several charges are made. First is the declaration that dishonest and fraudulent advertisements lure large sums from customers. Investigations by the American Medical Association and the Federal Trade Commission justify the conclusion that these charges are well based. Chairman Humphrey of the Federal Trade Commission, admitting that there was no method by which the amount could be accurately measured, estimated, in 1928, that the amount taken annually by fraudulent advertising was more than five hundred million dollars. The greatest portion of this he believed to be drawn from the sick, the poor and the ignorant through advertisements of medicines, cures, fake schools and the like, although other credulous persons contribute heavily. Fraud by advertising and using the mails to defraud are clearly unlawful, and both the Department of Justice and the Post Office Department have acted with vigor but without complete success. The Federal Trade Commission in the autumn of 1928 organized, with the cooperation of publishers, an attack upon fraudulent advertising and the publications which carry them.

Advertising interests have by no means been wholly lacking in the past in actions against untruthful advertising. A number of publications carry a guarantee of the reliability of all advertisements that appear in their columns. Many individual publications censor all advertising submitted and suggest the modification of objectionable copy or refuse it. A model statute for the prevention of fraudulent advertising was drawn up in 1911 under the direction of *Printers' Ink*, probably the most important trade publication in the advertising world; and this law, or a modification of it, is now in effect in most of the states. A National Vigilance Committee which was concerned with enforcement of the law was organized in 1912 by the Associated Advertising Clubs of the World. Its work was later largely taken over by the Better Business bureaus, national and local, which also played a part in the plans of the Federal Trade Commission. Although, as one advertising man comments, "the war against untruthful advertising has been long and bitter," the end of the imposter, the fraud and the cheat in advertising is not yet. One continuing difficulty is to distinguish between what is outright fraud and what is misrepresentation and near fraud.

A second charge against advertising is its alleged vulgarity. This takes various forms. A more specific charge is that advertisers disfigure walls, sidewalks and scenery and force a brash and garish intrusion upon our senses. England has for many years felt the need of regulating the advertiser's willingness to press his interests upon the attention of the public. As early as 1853 advertising vans were prohibited in London, and the sandwich man has long since been moved from the sidewalk to the gutter. There was formed in England in 1893 an organization called the Scapa, the National Society for Checking the Abuses of Public Advertising. In France, Germany, Switzerland, Italy, Austria, Hungary, the countries of South America, and the United States as well, regulation of billposting has been necessary. These regulations in some instances are left to a general police control. Some specifically forbid the disfigurement of landscapes. In other instances laws protect public monuments and limit the size and height of billboards. In the United States such regulation is for the most part in charge of the municipalities. Advertisers contend that in cities their billboards are far more sightly than the vacant lots and rubbish piles which they sometimes hide. Their case is perhaps weaker when they are charged with the concealment and disfigurement of rural scenery, which was satirized recently in the verse:

> Along the country roads there grow
> Willow trees and Texaco,
> Mobiloils and marigold,
> And other fruits of men and mold.

Another alleged vulgarity of advertising is found in its insistent appeal to mankind's lower or less admirable motives. A casual survey of advertisements in the most commonly read general or women's periodicals discloses frequent attacks upon the prospect through his fear, shame, vanity, ostentation or snobbery. It is

surprising how frequently such motives are appealed to by reputable concerns selling reputable goods. Many concerns also rely upon testimonials (bearing all the earmarks of being solicited and paid for) of movie stars, pugilists, society leaders, professional ball players and minor representatives of royalty. It is all the more depressing to realize that even after study advertisers find such motives the most moving and such methods the most effective. That these motives and methods are not limited to America is indicated by the remarks of a prominent English advertising man who, in commenting enthusiastically in 1928 upon a campaign based on emulation, said: "If you would sell cars to the British public, appeal to their sense of snobbery, create a definite class appeal. Tell them how many kings and queens and bishops and right honorables are using your car."

The study of the psychology of advertising, which has had a good deal of attention and discussion for two decades, together with the experiences of advertising writers, has produced several classifiable methods of approaching readers. These include emotional copy, "reason why" copy, narrative copy, human interest copy, testimonial copy, suggestive copy. These are ways of dressing the so-called appeals. The appeals themselves must inevitably be to human attitudes, ideas, emotions, instincts or ways of behaving, according to the kind of psychology one has in mind.

The criticism often made that advertising exercises a control over the consumer's mind and choices is more or less implicit in the foregoing. One specific form of alleged control is a monopoly created by impressing a brand upon the consumer's consciousness. Since ancient Egypt makers have attempted and succeeded in doing this with trade marks. The consumer is in part exploited, in part protected by this. While a widely advertised brand by no means always indicates the best obtainable, it does in a great majority of cases indicate dependable goods. Moreover, although the consumer does not know in any technical sense what a brand means, he can be reasonably sure that successive units will be of uniform quality.

The competitive waste of advertising competing brands, perhaps equally good, is of concern to every student of advertising. So it was more than two hundred years ago. There has even been improvement, if one is to believe what Addison wrote in the *Tatler* in 1710: ". . . above half the advertisements one meets with now-a-days are purely polemical. The inventors of 'Strops for Razors' have written against one another for several years. . . ." Of this waste, if waste it be, it must be said, as might be said of all struggles for the control of the consumer, including even the modern giant struggles of trade associations, that the waste is not in advertising but in the competitive system. If industries must battle in the market, printers' ink, paper and advertiser's art are the cheapest ammunition in the arsenal of sales effort.

But the criticism of control takes a more general form. Advertising is charged with an influence upon the habits of consumption and the standards of taste of the consumer. There is no doubt that there is such an influence. The millions spent on consumer advertising have no other purpose; and, although many appeals prove ineffective, the millions are not all spent in vain. The question whether this influence is desirable or undesirable is not so easily dismissed. It raises issues of a fundamental sort. The question involved is, how shall the standards of life be determined? The criticism of the advertiser's influence on the consumer's mind is usually based on the theory that the consumer is capable of knowing what he wants without outside suggestion. This theory is clearly untenable. What one comes to call the good life is determined by post-natal influences. The problem is, what shall the influences be? It may be said that whoever devises and directs the influences, it should not be those who are themselves influenced by a view to profit. This is a satisfactory generalization until one asks: Who should be responsible? How should the responsible agents be selected? How should they be compensated?

In eras when society was not able to produce beyond bare necessities, tradition, the medicine man and priest may have been satisfactory guides to the courses which life should take. But the great development of advertising came concomitantly with a reorganization of social production machinery. As an almost necessary part of the increase of production there has come an amazing invention of consumers' goods. New resources, specialization and the machine have produced not only more wealth but vastly greater variety.

Advertising, in spite of its costs, has proved itself an economical tool in the modern business system for bringing information as to possible choices before the many possible buyers. It has been used to urge upon every specialized

producer whatever has become available for use in production technique and upon every consumer whatever has become available for consumption. But the few standards for a narrow physical life which the consumer may have developed in a simpler day have been not so much erased by the flood of advertising rhetoric as they have been submerged in the onrush of improvements and overwhelmed in the torrent of variety. While by no means all materials or goods which were made a generation ago, and are still made, have been improved, how can the standards which guided either maker or user among the relatively few choices of that day be anything but impotent before the technique and diversity of today? Where opportunity to profit seemed possible, advertisers have honestly and accurately, or inaccurately and dishonestly, as the case might be, informed business men and consumers of the possibility of choice. They have used truth, deception, cajolery, vulgarity—almost every method known—to show and to persuade. They have in part, although by no means entirely, accepted the crude consumption standards of a crude world and appealed to them with crude methods.

But this great advertising activity has been largely due to the fact that advertisers have accepted increased productivity and, more important, its corollary, increased consumptivity. In accepting the first, they have often found it necessary to "go to the country"—the consumer—to secure acceptance by producers of important technical improvements. In accepting consumptivity they have been alone. The bankers have preached investments; the economist has taught saving; the schools have inculcated thrift. Our tradition is a tradition of careful frugality. The pillars of our society were built for a society of strict economy. No agency with a public interest was ready, with the coming of the new productivity, to encourage or guide in the enjoyment of the new wealth; nor has any since been ready to point the way to good use. Only now the economist is beginning to wonder if saving cannot go too far; if more spending may not be good even for production.

Consumer advertising is the first rough effort of a society becoming prosperous to teach itself the use of the relatively great wealth of new resources, new technique and a reorganized production method. Whatever eventually becomes of advertising, society must provide some device for this task. Some agency must keep before the consumer the possibilities resulting from constant advance, for the world appears to be learning to produce goods ever faster. Today the voices crying most loudly in the wilderness of consumption are more concerned with noisily advertising the weaknesses of advertising than with the patient teaching of standards of taste which will reform advertising by indirection. Other action is possible. An increase of government specifications would help, although not as much as is often thought, and they would require an enormous amount of advertising. What is most needed for American consumption is training in art and taste in a generous consumption of goods, if such there can be. If beauty is profitable, no manufacturer is desirous of producing crudity or vulgarity. Advertising, whether for good or ill, is the greatest force at work against the traditional economy of an age-long poverty as well as that of our own pioneer period; it is almost the only force at work against puritanism in consumption. It can infuse art into the things of life; and it will, if such an art is possible and if those who realize what it is will let the people know.

LEVERETT S. LYON

See: BUSINESS; COMPETITION; MARKETING; TRADE MARK; ADULTERATION; FRAUD; UNFAIR COMPETITION; WASTE; BUSINESS ETHICS; CONSUMPTION; SALESMANSHIP; PRESS; PUBLICITY; PROPAGANDA.

Consult: Sampson, Henry, *A History of Advertising* (London 1874); Presbrey, Frank, *The History and Development of Advertising* (New York 1929); Mataja, V., *Die Reklame* (2nd ed. Munich 1916); Goodall, G. W., *Advertising* (London 1914), with an introduction by Sidney Webb; Starch, Daniel, *Advertising Principles* (Chicago 1927); Sheldon, G. H., *Advertising* (New York 1925); Vaughn, F. L., *Marketing and Advertising* (Princeton 1928); Vaile, R. S., *Economics of Advertising* (New York 1927); "Standardization and the Consumer" in American Academy of Political and Social Science, *Annals*, vol. cxxxvii, no. 226 (May 1928); Hart, C. S., *Foreign Advertising Methods* (New York 1928); Höller, F., *Die moderne Reklamenunternehmung* (Munich 1925).

ADVISORY BOARDS. *See* BOARDS, ADVISORY.

ADVISORY OPINIONS.

NATIONAL. The historical relations of the English judges to the Crown and to the House of Lords explain the practise by which English judges gave opinions upon legal questions extrajudicially, that is to say, otherwise than as judgments. Since the English king was the fountain of justice and since the English national courts evolved from the *curia regis*, the English king retained the power, when acting

in his judicial capacity, of consulting his judges. The Privy Council, to which the monarch's judicial powers came to be delegated, likewise consulted the judges; and when in 1833 Parliament created the present Judicial Committee of the Privy Council (3 & 4 Wm. IV, c. 41), the duty was conferred upon it of advising the Crown on legal questions. Similarly from the king's power to compel the attendance of his judges in the *curia regis* there grew up the practise of calling on the judges to advise the monarch in his executive capacity. By 1770 this power was well recognized, although ten years earlier the judges had announced that they would not be bound in litigation before them by extra-judicial opinions previously given [Sackville's Case, 2 Eden 371 (1760)]. Since the establishment of the Judicial Committee of the Privy Council, resort to the judges has become unnecessary when the opinions of the law officers, the normal guides of the government in matters of law, are deemed insufficient. In recent years, however, several parliamentary acts have permitted references to the High Court for advice [51 & 52 Vict. Stat., v. 25, c. 41 § 29 (1888); 10 & 11 Geo. v, c. 30 (1920)]. The judges have been unfriendly to such legislation. A recent attempt to extend this practise encountered the stubborn and successful opposition of the law lords [see *Parliamentary Debates*, 5th series, vol. lxx, 755, 795, 914 (1928)].

From the time of Edward I judges have been summoned to aid the House of Lords in both its judicial and its legislative capacities. With a notable exception [Duke of York's Case, Rot. Parl., 39 Henry VI, no. 12 (1460)], they have always attended on request, and at the time of the American Revolution it was well settled that they were bound to give advice on questions of law arising in cases before the house (Blackstone's *Commentaries*, vol. i, *168). But ever since the judicial functions of the House of Lords have been entrusted to the law lords, the opinions of the judges have been less and less frequently invoked. In recent times, also, the right of the House of Lords to ask the judges "what the law is, in order to better inform itself how, if at all, the law should be altered," has lain dormant, but as late as 1912 its existence was recognized [Attorney General for Ontario *v.* Attorney General for Dominion (1912) A. C. 571, 586]. While the judges have declined to answer questions because not "confined to the strict legal construction of existing acts of Parliament" [*In re* The London and Westminster Bank, 2 Cl. & F. 191, 193 (1834); M'Naghten's Case, 10 Cl. & F. 200 (1843)], "the right to have the opinions of the Judges on abstract questions of existing law" was vigorously affirmed.

In the United States the advisory opinion did not follow its English history. The doctrine of the separation of powers, its basis and applications, as well as the unique scope of judicial review under American written constitutions, have always confined American judges, in the main, to adjudication. The framers of the constitution rejected the proposal to confer upon the executive and Congress the right to require opinions from the Supreme Court (Farrand, Max, *Records of the Federal Convention*, 3 vols., New Haven 1911, vol. ii, p. 341). When, therefore, President Washington in 1793 submitted to the justices of the Supreme Court twenty-nine questions (Sparks, Jared, *Writings of George Washington*, 12 vols., Boston 1834–38, vol. x (1836) append. xviii) concerning America's neutral rights in the Franco-British conflict, Chief Justice Jay and his associates politely but firmly refused to comply with the request. Jay argued that the constitutional provision enabling the president to call upon the heads of departments for advice precluded the possibility of requiring advisory opinions of the justices, and the giving of such opinions would not be a proper exercise of the "judicial power." The court has ever since rigorously abstained from such advisory opinions, even when elicited in the guise of formal litigation [see series of decisions from Hayburn's Case, 2 Dall. 409 (U. S. 1792) to Muskrat *v.* United States, 219 U. S. 346 (1911)]. It has based its repeated refusals to entertain other than actual litigation *inter partes* on its conceptions of the requirements of the separation of powers and the restriction of "judicial power" under the constitution to the disposition of "a case or controversy." Upon like considerations the High Court of Australia has excluded advisory opinions from the scope of "judicial power" under the Australian constitution, which is largely modeled upon that of the United States [see Luna Park, Ltd. *v.* Commonwealth of Australia, 32 Comm. L. R. 596 (1923)].

In most of the states the inability to resort to the courts or their judges for advisory opinions, on the part of either the executive or the legislature, is a firmly rooted doctrine of public law. So far as the advisory opinion has prevailed in American states, Massachusetts has set the ex-

ample. It was first introduced in the Massachusetts constitution of 1780 (pt. 2, c. 3, art. 2); the first opinion was given in 1781 [Opinions of the Justices (1781), 126 Mass. 547 (1879)], and it has survived two efforts to secure its repeal, in 1820 and again in 1853. This feature of the Massachusetts constitution was followed in the New Hampshire constitution of 1784 (now art. 74, of the constitution of 1902); in the Maine constitution of 1820 (art. 6, § 3); in the Rhode Island constitution of 1842 (art. x, § 3, reaffirmed in amendment xii, § 2, 1903); and is still maintained in these New England states. The practise was also adopted in the Florida constitution of 1868 (now art. iv, § 13), in the Colorado constitution of 1886 (art. vi. § 3) and in South Dakota in 1889 (art. v, § 13). Two states have sanctioned the advisory opinion by statute without explicit constitutional authority [see Alabama Civil Code, §§ 10290–91 (1923); Opinions of the Justices, 209 Ala. 593 (1923); and Revised Code of Delaware, c. 13, § 2, c. 110, § 11 (1915)]. But in several states there has been a recession in the use of the advisory opinion. The second Missouri constitution adopted the device in 1865 (art. vi, § 11), but it had an ineffective history and was abandoned by the constitutional revision of 1875. In Vermont the statute of 1864 authorized advisory opinions and was repealed in 1915, and in Minnesota such a statute was declared unconstitutional [Matter of Senate, 10 Minn. 78 (1865)]. In New York, North Carolina, Nebraska, Oklahoma and Pennsylvania advisory opinions were at first given without statutory authorization, but the practise has become atrophied. And in some of these states power to do so has been explicitly denied by the highest court [*Re* Board of Public Lands, 37 Neb. 425 (1893); Matter of State Industrial Commission, 224 N. Y. 13 (1918); Opinions of the Justices, 64 N. C. 785, 792 (1870)]. Likewise in Connecticut and Ohio the judges have refused to give opinions requested by their legislatures [Reply of the Judges, 33 Conn. 586 (1867); State *v.* Baughman, 38 Oh. St. 455 (1882.)]

In Canada the idea of the advisory opinion does not find itself in the grip of the doctrine of the separation of powers, nor is it involved in the unique scope of judicial review over legislation to which the American constitutional system gives rise. But even in Canada the use of the advisory opinion has encountered judicial opposition. Nevertheless it has won its way, so that at present the governor general or either house of Parliament may require the opinion of the Supreme Court of Canada upon any question of law or fact concerning the constitutionality of any dominion or provincial legislation or on any other matter which the governor in council sees fit to submit [Revised Statutes of Canada 1927, c. 35, §§ 55–56; see Attorney General for Ontario *v.* Attorney General for Canada (1912), A. C. 571, 585–86]. Seven of the nine provinces have likewise adopted statutes requiring their respective courts to answer similar questions. In several of the Latin American countries there are provisions for legislative reference of legal questions to the courts and for the participation by the judges in legislation affecting the codes of these countries (Rodriquez, J. I., *American Constitutions*, 2 vols., Washington 1906–07, vol. i, p. 278, 313, 375, 415; vol. ii, p. 336–37).

The procedure for eliciting advisory opinions is relatively simple. The executive, by written request, or either house of the legislature by resolution, submits to judges a number of questions affecting a proposed measure or action. Answers are given by the judges collectively or *seriatim*. Even where the duty of giving such opinions is well established, the judges may refuse to express opinions, for they very often exercise the right to pass upon the reasonableness of the demand made upon them [Interrogatories of the Senate, 54 Colo. 166 (1913); Answer of the Justices, 148 Mass. 623 (1889); Answers of the Justices, 95 Maine 564 (1901); Matter of Northern Missouri R. R., 51 Mo. 586 (1873)]. That the giving of advisory opinions by judges runs counter to the instinctive feeling of American lawyers is attested by the refinements to which courts have resorted in order to contract the scope of this duty. Thus, as a condition of giving advisory opinions, courts have required that no private rights be involved [Opinion of the Court, 62 N. H. 704 (1816), but see Opinion of the Justices, 190 Mass. 611 (1906)]; that no existing statutes be affected [*Re* Penitentiary Commissioners, 19 Colo. 409 (1894)]; that the question be *publica juris* and framed with sufficient definiteness; that no questions of fact be in issue [see Dinan *v.* Swig, 223 Mass. 516 (1916)]; and, usually, that the question be not of a nature affecting private interests [*Re* Opinion of the Judges, 43 S. D. 645, 647 (1920)]. Under the Canadian practise any question submitted is conclusively deemed to be appropriate for response. In all states, with

the exception of Colorado [Matter of Constitutionality of S. B. 65, 12 Colo. 466 (1889)], the opinions are those of the individual judges and are not given as the opinions of the court. Thus, legally, they are not binding in later litigation. But while the technical doctrine of *stare decisis* is not applicable, the views expressed in an advisory opinion not only receive careful consideration in subsequent litigation but in fact exercise a powerful influence psychologically upon adjudication [see Loring *v.* Young, 239 Mass. 349, 361 (1921)]. In Colorado such opinions have the authority of decisions.

The device, it is urged, permits the prompt resolution of legal doubts and avoids the waste of enacting legislation which the courts subsequently invalidate. But these conditions treat questions of law and constitutionality *in abstracto*, and fail to consider the practical implications of the American constitutional system. Constitutionality is not a fixed quality; in crucial cases it resolves itself into a judgment upon facts. Every tendency to deal with constitutional questions abstractly, to formulate them in terms of barren legal questions, leads to dialectics, to sterile conclusions unrelated to actualities. Legislation is largely empirical, based on probabilities, on hopes and fears and not on demonstration. To meet the intricate and subtle problems of modern industrialism, the legislature must have ample scope for putting its prophecies to the test of proof. To submit legislative proposals rather than the deliberate enactments of the legislature to judicial judgment is to submit legislative doubts instead of legislative convictions. The whole focus of the judicial vision thereby becomes altered. Legislation is thus deprived of its creative opportunities. For the history of modern legislation amply proves that facts may often be established in support of measures after enactment, although not in existence previously.

When actual cases come before them, courts profess not to exercise revisory powers over legislation, and there is an important truth in the theory. The whole milieu of giving advisory opinions on proposed bills or executive action is inevitably different from the process of adjudication in litigation which contests either legislation or the assertion of legislative authority. Judges have frequently deplored the lack of competent legal assistance and the inadequate opportunity for mature deliberation in rendering advisory opinions. While in a few states judges may command the assistance of the attorney general or *amici curiae*, in practise the aid of counsel is rarely received. Experience has shown that whatever provision may be made on paper, advisory opinions are bound to move in an unreal atmosphere. In the attitude of court and counsel, in the availability of facts which underlie litigation, there is a wide gulf between opinions in advance of legislation or executive action, and decisions in litigation after such proposals are embodied into law or carried into execution. Moreover advisory opinions involve the judges too intimately in the process of policy and thereby weaken confidence in the disinterestedness of their judicatory functions. On the other hand advisory opinions weaken legislative and popular responsibility. It is not merely the right of the legislature to legislate and of the executive to act; it is their duty. Legislatures and executives may inform themselves as best they can; but the burden of decision ought not to be shifted to the tribunal whose task is the most delicate in our whole scheme of government, involving as it does the power to set limits to legislative and executive action within those vague bounds which are undefined and *a priori* undefinable. In these considerations we must find explanation for the judicial hostility to advisory opinions even where, as in England, there are no formal restrictions against them.

FELIX FRANKFURTER

See: JUDICIAL PROCESS; JUDICIAL REVIEW; DECLARATORY JUDGMENTS; SEPARATION OF POWERS; CONSTITUTIONAL LAW; JUDICIARY; COURTS.

Consult: Macqueen, John, *The Appellate Jurisdiction of the House of Lords and Privy Council* (London 1842); Veeder, Van Vechten, "Advisory Opinions of the Judges of England" in *Harvard Law Review*, vol. xiii (1900) 358–70; Dubuque, Hugo, "The Duty of Judges as Constitutional Advisers" in *American Law Review*, vol. xxiv (1890) 369–98; Thayer, James B., *Legal Essays* (Boston 1908) p. 42–59; Grinnell, F. W., "The Duty of the Court to Give Advisory Opinions" in *Massachusetts Law Quarterly*, vol. ii (1917) 542–52; Ellingwood, Albert R., *Department Cooperation in State Government* (Menasha, Wis. 1918); Hudson, Manley O., "Advisory Opinions of National and International Courts" in *Harvard Law Review*, vol. xxxvii (1924) 970–1001; Frankfurter, Felix, "A Note on Advisory Opinions" in *Harvard Law Review*, vol. xxxvii (1924) 1002–09.

INTERNATIONAL. Disputing states have long been in the habit of inviting mediators, councils of conciliation or commissions of inquiry to advise them on a settlement. International organizations have frequently found it con-

venient to summon committees of jurists or to establish legal sections to advise them on legal problems. The pronouncements of such bodies might be called "advisory opinions."

The recommendations made by the Behring Sea, the North Atlantic Fisheries and other arbitral tribunals on certain points have some resemblance to advisory opinions, though motivated by considerations of expediency rather than of law. The term has, however, been confined in both national and international practise to opinions on disputes or questions of law not formally binding but issuing from a tribunal (or from its judges) with authority to give binding decisions.

Advisory opinions as a recognized international practise arose out of Article 14 of the League of Nations Covenant, which declared that the prospective Permanent Court of International Justice "may also give advisory opinions upon any dispute or question referred to it by the Council or by the Assembly." This provision seems to have originated in Lord Robert Cecil's draft covenant submitted to the Peace Conference on January 16, 1919, and was later supported by Larnaude, of France, after President Wilson's return to Paris. Modifications in the phraseology were suggested by David Hunter Miller, the American legal adviser, to exclude the possibility of compulsory jurisdiction developing under the clause, and by the drafting committee which changed the word "advice" to "advisory opinion," thus emphasizing the function's judicial character.

The commission of jurists which framed the court statute in the summer of 1920 provided that "questions" submitted for advisory opinion be considered by a special commission of the court with three to five members, while "disputes" so submitted be considered by the whole court "under the same conditions as if the case had been actually submitted to it for decision." There was disagreement, however, concerning this provision, and eventually the article in the draft statute dealing with advisory opinions was eliminated altogether. The judges of the court were thus confronted with the problem in drawing up their rules of procedure. Judge John Bassett Moore, of the United States, prepared a memorandum asserting that the giving of advisory opinions was not an "appropriate function of a court of justice," and might reduce the court's prestige and its opportunity to decide litigated cases. He concluded from the English text of the Covenant that the court was at liberty to decline to give an advisory opinion when requested, and advised against including any rules on the subject, leaving the court free to handle each application on its merits.

This, however, was not done, and rules were drawn closely assimilating the procedure to that in litigated cases. A proposal that advisory opinions might be given secretly was voted down eleven to one, and the revised rules of 1926 expressly provided for the reading of advisory opinions in open court. The rules, in conformity with the Covenant, provide for requests for advisory opinions only by the Council and Assembly of the League. In practise only the Council has made such requests, though it has sometimes acted upon the initiative of the international labor organization or of certain states. It has not been decided what vote is required in the Council for such a request, although apparently, when the request concerns a dispute before the Council, the votes of the disputants are not necessary.

The court's statute is an instrument independent of the Covenant and rendered operative by a signed and ratified protocol. It defines the court's jurisdiction as "comprising all cases which the parties refer to it and all matters specially provided for in Treaties and Conventions in force" (art. 36). The last phrase appears to furnish the legal basis for the court's recognition of the advisory jurisdiction mentioned in the Covenant, and it would seem to furnish equal basis for recognizing advisory jurisdiction conferred by any other treaty. Doubtless, however, the court could refuse to accept any expansion of its advisory jurisdiction. The opinion of Judge Moore that the court was not obliged to respond to requests, even from the League Council, was confirmed, but with a substantial dissent, in the Eastern Carelia case. This arose out of a dispute between Finland and Russia, placed by the former before the Council without the latter's consent. The court refused to give an opinion on request of the Council, holding that it could not "even in giving advisory opinions depart from the essential rules governing their activities as a court." This is in accord with the established principle of international law that "no state can without its consent be compelled to submit its disputes with other states . . . to any kind of pacific settlement." The court has also indicated that it would decline to answer questions which were wholly abstract or lacking in precision.

Fifteen advisory opinions have been given by the court (1928), most of them dealing with the legal aspects of disputes between states. Several have dealt with the organization and competence of international organizations, particularly the international labor organization, and a few have defined the jurisdiction of international judicial and quasi-judicial bodies. The opinions in the last class on the scope of the jurisdiction of the League Council as limited by the domestic jurisdiction clause (Tunis Nationality decrees case) and on the limits of the court's own advisory jurisdiction (Eastern Carelia case) have been especially important for the development of international law.

A certain suspicion of advisory jurisdiction has been shown by several of the Americans who have had a hand in the development of the court, and by the United States Senate. The latter attached a reservation to its resolution of adherence to the court protocol, prohibiting the court from "entertaining any request for an advisory opinion touching any dispute or question in which the United States has or claims an interest." The unwillingness of the signatories of the court protocol to give the United States a veto on advisory opinions not enjoyed by any other state brought the matter to a deadlock. The fears that opinions might be based on inadequate argument, might prejudice the court's consideration of similar facts in subsequent litigation, might be ignored to the detriment of the court's prestige or might be given without consent and hearing of the real parties at interest, have not materialized. Nor has the court become involved in political controversies or lost its independence. The court has provided for the exercise of this jurisdiction in a way to render any such results extremely improbable.

Advisory opinions, although they do not render controversies formally *res adjudicata*, have in practise often served to settle international disputes and have been looked upon as sources of international law, equal in value to opinions in litigated cases. Like declaratory judgments they afford a means for authoritatively establishing legal points and thus preventing disputes from arising. They often make it possible for states to gain the advantage of judicial settlement for disputes which they would be unwilling to submit for decision. This is partly because requests for advisory opinions may be initiated by third states and made by the League Council without direct responsibility of the litigants, and partly because advisory opinions are not formally binding. The advisory procedure, however, has the further merit that the legal can be separated from the political aspects of a controversy. Presence of the latter aspects frequently makes states unwilling to submit to arbitration or judicial decision, but often, with the legal aspects authoritatively decided and the facts clarified, the political problems prove to be readily soluble.

QUINCY WRIGHT

See: LEAGUE OF NATIONS; PERMANENT COURT OF INTERNATIONAL JUSTICE; INTERNATIONAL LAW; AGREEMENTS, INTERNATIONAL.

Consult: League of Nations, Permanent Court of International Justice, *Advisory Committee of Jurists, Procès verbaux of Proceedings* (The Hague 1920), and *Documents of the Statute of the Permanent Court* (Geneva 1921); Publications of the Permanent Court of International Justice, *Collection of Advisory Opinions, Ser. B.* (Leyden 1922–24) no. 1–15, and *Acts and Documents, Ser. D.* (Leyden 1922) no. 2, p. 397; Miller, David Hunter, *The Drafting of the Covenant*, 2 vols. (New York 1928); Bustamente, Antonio S. de, *The World Court* (New York 1925); Fachiri, Alexander P., *The Permanent Court of International Justice* (London 1925); Hudson, Manley O., *The Permanent Court of International Justice* (Cambridge, Mass. 1925); *The World Court, 1922–1928* (World Peace Foundation) (Boston 1928).

AEGIDIUS COLONNA (*c.* 1250–1316), mediaeval political theorist. From early youth he was a member of the order of Augustinian Friars. He is said to have become tutor to the future Philip the Fair of France, and it was for Philip that he prepared his most famous work, *De regimine principum* (first published in Augsburg, 1473, written before 1285). A mediaeval French version of this work was edited by S. P. Molenaer, under the title, *Li livres du gouvernement des rois* (New York 1889). In 1295 Aegidius became archbishop of Bourges, and took the side of the pope against Philip the Fair in his second important work, *De ecclesiastica potestate*.

The first work, which was very well known in the late Middle Ages, is interesting as representing very clearly the influence of St. Thomas Aquinas' rediscovery of Aristotle's *Politics*. To Aegidius, as to St. Thomas, the state is no longer an artificial institution devised to remedy the evil in human nature, but the natural form and method of human life and progress. But *De regimine principum* is even more significant as illustrating the first appearance of a doctrine which became of great importance

in the sixteenth and seventeenth centuries. This was the thesis that the king is above the law since he is himself its source, thus contradicting not only the view of Aristotle, but also the traditional principle of mediaeval society, that the king or ruler is subject to the law of the country.

In *De ecclesiastica potestate* Aegidius maintains in its most extreme form the doctrine of Pope Innocent IV and the other canonists of the later thirteenth century that all temporal as well as spiritual matters are in principle subject to the church and the pope. He holds, moreover, that no one can justly hold temporal powers unless he is spiritually regenerated by baptism and sacramentally absolved by the church. In this he contradicts the doctrine even of Innocent IV, as well as of Aquinas, that political authority is lawful and natural among unbelievers as well as among Christian men. Aegidius expressed similar views concerning property. All property, he says, is under the *dominium* of the church, and can be held only by the man who is baptized and absolved. Wycliffe, in *De dominio civili*, may have been influenced by this conception.

A. J. CARLYLE

Consult: Janet, Paul, *Histoire de la science politique*, 2 vols. (Paris 1887) vol. ii, ch. iii; Dunning, W. A., *A History of Political Theories*, 3 vols. (New York 1902–20) vol. i, p. 207–12; Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–) vol. v (1928) pt. i, ch. vi and pt. ii, ch. ix.

AEHRENTHAL, ALOIS LEXA, GRAF VON (1854–1912), Austrian diplomat and statesman. After a long apprenticeship as attaché and ambassador to Russia he became Austro-Hungarian foreign minister. Since he was known as an ardent supporter of close relations between the three imperial courts of Germany, Austria-Hungary and Russia, his subsequent steps against Russian interests in the Balkans came as a surprise. Aehrenthal, hoping to reestablish the prestige of the Dual Monarchy in international affairs, soon came into conflict with Izvolski, the Russian foreign minister, who was intent on making good the mistakes of the Japanese War and reviving the traditional Russian Near Eastern policy. The first clash came with the beginning of 1908 when Izvolski opposed Aehrenthal's plan for a railway through the Sanjak of Novi-Bazar, holding it to be an expression of the Austrian *Drang nach Osten* and a menace to the Slavic states of the Balkans.

Aehrenthal's name is associated chiefly with the crisis arising later in 1908 when Austria annexed the two Turkish provinces of Bosnia and Herzegovina, which had been occupied since 1878 under a mandate of the powers. At first, in the famous Buchlau interview between Aehrenthal and Izvolski, the latter gave his consent in exchange for Austrian approval of the opening of the Straits to Russian warships; but when the announcement of the annexation caused a storm in European chancelleries, Izvolski maintained that he had been deceived by Aehrenthal and came out in open opposition. The crisis dragged on through the winter of 1908–09, but war was finally averted. Austria was supported by Germany, Russia was in a state of military unpreparedness, and France and England were disinclined to go to war. Aehrenthal concluded a separate agreement with the Turks, and forced the intransigent Serbs to yield, after combatting the belligerent suggestions of Conrad von Hötzendorf, the Austrian chief of staff. The affair left Russo-Austrian relations exceedingly strained, and in a sense marked the beginning of the Near Eastern tension which ended in the World War.

WILLIAM L. LANGER

Consult: Molden, Berthold, *Alois, Graf Aehrenthal* (Stuttgart 1917); Hoijer, Olaf, *Vers la grande guerre; le comte d'Aehrenthal et la politique de violence* (Paris 1922); Friedjung, Heinrich, *Das Zeitalter des Imperialismus*, 3 vols. (Berlin 1919–22) vol. ii; Kanner, Heinrich, *Kaiserliche Katastrophenpolitik* (Vienna 1922); Conrad von Hotzendorf, Franz, *Aus meiner Dienstzeit*, 5 vols. (Vienna 1921–25) vols. i–ii, and the review of it by Emile Bourgeois in *Revue des sciences politiques*, vol. xlvi (1923) 484–99; *British Documents on the Origins of the War, 1898–1914*, ed. by G. P. Gooch and Harold Temperley, vols. i–v, xi (London 1926–) vol. v, and the review of it by W. L. Langer in *Foreign Affairs*, vol. vii (1929) 635–49.

AENEAS SILVIUS. *See* PIUS II.

AERIAL LAW. *See* AVIATION; RADIO.

AFFORESTATION. *See* FORESTS.

AGAZZINI, MICHELE (1790–1840), Italian economist. Agazzini's best known and most important work, *La Science de l'économie politique, ou Principes de la formation, du progrès, et de la décadence de la richesse: et application de ces principes à l'administration économique des nations*, was issued in French (Paris 1822) and in Italian (Venice 1827). Later he published a critical essay on the theories of value of Smith,

Malthus and Say, *Sconvenevolezza delle teoriche del valore insegnate da Smith, dai professori Malthus e Say e dagli scrittori più celebri di pubblica economia* (Milan 1834).

The *Economie politique* is remarkable for certain original ideas. For example, he considers the concept of cost of reproduction and the effects of forecasts and errors in forecasting. The principles of economics he expounds first in a milieu of isolated men (*l'état sauvage*); next in a single market, with exchanges; then in a market with differentiation in occupational training and state intervention; finally in a market with foreign trade, customs and money.

RICCARDO BACHI

AGE SOCIETIES. Apart from social units based on the blood tie, such as the family or the clan, many primitive communities recognize "associations." These unite members irrespective of real or putative kinship, but with a view to a common status or common interests. Among units of this type age grades and age societies constitute a distinct category.

Since savages generally fail to keep account of their ages by years, it is only approximate coevals that are grouped together. Puberty forms a natural line of demarcation. Boys or girls are often advanced to the status of adults by a ritual roughly equivalent to confirmation, and those initiated at the same time constitute a definite company. Later they marry and pass into the grade of married folk or "elders." This tripartite division of society was regarded by Schurtz as naturally reflecting the conflict of adjoining age groups or generations, hence he considered the grades of the uninitiated, of initiated single men and of elders as potentially universal and as the earliest forms of age grading. Wherever grades were more numerous, he assumed that there had simply been a subsequent elaboration of this primitive scheme.

This last conclusion may be at once dismissed as *a priori* rationalism. Whenever there is a joint admission into a definite age grade, the coevals thus initiated frequently form a definite group for life; and the number of such companies depends solely on the local conditions regulating initiation rites. Thus the Masai of East Africa have indeed three status grades corresponding to Schurtz's threefold division, but neither the uninitiated boys nor the married men form definite units. On the other hand all those initiated within the same quadrennium are linked together as a lifelong company with mutual obligations and claims. An age mate in this sense occupies his fellow member's hut and enjoys marital rights over his host's wife when he visits a strange village; and of these age companies there would be at any one time not three, but possibly eight or nine.

The distribution of age grades militates against the theory that they represent an essential development of human society. Thus even in Schurtz's map their complete absence in Siberia is significant, while Father Schmidt restricts the range to parts of Oceania, Indonesia, southern Asia, East Africa, the Bororo in South America and the Eskimo in North America. This is doubtless going too far, for there is clear evidence that West African Negroes share the institution. Thus the Ibo are divided into eight classes, each with distinctive duties: one has to clean towns and roads, another clears away trees and acts as guards, and so forth. Each grade forms a society into which boys enter, sometimes even long before puberty, although more generally at that period. Usually some such rite as circumcision or tooth-filing marks the entrance into the lowest class. A merging into a different type of association is noted by Talbot for Nigeria, inasmuch as wealthy people could pay fees and thereby skip some of the lower grades.

The Northern Plains Indians had a similar division of male society—sometimes with parallel series of women's associations—into age societies. Among the Blackfoot the "All Comrades" were responsible for the safety of the camp, while among the Arapaho a whole series were under the guidance of the old men's grade. In other tribes of the area there was less integration of the several component units, though the underlying pattern was clearly uniform for a particular people. Closer examination has shown, however, that the age factor is not truly comparable to that of other regions. The essential feature in the plains is purchase of a set of ceremonial privileges, and it is merely through the fact that the rights are bought jointly by groups of approximate coevals that a basic division into age societies is produced.

In another sense, however, the age factor is obviously conspicuous even here, for why should age mates buy membership together? Schurtz must be recognized as having put his finger on a true bond in linking individuals together His error lies merely in insisting on the necessity for formal association of coevals,

which the geographical facts of distribution fail to support. A tendency toward union on these lines, whether it finds formal expression or not, can hardly be denied.

ROBERT H. LOWIE

See: ASSOCIATION; FAMILY; CLAN; CASTE; GERONTOCRACY; SECRET SOCIETIES; SOCIAL ORGANIZATION.

Consult: Schurtz, Heinrich, *Altersklassen und Männerbunde* (Berlin 1902); Lowie, Robert H., *Primitive Society* (New York 1920); Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912–24) vol. iii, pt. 1; Talbot, P. Amaury, *The Peoples of Southern Nigeria*, 4 vols. (London 1926).

AGENCY, in Anglo-American law, covers the bulk of relations and transactions in which one person (agent) is dealing with another (third party) on behalf of still another (principal). It is concerned therefore with the external business relations of an economic group or unit and with the powers of the various representatives to affect the legal situation of the principal (person or organized group). In the internal set-up of either the business or the production unit, agency plays its part primarily in the organization process: every member in being hired, fired or promoted is for the moment an outsider with reference to the unit, and deals as an outsider with some representative. And of course the eternal problem of government, whether of the state or of any other unit, involves agency with internal organization in another way: to cope with unforeseen conditions it is repeatedly necessary to give representatives powers wider than those they are normally expected to use. Thus an agent's effective powers in dealing with outsiders often extend to transactions which he is under a duty to his principal not to enter into ("apparent authority"; "authority" alone, or "real authority" covering the case where power, and privilege as against the principal to exert the power, are coextensive).

It is obvious that some type of legal representation became needed increasingly as business units came to involve transactions conducted at a distance (as in the case of factors) or grew in size (the firm, the house, the corporation). The original models seem to have been the steward of a lord and the servant with a specific matter to attend to; the law was therefore long plagued with refined distinctions between "general" agents, the only ones with whom an outsider could deal with moderate safety (the steward model), and "special" agents, whose powers the courts viewed very narrowly. With the persistent shift to larger business units with a running organization of subdivided powers, the law has become more realistic on the point. Compare, for example, the recognition, in the doctrines of ratification and adoption, of the practise by which a principal approves a transaction which he (it) had not previously authorized—even, at times, when entered into by a person who was not at the time his (its) agent at all. Yet the law still lags; especially, perhaps, in the field of marketing. The courts attempt to bring most of the marketing structure under one or the other of two legal concepts: agency (the "title" to goods being in the principal, there follows, for example, permissible control of resale prices and, in the event of the agent's bankruptcy, the recovery by the principal of the specific goods and outstanding accounts; by this concept the contracts of the agent within his powers obligate the principal only); and sale (the "title" to goods being in the "representative," who owes the price and is alone responsible on his contracts, it follows that no resale price maintenance is enforceable). These concepts are taken as sufficient between them and as mutually exclusive. But they rather obviously fail to describe or deal adequately with the complicated marketing structure involved, for example, in "consignments" with or without immediate invoicing on fixed terms; in exclusive "representation" in a given territory with or without agreements for taking minimum quantities; or in subsidiary marketing corporations (involving, for example, tax questions, when the internal billing of goods is built to deprive one or the other corporation of any taxable profit or stockholders' rights, when the parent corporation is being "milked").

The business term "agency"—i.e. "some intermediary in the distribution process"—is thus at wide variance with what the lawyer understands by the word. Agency in law is confined to the useful but somewhat antiquated legal framework of the business set-up. It gives legal validity to most deals made by representatives. It imposes certain minimum duties on the representatives (diligence, good faith, accounting), in one instance, indeed, going beyond the current practises among higher executives (the principal may at his option take over any deal in the line of the agent's business which the agent has made on his own, without permission). But the law of agency affords no safeguard against what chiefly interests the business man—stupidity or bad judgment. This accounts, to a

great extent, for the growing practise of large units using standardized printed forms to limit their minor agents' discretion, and to make salesmen's agreements subject to approval by the home office or credit department. And the law of agency is especially open to abuse where the "principal" is not organized for supervision, as in the case of an absentee whose affairs are conducted by a trusted adviser, or in the case of the larger corporations where management has been dissociated from investment.

Concepts grow out of specific typical fact situations and are slow to become systematized; it is therefore not surprising that the concept of legal representation developed differently in different times and places, and even within a single legal system. Thus, apart from the mercantile field, other types of representation developed in regard to decedent's estates (executors, administrators), trusts and governmental officers. Each of these classes, as also in the case of corporation directors, is the subject of peculiar rules, at times widely different from those applicable to agents in general. A thoroughgoing systematization of the law of representation at large has never been worked out in Anglo-American law. And the fact that on the continent totally divergent institutional divisions of the same subject matter work out, in both domestic and international business intercourse, with practical results so similar to ours, leads one to wonder how far the legal theory on the subject has great practical import.

Such a doubt, at least, is well founded as to the philosophy of representation. The struggles of legal philosophers to explain or justify representation have moved from an outworn premise to solve an unreal problem. They begin with some such assumption as that a man can acquire rights or obligations only by exercise of his own will or by personal participation in some transaction (our "privity of contract"); there is then the problem of carrying the acts of the representative back to the will or acts of the principal—e.g. by a fiction of identification or by inventing a delegation of will; and finally the problem of finding a concept for this purpose which squares with all the rules on the subject, or the set of related subjects, existing at any given time in one legal territory. But it saves labor to think of law as in the main a reflection of felt expectations and necessities, and to recognize that legal rights and obligations are acquired in the first instance through exercise of the will not of the parties but of legal officials. Under such a view representation becomes normal in law because normal in life. This is not to deny importance to legal philosophy or legal theory. The view that a principal must be in existence to be "represented" still ordinarily annuls an agent's powers on the unknown death of his principal; the feeling that a contract is an abnormal relation and can affect at most the contracting parties is still potent in the law; only by turning to account the notion of agency was assignment of debts accomplished; even negotiable paper carries, in the obligatory formulary words "order" or "bearer," the marks of its origin in an agency to collect. But a modern legal philosophy has as its task, in this field as in others, rather to examine the origin and working of ancient premises than to accept them as posing its problems. Nor does it serve much purpose to attempt a complete philosophic harmonization of a set of rules, where some are fossils from a past age and some are only in process of emergence.

On the whole, agency has been of almost equal importance with contract as a device facilitating the development of the modern business structure—in good part because of its high flexibility. It was once a, if not the, major way of organizing a mercantile enterprise, as in the relationship between the master of a vessel, the supercargo and the factor. It still remains the major building material, even in the corporate structure. It has, moreover, been a fertile matrix of specialized adjustments: the transfer of contract; the attorney-at-law (naturally one of the earliest forms recognized by lawyers); brokerage; the power to a mortgagee to foreclose by sale even after the mortgagor's death; and, quite recently, the suability of an unincorporated labor union. Finally, with growing specialization, agency takes on another aspect, especially in the purveying of services; the specialized purveyor (as in bank handling of collections and stock brokerage) moves largely out of the control of his principal, becomes an independent unit and may gather sufficient financial power to finance and even control his scattered "principals" (so the textile factors and import bankers), or may by reason of distance and the manipulative opportunities of a central market call forth legislative control in the interest of his unorganized principals (so the produce commission men). In all such cases of independence of the "agent" the tendency is strong for the one-time agency to become swallowed up in contract, as between two independent dealers (railroads, warehouse-

men, stock brokers). In such cases the control of the specific operations passes increasingly out of the "principal," and the "agent" makes any necessary contracts or arrangements on his own account. In the grain elevator case the "agent" will not even be required to redeliver the same grain he received; in the case of a bank transmitting funds the money received goes into the bank's general assets, and only a pure contract relationship remains. On the production side, where the relationship as for example between "master" and "servant" is of a slightly different character since the "servant" does things for his "master," as contrasted with an agent who deals with people for his principal, there is a similar development toward a contractual arrangement; thus the master—or principal—is freed from responsibility for wrongs committed by the "independent contractor" in the course of getting the agreed job done.

K. N. LLEWELLYN

See: REPRESENTATION, LEGAL; LIABILITY; NEGLIGENCE; TORTS; STATE LIABILITY; CONTRACT; SALE; TRUST AND TRUSTEES; GUARDIANSHIP; BROKER; MARKETING.

Consult: Mechem, F. R., *A Treatise on the Law of Agency*, 2 vols. (2nd ed. Chicago 1914); Tiffany, F. B., *Handbook of the Law of Principal and Agent*, ed. by R. R. B. Powell (2nd ed. St. Paul 1924); American Law Institute, *Agency*, Restatement no. 1–4 (n. p. 1926–29); Holmes, O. W., "Agency" in *Collected Legal Papers* (New York 1920) p. 49–116 (first published in 1891); Isaacs, Nathan, "On Agents and 'Agencies'" in *Harvard Business Review*, vol. iii (1924–25) 265–74.

AGENT PROVOCATEUR. *See* ESPIONAGE.

AGGRESSION, INTERNATIONAL. Aggression, aggressive war and aggressor nation have become familiar terms during and since the World War. Before then the word "aggressive" was occasionally used as synonymous with "offensive" in describing and condemning certain kinds of war. The expression "offensive war" has fallen into disuse, and "aggressive war" is now often used as the antithesis of "defensive war." "Aggression" became the subject of renewed interest through the stipulation of the Versailles Treaty requiring Germany to make reparation "for all damage done to the civilian population of the Allies and their property by the aggression of Germany," and through the language employed in Article 10 of the League Covenant (1919) wherein "the members of the League undertake to respect and preserve as against external aggression the territorial integrity and existing political independence of all members of the League." The Treaty of Mutual Assistance (1923) contributed the provision that "aggressive war is an international crime," etc. This phrase reappeared in the American Revision of the Treaty (1924) and in the subsequent Geneva Protocol of September 1924. In both the American Revision and the Protocol an attempt was made to base the definition of an "aggressor nation" on refusal of arbitration, whereby the crime of aggression might be better identified. All three proposals were designed to bolster up the sanctions of force contemplated by the Covenant, but were rejected by the League.

The inherent difficulty and danger of defining aggression was one of the reasons for rejection. The wisdom of this action is supported by the analogy between aggression and fraud. The courts, including English and American, have consistently refused to define "fraud" but will decide what constitutes fraud from the facts in each case. Manifestly it is much harder to set limits by definition to what constitutes aggression, because the conditions out of which war arises are far more complicated and elusive than in an individual case of fraud. But the principle is the same. Public opinion should be as free to pass upon aggression as courts are to determine fraud.

Notwithstanding the rejection of the Geneva Protocol, efforts have since been made to confine the outlawing of war to aggressive war. Such an effort was made by resolution in the United States Senate in the session of 1927–28, but failed. The issue was set at rest by the notes exchanged by the American Secretary of State with other governments, which led to the making of the Peace Pact, and by assent of the signatories definitely ruled out the qualifying word "aggressor." In his note of February 27, 1928, to the French ambassador, Secretary Kellogg said: "If, however, such a declaration were accompanied by definitions of the word 'aggressor' and by exceptions and qualifications stipulating when nations would be justified in going to war, its effect would be very greatly weakened and its positive value as a guaranty of peace virtually destroyed. . . . The Government of the United States desires to see the institution of war abolished." And again Secretary Kellogg, after discussing arbitration treaties, said: "We know of but one other form of treaty which can be concluded for the purpose of preventing war

and that is a treaty in which the parties specifically bind themselves not to resort to war. It is this kind of treaty which people have in mind when they discuss treaties for outlawing war, and it is a novel idea in modern international relations."

The universal acceptance of this Peace Pact will make it basic international law. Thereupon it will become unlawful and criminal for any nation to attempt to settle any dispute by force. But so long as war is recognized as lawful and legitimate, the question of "aggression" is irrelevant and the term "aggressor nation" will continue to be merely the epithet which each belligerent nation in self-righteousness hurls at its enemy. If a nation has the legal right, as it always has had, to seek and compel by force the settlement of its controversy with another nation, it is immaterial, except for purposes of public sympathy, which nation strikes the first blow or provokes the first blow to be struck. Under international law hitherto any nation has had the undisputed right thus to resort to war, and be strictly within its legal prerogative. Whatever immediate public opinion or historians later may say about an alleged aggressor nation, the war itself, its legality, its conduct, its destructiveness, its cruelties, are unaffected. Civilization is far more vitally interested in protecting itself against the devastation of war than in determining the intricate question of precise war guilt, that is, of international aggression. The question is thus purely academic except with regard to the theory of sanctions or legalized force.

Used in euphemistic contrast to "aggressive wars" considerable confusion has arisen over so-called "wars of self-defense." But the claim of "defensive war" has too often been invoked as a subterfuge for the "aggressive" use of force. The question of the bona fide exercise of the right of self-defense is placed in the hands of the people by the Pact. Therefore the decision between aggression and the legitimate right of self-defense is lodged with the people. If needed, public opinion may be aided in its decision by clothing the international courts with jurisdiction to hear the facts and determine the questions on the charge of a breach of the Pact. All such hearings should be open to the public and the press, but the court should have no power of enforcement, as this would savor of a superstate. Judicial investigation and publicity would enable public opinion to function more intelligently and effectively. But with war outlawed and thus with every presumption against a nation resorting to force, public opinion may alone furnish a safeguard of the highest order.

S. O. LEVINSON

See: WAR; WAR GUILT; INTERVENTION; WORLD WAR; OUTLAWRY OF WAR; PEACE MOVEMENTS; DISARMAMENT; LEAGUE OF NATIONS; ARBITRATION, INTERNATIONAL; INTERNATIONAL LAW.

Consult: Hershey, A. S., *The Essentials of International Public Law and Organization* (New York 1927) (see authorities cited p. 150 n.); Kellor, F., and Hatvany, Antonia, *Security Against War*, 2 vols. (New York 1924) (see table, p. 36, and "Aggressions" in index for instances of aggressions); Morrison, C. C., *The Outlawry of War* (Chicago 1927) ch. xii; Madariaga, Salvador de, *Disarmament* (New York 1929); Miller, D. H., *The Geneva Protocol* (New York 1925) ch. x; Williams, Roth, *The League, the Protocol and the Empire* (London 1925) ch. iii; Shotwell, J. T., *War as an Instrument of National Policy and its Renunciation in the Pact of Paris* (New York 1929).

AGIA, MIGUEL DE, Spanish missionary of the sixteenth century. He served on the colonial missions, particularly in Peru and in Mexico, where in 1563 he became professor of theology. He was considered an authority on the Indians, and was frequently consulted by the Viceroy of Peru and the Council of the Indies. He held the treatment of the Indians to be a social, rather than a political or economic problem. Although he believed they were unfit to be placed on an equal footing with the Spaniards, he thought they should find their place in the social scheme of the New World, and be taught their share in its development. The Indians, he maintained, were free men, but the king could justly compel their services for the necessary works of civilization, such as agricultural labor, construction of public works, labor in the mines, the tribute and domestic services for the *encomenderos*. Only in this way could they be taught to overcome their aversion to work beyond the production of bare necessities, and to feel that they were contributing to the progress of civilization. He demanded that the Indians should receive a just compensation for their services, and be assigned to work suitable to their state, with the opportunity of seeking other work to which they might personally be more inclined. He subscribed to Sir Thomas More's division of the day into six hours for work, eight hours for sleep or rest, and ten hours for one's own personal pursuits.

MARIE R. MADDEN

Important works: *Tratado y consulta sobre el servicio*

personal de los Indios (Lima 1604); *De exhibendis auxiliis; sive de invocatione utriusque brachii tractatus, ad Licent. Paulum de Laguna, Suprema Indiarum Senatus Praesidens amplissimum* (Madrid 1600).

Consult: Solórzano Pereira, Juan de, *Politica Indiana* (Madrid 1648).

AGIO, with reference to the exchange of coins or currencies, is the difference between the values of two coins or currencies supposed normally to be equal in value. However, variations within the "gold points" of gold standard currencies are not usually subsumed under this term. Agio develops out of changes in the conditions of supply and demand of the currencies in question from those previously considered normal. After the appearance of an agio, produced by a shifting in the reciprocal demands of nations for each other's products or by changes in the quantities or qualities of the currencies in circulation, it is modified by speculation, which tends either to increase the agio or to restore equilibrium. The course of the German mark between 1915 and 1923 offers a good example. As long as the dealers thought that the mark might be revalorized, speculative buyers and sellers alternately predominated in the market. But in 1923, when all such hopes vanished, people sold marks without restraint and the agio on foreign money increased without limit. This explanation takes no account of adjustments through changes in the balance of payments, which always strengthen the tendency toward equilibrium.

The "self-inflammatory" tendency first becomes a real force in the market when, in addition to the regular dealers, the general public begins to speculate, and it is further strengthened by the substitution of other money for the depreciated legal tender in business transactions. A most important form of speculation due to agio is the purchase of foreign securities or money as a safer store of values. Just as this search for a safe store of values led people to hoard foreign coins and bullion in mediaeval times, so in modern times it causes international movements of capital during periods of monetary disturbance.

Speculation in coins before the establishment of stable currencies under the control of central governments was a common practise, because the frequency of changes in minting standards, the multiplicity of currencies in circulation, the existence of differences even among individual coins and the use of changing "ideal" standards of value perpetuated a system of interrelated agios. Speculation in coins was further increased, as late as the seventeenth century, by the practise of concealing interest charges through an adverse exchange rate.

In the long run agios are always limited by the real values of the currencies or coins concerned, and any explanation of continuous depreciation in terms of speculation or of "lack of confidence" without reference to progressive inflation is necessarily false.

M. PALYI

See: FOREIGN EXCHANGE; COINAGE; PAPER MONEY; ASSIGNATS; RENTENMARK; INFLATION AND DEFLATION.

Consult: Landry, A., *Essai économique sur les mutations des monnaies* (Paris 1910); Lescure, J., "Esquisse de l'évolution du change et des théories relatives au change" in *Revue d'histoire des doctrines économiques et sociales*, vol. ii (1910) 48–69; Subercaseaux, G., *Le papier-monnaie* (Paris 1920); Wiriath, Marcel, *La spéculation et les troubles monétaires* (Paris 1924); Mitchell, W. C., *A History of the Greenbacks* (Chicago 1903); Kramár, K., *Das Papiergeld in Oesterreich seit 1848* (Leipsic 1886); Walré de Bordes, J. van, *The Austrian Crown* (London 1924); Graham, F. D., "Self Limiting and Self Inflammatory Movements in Exchange Rates; Germany" in *Quarterly Journal of Economics*, vol. xliii (1928–29) 221–49.

AGITATION. The word agitation is variously employed to mean a phase of a social movement and to specify a method of collective influencing. Conceived as a method, there is no consensus in distinguishing it from propaganda, nonviolent coercion and kindred concepts. To avoid confusion the term is here taken to refer to that phase of a social movement which is characterized by the spontaneity with which a collective ideology is propagated and accepted. A social movement arises when common emotional dispositions find expression in a new system of symbols which condemns things as they are and prescribes what they ought to become. A social movement is consummated and reaches the phase of organization when it has passed through this agitational period and produced rather permanent alterations in the practises of society. Democratic, labor and nationalist agitations have figured most conspicuously in recent history.

When individuals are thrown into circumstances in which their claims on society are threatened or thwarted, they may identify themselves with one another and demand collective justice. Identification does not necessarily arise, however, and a man thrown out of employment may regard it as a purely private

affair with his employer. Identification is a process by which affections are guided by perceptions of similarity. Emotional relations within a large group become possible by interlocking identifications among those in visible contact, and by the sharing of symbols of the whole.

Society witnesses the competition of old and new ideologies for the allegiance of the dissatisfied. An agitation appears when many of the malcontents in a community are excitedly considering a new ideology as the symbol of their protests and demands. A satisfactory symbol system is a compromise formation in which the diverse affective drives of the discontented find expression. Since one of the wants of man is the justification of the rest of his wants, a demand for bread or ballots must be buttressed by a demand for justice. The appeal for justice is an appeal from one authority to another, and the laws of God or Nature or Historical Necessity may be invoked against the laws of man. The defiance of authority is associated with feelings of guilt and a desire for expiatory punishment, and protest ideologies gratify this craving to do penance by stressing the sacrifices necessary to reach the promised land.

In the agitational phase of social action men are willing to die for their convictions, and to forsake family and dependents in the service of the cause. Sectarianism thrives, and the true believers hesitate to mingle socially with the unbelievers, cultivating distinctions of vocabulary, dress and decorum. This is the era of prophets, apostles, heroes, martyrs and saints. Persistent persecution from the authorities provokes conspirative tactics and possible violence. On the whole the spreading of the new gospel proceeds with a minimum of tactical premeditation and with a maximum of joy in sharing a new revelation.

The transition from agitation to organization tends to occur even though society has made few of the concessions demanded. The tactician substitutes for the prophet, and the bureaucrat for the enthusiast; religion becomes magic, and ideology becomes phraseology. Sectarianism diminishes, and points of dogma and method become debatable, thus permitting the existence of a public opinion within the group and within the community of which the group is a part.

One function of agitation is to organize social energy for social change. But it may produce no substantial alteration in society, and serve entirely as a formation by means of which the impaired self-feeling of a group is compensated. It is symptomatic of deep lying difficulties in adapting human impulses to a given set of cultural conditions, and it also implies a long antecedent process during which authoritative symbols have been de-valued.

HAROLD D. LASSWELL

See: COLLECTIVE BEHAVIOR; SOCIAL PROCESS; SYMBOLISM; PROPAGANDA; VIOLENCE; MOB; RIOT; STRIKE; BOYCOTT; ASSEMBLY, RIGHT OF; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Mayreder, R., *Der typische Verlauf sozialer Bewegungen* (2nd ed. Vienna 1926); Geiger, T., *Die Masse und ihre Aktion* (Stuttgart 1926). ON AGITATIONAL PHASES OF SOCIALISM, NATIONALISM AND RELIGION: Man, H. de, *Zur Psychologie des Sozialismus* (2nd ed. Jena 1927), tr. by Eden and Cedar Paul (London 1928); Hayes, C. J. H., *Essays on Nationalism* (New York 1926); Leuba, J. H., *Psychology of Religious Mysticism* (London 1925).

AGNATIC RELATIONSHIP. *See* KINSHIP SYSTEMS.

AGOBARD (*c.* 779–840), archbishop of Lyons. Contemporary with Hrabanus Maurus and overlapping in youth the life of Alcuin and in old age that of Hincmar, he participated with this earliest group of mediaeval publicists not only in developing the claims of the church but also in producing that conjunction of classical political forms with barbarian social and political institutions, attitudes and customs which remains the base of modern political theory. He was not a systematic writer, and his literary remains are in the form of short dissertations and letters. He accepted the patristic view that since men were naturally equal, only sin justified slavery. He protested therefore against the denial of baptism to slaves without the master's consent, arguing that the inner man was subject only to God. He maintained firmly the authority of the church even over princes: the sacred canons of the church, "confirmed by the spirit of God, by the assent of the entire world, by the obedience of princes, by the agreement of the Scriptures," held for all men alike, and to act against them was to act against God and His universal church. The most remarkable quality of Agobard's thought was his detachment from some of the characteristic beliefs and institutions of his day, such as witchcraft, magic, trial by ordeal, and the worship of images.

ROBERT T. CRANE

Works: *Agobardi opera*, ed. by Papire Masson (Paris

1605), ed. by Etienne Baluze, 2 vols. (Paris 1665–66); letters in *Monumenta Germaniae historica: Epistolarum*, vols. i–vi (Berlin 1891–1902) vol. v, p. 150–239.

Consult: Ebert, Adolf, and others, *Allgemeine Geschichte der Literatur des Mittelalters*, 3 vols. (Leipsic 1874–87) vol. ii, p. 209–22; Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–) vol. i, pt. iv.

AGOULT, CHARLES D' (1747–1824), French writer on political and financial subjects. He was made bishop of Pamiers (France) in 1787, emigrated at the beginning of the revolution and returned to France in 1801 after having renounced his bishopric. Later he refused the portfolio of minister of finance, offered him by Louis XVIII.

Strongly influenced by Montesquieu and Burke, he declared himself against popular sovereignty and in favor of the ideas of the historical school. However, he advocated a limited form of constitutional monarchy (*Lettres à un Jacobin, ou Réflexions politiques sur la constitution d'Angleterre et la charte royale*, Paris 1815). His more original work is revealed in his financial pamphlets, although even in this field he profited by neomercantilist doctrines and by the experiences of Law and of the Bank of England. In 1815 he resumed work on a *Projet d'une banque nationale* (Paris 1815) which he had already proposed to Louis XVI at the beginning of the revolution as a means of gradually reabsorbing the *assignats* (*q.v.*). In his *Eclaircissement sur le projet d'une banque nationale* (Paris 1816) he energetically denounced the lack of specie from which France was suffering and the necessity of providing for it by issuing paper money based on a mortgage on the land, to be payable in ten years. He expected that in order to satisfy the needs of industry and trade a considerable part of this credit currency would continue to circulate even after the decade had elapsed. To insure the service of the debt thus contracted, d'Agoult proposed to replace the direct tax, especially the direct land tax, by consumption taxes. In his opinion a system of taxes on expenditure rather than on income would possess all the essential merits of equity, convenience and fiscal productivity (*Des impôts indirects et des droits de consommation*, Paris 1817).

PAUL HARSIN

AGRARIAN MOVEMENTS

I. INTRODUCTION ..... ALVIN JOHNSON
II. CLASSICAL ANTIQUITY
Greece ..... PAUL LOUIS
Rome ..... PAUL LOUIS
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Germany and Austria ..... HENRI SÉE
Italy ..... HENRI SÉE
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East Central Europe and the Balkan Countries ..... IFOR L. EVANS
European Russia ..... A. MEYENDORFF
Poland and Lithuania ..... ESTHER R. MANGEL
Latvia and Esthonia ..... ESTHER R. MANGEL
VI. UNITED STATES ..... BENJAMIN B. KENDRICK
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I. INTRODUCTION. Throughout the history of civilization town and country have presented contrasts, not easily definable, in ways of living, in manners and morals, in conceptions of fundamental values. In static social periods these contrasts manifest themselves in social and economic friction having no significant political consequences. Until very recent times the manners and speech and dress of the countryman made of him a butt of ridicule for the townsman. Until recently, also, the prevailing rural view of the townsmen was that they were idle wasters, sharpers, parasites upon the husbandman's honest toil. In the exchange of products or services between town and country there were much bickering and incessant complaints of trickery. The townsman was most frequently accused of charging exorbitant prices, the countryman, of putting his best apples at the top of the barrel or selling in the town products

of dubious history, like contaminated cream or diseased meat. A solidarity of opinion condoned the vices of the one side and exaggerated the vices of the other, emphasized the virtues of the one and reflected doubt upon the virtues of the other. Town and country represented antagonistic cultures, each so tenacious of its own ways that language and manners often drifted far apart, as in the remotely analogous case of nation building.

In the last three quarters of a century compulsory education, by imposing universal standards of speech, has worked powerfully toward the obscuring of the cultural divergencies of town and country. Universal military service has exerted a similar influence in continental Europe. Above all, the modern economic process, with its easy transportation penetrating even the remotest rural districts, its standardization of consumption, of manners, speech, ideas might seem destined to obliterate altogether the lines between town and country. In fact, however, the lines of cleavage cut deeper than the superficial cultural manifestations. So long as the countryman faces nature directly, engaged directly in the work of production, while the townsman meets nature through the intermediation of "business," the distinction between country and city may be expected to persist. When agriculture becomes essentially capitalistic, as in some parts of the United States and other countries of extensive land resources, or in the plantation zones of the tropics, the contrast of country and town disappears and the class struggle assumes a form analogous to the class struggle in industry.

Within the country society as within the towns, conflict of classes may emerge: small proprietors against large, tenants against landlords, hired laborers against owners of estates. These conflicts contrast sharply with the general conflict between town and country interests which characterizes a true agrarian movement. In some instances, it is true, what appears to be merely a struggle between different rural elements is essentially an agrarian-urban conflict. Thus an anti-landlord movement wears a true agrarian character when the landlords as a class are absentees or, if not absentees, nevertheless assimilated to urban life. The owners of the latifundia, to whom tradition ascribes the ruin of ancient Rome, lived in the cities, leaving their estates to the management of *villici*. In the ancient regime of France the large landowners were urbanized in culture; many of them lived continuously in Paris or in provincial cities. The Irish landlord of the eighteenth and nineteenth centuries spent most of his time in commercial and industrial England.

Genuine rural class struggles have no strict relevance in a study of agrarian movements. In any historical discussion, however, it is inexpedient to draw lines too sharply. Interclass rural conflicts, agrarian problems as viewed by the statesman, and self-conscious agrarian movements, while easily distinguishable in theory, form in history a closely woven texture which is difficult and profitless to unravel. In the sections that follow the subject is treated broadly, in order to cover the related group of rural problems popularly described as agrarian.

True agrarian movements have arisen whenever urban interests have encroached, in fact or in seeming, upon vital rural interests. Such encroachment may take the form of the absorption of the better agricultural lands by urban wealth, through violence as in Ireland, legal chicanery as in nineteenth century Mexico, the superior bargaining power of groups trained in trade, or by a combination of all three, as in England of the seventeenth and eighteenth centuries. Often such encroachment is of long standing, apparently accepted throughout generations. In such cases the emergence of an agrarian movement appears like a revolutionary infection, instead of the natural expression of agrarian ideals and sentiments. An instance is the widespread movement against the large landholders of eastern Europe in the late nineteenth and early twentieth centuries. Although the immediate cause of these movements was the distress which resulted from land reforms, it is improbable that the peasant had ever, in fact, accepted willingly his tributary position.

Another point at which the vital interests of the country have come into conflict with town or city centers is money lending. Especially in pre-capitalistic societies the loan contract has run in terms disadvantageous to the cultivator of the soil. He has been prone to borrow at usurious rates, being untrained to calculate properly the actual burden of the interest or his ability to repay. Whole communities have thus come to be saddled with debt, and have developed a common hatred of the monev lender and the town society which he repre-

sents. This hatred becomes all the more violent when racial, national or sectional differences add weight to the social-cultural differences of country and town. Agrarian rage against usury provided a sinister background upon which religious and political fanaticism inscribed the vengeance of Kurdish shepherd and Turkish peasant against the Armenians. Antagonism to the alien British money lender was abundantly in evidence in the inchoate agrarianism of the American South in the early decades of independence. "Eastern Capital" was a bugaboo of mid-western agrarianism of the greenback and Farmers Alliance period.

A third point at which the conflict of urban and rural interests gives rise to agrarian movements is the distribution of the burden of taxation. Before the American Civil War the agricultural South was violently opposed to the tariff, holding it to be a means of taxing the South for the benefit of northern industry. The principal issue in modern agrarian movements, however, is that of prices. With the progress of the commercial and industrial system the country districts fall away from their primitive self-sufficiency and come to depend more and more upon a general market for the disposal of their products and the procuring of necessities of consumption and production. This occurs first of all in such staples as tobacco and cotton, where direct consumption is negligible. With improvements in production the range of commercialized agricultural production extends, until virtually the whole product of extensive farming districts finds its way to the market. The matter of prices becomes vital to the life of the rural community.

In the circumstances agrarian sentiment fastens itself now upon one feature of the commercial system, now upon another. The most general features of attack are the "middleman," who makes his profit, according to prevailing rural opinion, by depressing the price to the farmer and raising it to the urban consumer; the speculator, who emphasizes the spread of prices; the transportation agency, which takes, it is assumed, an exorbitant share of the product in return for carrying it to market. Similarly the middleman is charged with an unconscionable inflation of the prices the farmer has to pay for his supplies.

Out of this antagonism to the agencies of trade and transportation has arisen an agrarianism throughout western civilization which seeks to arm itself with either political or economic weapons, or both. On the political side there is a ceaseless agitation, sometimes more or less successful, for the restriction of speculation, the control of railway rates, elevator charges, and the like. On the economic side there is a movement toward cooperative organization in the sale of products and the purchase of supplies. American agrarianism has been mainly political. The European agrarian movement has won its chief victories through cooperation, although it has also availed itself of political means, as in Denmark, where agriculture is not only thoroughly organized cooperatively, but also has bent the resources of the state to its ends in the control of railway rates, in taxation and in the provision of cheap credit for the establishment of farm ownership.

On occasion agrarianism has struck out against more abstract forces, like the appreciation in the value of money and the consequent fall of prices that attended the resumption of specie payments after the Civil War; the world-wide rise in the value of gold in the quarter of a century from 1870 to 1895; the credit deflation after the World War. While the greenback, free-silver and antideflation movements were not exclusively agrarian, they drew their chief strength from agrarianism.

Since the time of Colbert agrarianism has frequently fixed its chief interest upon tariff policies. During the eighteenth century the agricultural interest succeeded in fixing on the statute books of England a succession of laws designed to check the importation and facilitate the profitable exportation of corn. Especially since the middle of the nineteenth century, when the competition of the virgin lands of the American West began to make itself felt severely, European agrarianism has been decidedly protectionist. Agricultural duties have been a primary demand of the agrarians in all western Europe. In the United States the general agrarian approval of protection as a means of creating a domestic market was supplemented, in the period following the Great War, by a demand for direct protection, to be made effective through what amounted to an export bounty.

Varying as is the content of agrarian demands in differing circumstances, certain characteristics appear to be fairly general. However definite its material objectives, agrarian agitation promptly assumes a moral color. A semi-mystical sense of the paramount importance to humanity of agricultural production is every-

where manifest. Hence an agrarian movement under way is almost always characterized by violence of thought, and often violence of action. In spite of this interpolation of moral attitudes—or perhaps because of it—most agrarian movements are short lived. The emotions burn themselves out, leaving an aftermath of negativism and discouragement. Even at the present time, with agriculture extensively commercialized, there is the sharpest contrast between the ebb and flow of agrarian sentiment and the remorseless pursuit of political interests characterizing industrialism.

Most agrarian movements in history have been confined to areas limited relatively to the political system within which they have operated. This fact has most frequently foredoomed them to failure. When they have attained to partial success, the explanation commonly lies in the fact that non-agricultural forces have been enlisted to give dramatic coherence and cogency to agrarian demands, as in the case of the French physiocrats or the lawyers of the old South. Or else agrarian demands have been taken over by statesmen as essentially in the general interest. Thus agricultural protection in countries like France and Germany won the effective support of statesmen in the interest of national self-sufficiency in peace and war.

Agrarian movements are often bracketed with the labor movement in its various forms—trade unionism, social democracy—as parallel manifestations of the democratic movement of the times. On the whole, however, the contrasts between the two movements appear more marked than the analogies. The typical laborer owns little besides his hands; the typical member of an agrarian movement owns land and home, or at least holds a quasi-permanent tenure. The economic status of participants in the labor movement is roughly the same: in agrarian movements the rich farmer and the poor stand shoulder to shoulder. The conception of self-sufficiency has never been lost by the farmer; it has never been cherished by the laborer. The objective of the labor movement is simple and intelligible—to secure higher wages for shortened hours of toil. The agrarian objectives are abstract, undefinable, elusive. When the laborer has won in a struggle with the employer he carries away his winnings in his pocket. When the farmer has secured a law against usury or speculation, the probabilities are that usury and speculation change their masks and come back into the market place. The labor movement admits of close and tenacious organization, capable of persisting through generations. An agrarian movement is held together by a moral fervor that cools.

Attempts have been made in various times to unite the agrarian and the labor movement for both economic and political ends, but the most extensive experiment in this direction, the composite peasants' and workers' government of Soviet Russia, has involved endless friction. In America the Knights of Labor, the Farmers Alliance, the Farmer-Labor party, have attempted to effect consolidation of agrarian and labor interests for the advancement of political policies. The permanent results of such combinations have not been notable.

In the following sections of this article the agrarian movements of the several periods of history and the several modern states have been traced upon the institutional background. No attempt has been made to attain to comprehensiveness, since a comprehensive history of agrarian movements in all their forms would represent a major section of the history of human culture. Neither has any attempt been made to establish a schematic unity, since unity would necessarily be misleading in the handling of such varying material. The more significant facts have, however, been assembled, to make possible a conspectus of the agrarian factor in its relation to social-political institutional development.

ALVIN JOHNSON

II. CLASSICAL ANTIQUITY. *Greece.* In ancient Greece, as in all primitive societies, the problem of land distribution was primary, and throughout Greek history formed the basis of all agrarian disturbances. For a long time cultivation of the soil, if not the only form of economic activity, surpassed all others in importance. At the same time the land was limited in extent, mountainous and unfruitful, and it was inevitable that struggles for its possession should develop among cities as well as between classes. Indeed these struggles, more than any other single problem, dominated the history of Athens, Sparta, Corinth and most of the other Greek cities.

In the earliest period of which we have record land ownership was vested in "families." But in those times the family, with its chieftain and numerous membership, resembled a minia-

sure people. Several of these families in each section of the country controlled the land. A family group gathered about it clients, actually serfs, who worked in exchange for protection, shelter and subsistence. The few slaves were a minor element in the situation, for slavery did not develop on a large scale until later, as a result of war and piracy, criminal conviction and non-payment of debts. The outlines of this early society are drawn for us in the *Odyssey*.

In the eighth century the older organization was superseded by one in which the aristocracy rose to power at the expense of the kings. The laws of Lycurgus in Sparta marked this change. During this period the aristocracy in each city was a minority group, composed of large landholders; at Epidaurus, for instance, one hundred and eighty men constituted the body politic, while still fewer held power at Heraclea, Cnidus or Thera. This first revolution, however, was followed by another in which undivided estates and that right of primogeniture which had formed the foundation of family organization were abolished. Thus the patriarchal family broke up into smaller groups.

At the same time the clients were struggling to improve their condition. They demanded freedom from their bondage to the family and from their obligation to surrender to it the entire yield of their labor. After innumerable conflicts, extending over many years, they achieved a degree of independence in which the master received only a part of what the client extracted from the soil. But that part the client still considered too large, especially as it was arbitrarily fixed, and he was constantly threatened with slavery in case of failure to discharge his obligations. So for four or five generations he fought sturdily for complete emancipation.

In Athens the men of the upland (*Diacrieis*) gained their freedom earlier than the men of the plain (*Pedieis*). The importance of the laws of Solon (sixth century B.C.) lay in the modification of property rights which they effected in Athens. Thereafter the debtor, when a free man, could no longer be enslaved for debt, for his liability was limited. In effect the land became free. "Those who, on this earth, suffered cruel servitude and trembled before a master, them have I set free," said Solon. But Athens was not all Greece and even at Athens complete equality was not achieved.

Sparta's policy was as peculiar in the agrarian domain as it was in all others. No society was a more complete hierarchy, and if equality existed it was only in a very narrow ruling class. The ideas that Lycurgus had imposed on his few followers who conquered Laconia and Messenia were relatively simple. The aristocracy was like an army encamped on the land; it possessed lands that were inalienable, transmitted from first-born to first-born; 250,000 helots or serfs and 100,000 free men worked for it. The helots were really slaves of the state; they cultivated the land under condition of payment of a fixed sum to the owner, and it was by their labor that he and his family were maintained. Some tribute, too, came from the free men who lived near the borders of the state. One can easily understand that the Spartans lived in constant fear of helot insurrections.

Throughout the classical period, there was in all Greek cities a clear tendency toward concentration of property; and this concentration resulted in a proportionate increase in the number of slaves. In order to avoid disturbances the cities at this time encouraged their surplus landless citizens to colonize Sicily, southern Italy and regions along the Black Sea, or in Thrace. However, although concentration of land in large holdings occurred throughout Laconia, in Attica small holdings continued to exist for many years, and one still found there the small landowner or *thetes* who harvested less than 104 hectoliters of grain and less than 78 of wine or of oil. It was not until the destruction of vineyards and olive orchards during the Peloponnesian wars and the subsequent sales of land by needy debtors that land concentration began in Attica as well.

In the Greek cities where only a small portion of the population owned property either in law or in fact, it is not surprising that the dissolution of the great families should have been the signal for war between rich and poor. In the fifth century B.C. this struggle was everywhere at its height. The insistent demands of the poor for the cancellation of debts and the distribution of lands were the source of the long succession of riots and revolutions, lasting until the Roman conquest, which so facilitated the subjugation of Greece. At Megara and at Samos the property of wealthy families was confiscated and distributed. After the death of the tyrant Dionysius a general redistribution took place at Syracuse. At Messina the landed aristocracy was despoiled. From time to time the people set up dictatorships or tyrannies

which overthrew the existing systems of land ownership—dictatorships such as those of Aristodemus at Cumae, Nicocles at Sicyon and Aristomachus at Argos. Notwithstanding the silence which marks its internal history, Sparta, according to Thucydides, was well acquainted with revolutions of this kind. In the fifth century King Agis proclaimed the distribution of the lands of the plutocrats and was assassinated. Two hundred years later, Cleomenes attempted to achieve a similar reform throughout the Peloponnesus; but at his death this movement also was crushed. Within a short time another popular leader, Nabis, gained power, and likewise decreed a redistribution of land in the Peloponnesus. He was opposed by the aristocratic Achaean League, which appealed to Rome, and Nabis, like his predecessors, was assassinated. Thus to the very end agrarian conflicts dominated the history of free Greece.

PAUL LOUIS

See: SLAVERY; DEBTORS, RELIEF OF.

Rome. The history of agrarian evolution and of agrarian movements in Rome resembles that of Greece in its main outlines. In the early years the land was held without subdivision by the great families, or *gentes*, who cultivated it with the help of their clients, serfs attached to the soil. Somewhat later subdivision of property occurred; but while the great noble families enjoyed quiritarian ownership and full property rights, the plebs held only a precarious title to their small parcels of land. Roman territory, and consequently available land, was limited in this early period. There was as yet no need for many slaves; Dionysius of Halicarnassus mentions only 17,000 in 476 B.C. In succeeding years, however, this slave population was augmented by war, by convictions for crime and by the enslavement of insolvent debtors, and slave revolts broke out in 501, 498, 497 and 419 B.C.

Up to this time most owners had cultivated their own land. The leaders of the *gentes* followed the plow themselves and but few of them lived in the city. Holdings were relatively small; in the sixth century, when there were approximately 8000 quiritarian proprietors and 8000 tenants at will, five hectares was a large holding, and one fourth of a hectare was average size. But the extension of Roman conquests resulted in the formation of the *ager publicus*, a public domain, and these lands the patricians attempted to appropriate. Servius made an initial distribution of the land which satisfied the poor, but in the sixth and fifth centuries the nobles renewed the struggle and gained possession of the *ager*. Indeed they no longer paid even the rent charges which theoretically devolved upon them.

The fourth century marked the appearance of very large holdings. The war with Carthage had enriched the patricians and ruined the rest of the population, and numbers of small holders were obliged to sell their land in order to pay their debts. Most of these small holders became share tenants. The formation of these large estates alarmed conservatives who feared popular insurrections and dreaded the passions of a floating populace unattached to the soil. It was to save the state from such dangers that Spurius Cassius (consul 486 B.C.) had demanded a new distribution of the *ager*. Throughout the next two centuries one such agrarian project succeeded another. Icilius distributed acreage on the Aventine among the poor; in 366 the Licinian laws reduced the maximum of *ager* that a citizen might hold to 125 hectares, limited the number of cattle that one individual might graze on the *ager* and promised a redistribution of land to benefit all citizens. But these laws, too, remained futile.

Then followed the period of the great conquests and the struggle between the classes, patricians and plebeians, became intensified. By 46 B.C. the territory of the Roman Empire was more than a hundred times greater than it had been in 264 B.C. The patricians were exploiting veritable latifundia, with armies of slaves. In 190 B.C. Italian agriculture employed a million and a half slaves, who from time to time throughout the succeeding century were involved in formidable revolts (198, 196, 185, 140 B.C.). As Sallust said, conquest had ruined the poor. The small landholders were continually compelled to sell their holdings, for the conquered countries provisioned Italy at low prices. Expropriations became increasingly brutal. Plutarch tells us that the free peasant disappeared in the second century.

It was during this period that the Gracchi rose to power. Were they revolutionaries? They tried to subdue the agrarian plutocracy and to restore the old order of society, based on a more equal distribution of the land. In 133 B.C. Tiberius Gracchus again put into force the Licinian laws limiting occupation of the *ager* and providing for reversion to the poor of land thus freed. He was assassinated. Ten

years later his task was vainly resumed by Caius. The Thorian law of the year 111 B.C. legalized the seizure of the *ager* by the aristocracy and suppressed the payment of all rents for the land. Small holdings were indeed dead. Attempts to reestablish them in Italy and elsewhere resulted in failure, for owners of small parcels of land, since they were unable to compete with the latifundia, hastened to sell their holdings.

The latifundia increased in size under the empire. Coloni succeeded slaves because the large landholder found the colonus less burdensome. Slaves were expensive to buy and expensive to feed, while the colonus, the ancestor of the feudal serf, not only was bound to the soil but also paid dues. The institution of the colonate, which was already in use among the barbarians, was praised by Tacitus and Columella. The emperors encouraged the great landowners to grant personal liberty to their slaves in exchange for payment of a fixed or variable sum, while the small landowners who reappeared or survived looked to the powerful owners for protection. Barbarians who settled on the frontiers in the time of Vespasian and Marcus Aurelius received lands which they worked as coloni. Thus the institution developed.

But the new regime only temporarily revived agricultural prosperity. About 250 A.D. Italy was seized by a tremendous agricultural depression; taxation crushed the farmers and uncertainty darkened their lives; peasant insurrections broke out. Other disturbances occurred when the scarcity of supplies caused an unprecedented rise in prices, and the land was deserted because the tiller of the soil received prices insufficient to cover his costs. The empire was ripe for destruction.

PAUL LOUIS

See: SLAVERY; SERFDOM; DEBTORS, RELIEF OF; PUBLIC DOMAIN; LATIFUNDIA; COLONATE.

III. GREAT BRITAIN. In the Middle Ages village life was very much the same over most of western Europe. "Everywhere," says Sir William Ashley, "half or more of the tilled land was in the hands of small peasant cultivators. The terms on which most of them occupied their holdings were indeed onerous, and we must take care not to depict their condition in colors too rosy. Yet there they were alike in Central and Northern France, in Southern and Middle England, in Western and Central Germany." For our purposes the important features of mediaeval society were the obligation of poor peasants to give bodily labor to their lords, and the fact that in addition to the land cultivated by the peasants there was common waste used by both lord and peasant for pasture. The history of the peoples of western Europe since the Middle Ages is largely the history of the transformation of this common type of society into the different societies that we know today.

The revolts of the agrarian poor in English history are all connected with this transformation. They fall into three classes. The first revolts are revolts against the oppression of the lowest class of cultivator, the villein, by the great lord. The process of commuting bodily services for a money payment began much earlier in England than on the continent. The Black Death in 1348 created a great social disturbance by reducing the population, and since laborers were then scarce, the emancipated peasant demanded higher wages for his labor, and the villein still in bondage grudged services that were now in greater demand than ever. The landlords met this pressure by the Statutes of Labourers, fixing wages, and by trying to check further emancipation. The Peasant Revolt led by John Ball and Wat Tyler in 1381 was the result.

The second kind of revolt is the revolt against the attempt of the lord to enclose the common waste. The disorder of the sixteenth century, illustrated by the rebellion led by Robert Ket in Norfolk in 1549 was provoked by the conduct of the nobles, who enriched themselves by the plunder of the monasteries, and whose avarice had been further excited by the opportunity of making great wealth out of the expanding trade in wool. A gradual process of enclosure of fields by small owners was also going on, particularly in the south of England; and throughout the sixteenth century enclosure and depopulation were subjects of frequent political debate. Enclosure was fiercely denounced by Latimer and criticized by More and Bacon. Parliament put only a slight check on the process. In the eighteenth century there was a further powerful enclosure movement under the influence of the demand for scientific agriculture. As the landlord class was supreme it is not surprising that the smaller peasants, the cottagers and laborers, came off badly in this revolution. It was the fashionable belief of the time that a landless laborer was the best laborer.

Little care therefore was taken of his interests. Cottagers and small farmers who had maintained themselves by their common rights sank into the position of wage earners, without property of any kind. The transformation of the old manorial system was complete and English agrarian society consisted of landlords, tenant farmers and laborers.

The agrarian movements of the nineteenth century were revolts of laborers against low wages and bad social conditions. The Napoleonic wars brought high prices and great suffering. The ruling class, finding that the laborers could not live on their wages, rather than fix a minimum wage, adopted a plan by which laborers' wages were augmented from the public funds in proportion to the number of their children (*see* ALLOWANCE SYSTEM). From this plan there developed various schemes for public employment; the overseers of the poor used to hire out laborers, and in some places laborers were put up for auction. This plan, benevolent in intention, led to the creation of something like a serf class in southern England. Distress and humiliation produced in the southern counties in the winter of 1830 a rising which was suppressed without difficulty and punished with sensational severity—some five hundred men being transported to Australia.

Unions were formed among the agricultural laborers in the eighteen-thirties when the Owenite movement was spreading, but their spirit was crushed in 1834 when six Dorsetshire laborers were transported for taking illegal oaths in accordance with an old fashioned ritual. In the same year the old Poor Law was reformed, and the able bodied laborer was offered the workhouse if he needed help from public funds. The result was a slight rise in wages and the increasing employment of women and children. For forty years the laborer accepted his position. Not only did the conditions of his life and work make combination very difficult, but in the village he had against him farmer, parson and landlord. In the early seventies, however, Joseph Arch succeeded in creating and sustaining for some time a strong agricultural laborers' union. At one time it had almost 100,000 members, and under its pressure wages were raised and conditions improved. But the farmers, supported by the clergy and landlords, with a few distinguished exceptions, organized to destroy the union, and succeeded in weakening it by means of a lock-out. Then came the great agricultural depression; arable farming declined in favor of pasture, and less labor was needed; by 1881 the union had sunk to 15,000 members, and it was chiefly occupied in helping laborers to emigrate.

The extension of household franchise to the counties in 1884 was followed by legislation, favorable to the laborers, on parish councils, allotments and other questions; and a few years before the war a new spirit of hope was excited by a great Liberal campaign. When the war broke out new unions had been formed and demands were being pressed for a minimum wage and a weekly half holiday. After the war the laborers gained a great advantage in the establishment of an Agricultural Wages Board with wage committees in different counties. Unionism rapidly increased. In 1921 the government repealed the Corn Production Act with its guaranteed prices to the farmer and abolished the Wages Board. But in 1924 the Labor government set up another Wages Board on which representatives of laborers meet the employers' representatives on the district committees as equals. Thus, although wages are still very low, the laborer has acquired a status that he previously lacked.

Irish history presents a complete contrast to English history. In Ireland the agrarian movements have always been peasant movements, for the Irish peasant kept his hold on the soil. The framework within which the struggle went on was the English land system planted on Irish soil. But in the English system the landlord supplied capital and guidance; in Ireland he supplied neither. He was a rent receiver, usually making his home and career in England. (Maria Edgeworth's novel *The Absentee* was written to touch the conscience of these Irish landlords in London.) The Irish peasant consequently looked elsewhere for leadership, and Daniel O'Connell made him a political power. A series of agrarian movements beginning with O'Connell's campaign, and taking different forms under different leaders, compelled the British government to reform the system, banishing, as it was said at the time, political economy to Saturn. The history of land reform in the nineteenth century is the history of the modification of that system in the peasant's favor by Gladstone's successive land acts, which set up fair rent courts and recognized tenant rights. This was but a stage in a revolution, for it was followed by the use of state aid to enable the peasants to buy their farms.

Scottish history has something in common

with English and something in common with Irish history. In the lowlands the agrarian system resembled the English; in the highlands, the Irish. There the typical holding was the crofter holding, and the crofters were as much attached to their land as the Irish peasants. But they were swept away in great numbers by two invasions: the invasion of the sheep breeder and the invasion of rich men who wanted to make great deer forests for sport. The first was denounced by Sir Walter Scott in a famous passage about the unrelenting avarice which was draining the highlands. The evicted crofters emigrated or settled in Glasgow and the towns of the Clyde, where they fostered passionate memories of their wrongs. The process was practically unchecked until the eighties when Gladstone set up a Crofter Commission. The wrongs of the crofters began then to excite widespread sympathy, and Gladstone's government passed an act in 1886 giving security of tenure and fair rents to the crofters in seven counties. Just before the war the Liberal government, after a severe struggle with the Lords, extended the principle of this act to all Scotland.

J. L. HAMMOND

See: MANORIAL SYSTEM; SERFDOM; BLACK DEATH; LABOURERS, STATUTES OF; ENCLOSURES; POOR LAWS; ALLOTMENTS; SMALL HOLDINGS; WAGE REGULATION; ABSENTEE OWNERSHIP.

IV. WESTERN EUROPE. *France.* Throughout western Europe the manorial system, with its hierarchy of ownerships and system of common cultivation, was firmly established by the tenth or eleventh century. But by the fourteenth century peasant tenure in most parts of France, even within the manorial system, had become virtually an independent ownership, encumbered only by manorial rights and royal taxes. During the early period peasant revolts were infrequent, occurring only when situations were particularly unbearable, as at the time of the rigorously suppressed *Jacquerie* of 1358. Beginning in the twelfth and thirteenth centuries, however, there developed in most parts of the country a powerful movement for the emancipation of the serfs. The unrest caused by this movement combined with particular cases of oppression by the noble classes to produce a series of peasant revolts in the succeeding centuries. Of considerable seriousness were the movement of the *Tuchins* in the South (1380–83), the revolts of the *Croquants* during the devastations of the religious wars at the end of the sixteenth century, and the revolt of the *Nu-Pieds* of Normandy in 1639 after an excessive levy of taxes. Even the reign of Louis XIV was marked by troubles, principally in Lower Brittany, where the revolt of the *Bonnets Rouges* (1675) took on the aspect of a real peasant uprising against the domination of the nobles. But from the beginning of the eighteenth century until the outbreak of the revolution no peasant movements disturbed the peace of the country, although the burdens of the feudal regime do not seem to have been diminished, but were, if anything, increased, especially after 1750.

That dissatisfaction and strong antagonism existed beneath the surface, however, became apparent on the outbreak of the revolution. Throughout these later centuries seignorial authority was exercised directly not by the lord himself, even when he lived on his estate, but by his officers in charge of the administration of the domain. The residence of the noble on his estate rather than in the city had little effect on the attitude of the peasants; and the belief that in the Vendée or in Brittany relations were more cordial than elsewhere is without adequate historical foundation. For in all parts of France, at the time of the summoning of the Estates-General, those peasants who could make themselves heard in the local *cahiers* demanded the mitigation of the manorial regime, protested against its abuses and asked for the redemption of the most burdensome dues.

This attempt at governmental reform was early complicated by the release of agrarian discontent. One of the consequences of the fall of the Bastille was the *Grande Peur*, a widespread and unorganized peasant movement which resulted in the burning of chateaux and of records and in considerable terrorism. As a result the National Assembly passed the decrees of August, 1789, and of March, 1790, which abolished without indemnity the right of mortmain, hunting and fishing privileges, *banalités* and tolls, and made redeemable the other manorial dues, though on conditions that were onerous for the peasants. Hence serious disturbances again broke out. But after the events of the tenth of August, 1792, agrarian legislation became increasingly democratic in character; until finally, on the seventeenth of July, 1793, the Convention abolished without indemnification all feudal dues. This was the complete and definitive legal abolition of the manorial regime. The subsequent sale of the national domain, first the land of the clergy,

then that of the emigrés, contributed considerably to the increase of peasant ownership. Although it was of particular benefit to the more prosperous peasantry, it also enabled the hitherto landless groups to acquire some property.

Throughout the nineteenth century the characteristic small peasant holdings persisted in France side by side with large and middle sized holdings, to such an extent that on the eve of the World War only 36 percent of the soil was cultivated by large farmers and metayers. Agriculture, still rather primitive up to 1840, developed rapidly in the second half of the century, largely as a result of progress in the means of communication. A serious agricultural depression which began in 1875 and lasted until 1896 led to a series of protective tariff measures which resulted in a rise in prices especially advantageous to the large landholders. But agrarian policy throughout the century was dominated not by the pressure of agrarian movements, for there were none, but by considerations of national welfare.

Because of the low birth rate and of the rural exodus, the number of agricultural workers in France has been relatively small and has decreased still further since the World War. Moreover, although most of the peasant proprietors employ little outside labor, the wages of day workers and of domestic servants have shown marked increases in recent years. Quite recently, too, the accident compensation law was extended to agriculture. It is therefore not surprising that among agricultural laborers the trade union movement has been very weak.

Other types of agrarian organizations have, however, had an important development in France. Agrarian syndicalism, a movement in reality more cooperative than unionist, has grown rapidly since 1890. The *syndicats agricoles* are associations of producers (landholders and farmers of all kinds) one of the chief activities of which is the purchase of fertilizer, machines and tools. The wine producers, especially those in the south, have organized powerful cooperatives not only for the purchase of supplies but also for the sale of their products. More recent is the important movement for the organization of agricultural credit unions to help the peasants in financing the purchase of livestock and even of land. This movement has been supported by the government. A law of August 5, 1920, created a National Office of Agricultural Credit which advances funds to *syndicats*, cooperatives and regional banks (*caisses régionales*). These institutions may be expected not only to help maintain but also to extend the system of small peasant holdings, which remains one of the most characteristic features of French economic and social life.

HENRI SÉE

See: MANORIAL SYSTEM; SERFDOM; JACQUERIE; FRENCH REVOLUTION; ABSENTEE OWNERSHIP; SMALL HOLDINGS; PEASANTRY; AGRARIAN SYNDICALISM.

Germany and Austria. Although serfdom lasted longer in Germany than in England and France, during the Middle Ages the evolution of the rural classes particularly in western and southern Germany was quite similar to that in France. At the end of the fifteenth and the beginning of the sixteenth century, however, the nobles, and even more the ecclesiastical lords, were making attempts to reenforce their rights, to extend their manorial administration and to encroach upon the communal property of their subjects. This activity was the cause of more and more frequent troubles in southern Germany, as well as in neighboring parts of Switzerland. Numerous understandings of a general character were formed among the peasants (as in the famous *Bundschuh*), and all the movements came to a head in the bloody Peasants' War of 1525. This uprising was in a certain measure reenforced by the Reformation movement, although it is evident from the famous Twelve Articles that the demands of the peasants were essentially of an economic and social character. Luther himself severely criticized the Peasants' War. After a terrible struggle the lords were victorious and the peasants fell back into their former condition of serfdom.

In eastern Germany—Germany beyond the Elbe—the condition of the peasants grew steadily worse after the beginning of the sixteenth century. They were reduced more and more to a position of virtual slavery. The characteristic feature of this evolution was the gradual transformation of the feudal tenure (*Grundherrschaft*) of the lords into estate ownership (*Gutsherrschaft*). The lords, attracted by the gradually increasing price paid for grain exported through the Baltic, undertook the direct exploitation of their estates. This they accomplished through the extinction of a great number of peasant tenures and through forcing the children of their tenants to serve on their lands (*Gesindedienst*), while prohibiting the emigration of the peasants. The latter were therefore reduced to a condition of subjection closely re-

sembling slavery. This subjection, to be sure, varied in severity in different sections of the country. In Prussia, where the kings were very powerful, the central government succeeded in restricting to a large extent the absolute authority of the lords. But in the eastern part of the Austrian monarchy—Silesia, Bohemia, Moravia—more severe conditions were to be found. The wars of the modern period, and especially the ravages of the Thirty Years' War, greatly aggravated the subjection of the peasants.

The abolition of the feudal regime occurred in western and southern Germany under the influence of the French Revolution. In the Rhine countries annexed to the French state until 1815, this abolition was rapid and radical; elsewhere it was more or less complete and rapid according to the degree of domination that France exercised. In the kingdoms of Württemberg and Bavaria and in Baden peasant emancipation was achieved only in the first half of the nineteenth century. In Austria, as early as the eighteenth century, Maria Theresa and especially Joseph II had, through a series of measures, succeeded in liberating the peasants from their most severe burdens. But after the death of Joseph in 1791 feudal rights were again enforced, and the peasants were not actually freed from the rule of the nobles until after the Revolution of 1848.

In Prussia the abolition of serfdom was the work of the royal government, particularly as directed by the ministers Stein and Hardenberg. Contrary to popular opinion, their reforms were not carried out under the influence of the French Revolution. By the edicts of 1807 and 1809 Stein abolished all servile dues (*Abzugsgeld*, *Gesindedienst*) and suppressed all legal distinctions between the different kinds of property. These arrangements were completed by the *Regulierungsgesetz* of the 14th of September, 1811, promulgated by Hardenberg. According to this legislation the tenant became owner of his holding, but on the condition that he abandon a third or a half of it. The result was an extension of the land owned by nobles, as well as an increase in the number of landless day laborers. Although from 1815 to 1820 there was a marked aristocratic reaction, during the period from 1821 to 1848 legislation favorable to emancipation developed in Silesia and in the province of Posen. A new stage of emancipation was inaugurated by the Revolution of 1848; the laws of the 2nd of March, 1850, abolished without compensation all the manorial rights and services that still remained.

In eastern Germany, throughout the nineteenth century, an independent landowning peasantry scarcely existed. The land was owned almost entirely by the great nobles (Junkers) who cultivated their own estates through the employment of household servants and day laborers. The condition of the latter was deplorable throughout the whole of the first part of the nineteenth century; in the second half and until 1914 their position improved noticeably, thanks to increasing production, to the rural exodus and to emigration. The wages of household servants also increased, although their living conditions remained very bad. During this time the money wages of day laborers rose on the average 200 percent, real wages 120 percent. There was, however, no diminution in the exodus from the country to the cities, for wage increases were greater in industry. The landowners came to rely more and more upon the seasonal labor of foreigners, particularly Poles.

Unions had been organized among these agricultural laborers and the Social Democratic party had tried to arouse them, but both movements remained ineffective. It is to the Revolution of 1918 and to the German Republic that the German agricultural laborer owes his new and better condition. The republic early abolished all the political and civil restrictions from which he had suffered. As a result of its encouragement to union organization the *Reichslandarbeiterbund* had in 1920 a membership of 65,000; because of its activity the agricultural laborers secured for the first time in German history collective labor agreements, from which two millions of them profited. The state also forced the employers to provide more humane living conditions for farm servants. Its extension of arbitration to include agricultural labor was a reform of especial benefit to families tied to the large estates. For unattached workers the length of the working day was fixed by law—from eight to eleven hours according to the seasons—and through collective agreements wage rates were made uniform. As a result wages were considerably higher than before the war; their further rise was checked by inflation and by the falling off in agricultural output, both consequences of the war.

HENRI SÉE

See: MANORIAL SYSTEM; SERFDOM; REFORMATION; LAND SETTLEMENT; MIGRATORY LABOR; WAGE REGULATION; CREDIT COOPERATION.

Italy. The agrarian development of Italy, affected to some extent by the survivals of ancient Roman institutions and more definitely by peculiar geographic conditions and the general historical evolution of the country, was quite different from that of France or Germany. Moreover it did not occur uniformly throughout the country.

In the north the struggle of the prospering cities with the feudal nobles culminated, toward the end of the twelfth century, in the defeat of the nobles. They were made to spend a major part of the year within city walls, and their estates were put under the supervision of that branch of municipal administration which was concerned with the supply of food and raw materials. Under these conditions the servile status of the cultivators could not persist and by the fourteenth century no trace of it was left. At the same time the city bourgeoisie, enriched by commercial and banking activities, was buying up and consolidating nobles' estates. There emerged a system of large estates owned by the city patriciate, managed by employed superintendents along definitely commercial lines and worked by free laborers for wages paid in kind.

In Latium and the neighboring provinces the church acquired much land. Although it farmed this land directly at first, eventually the clerical farm managers, the *rectores* and *defensores*, came to be merely rent collectors from the dependent coloni. Large tenants of church land, the *conductores*, also began to function as collectors of rent, supervisors and even personal lords exacting a labor tribute from the coloni in the adjoining holdings. Although the church was careful not to extend the duration of tenancy beyond thirty years, which would automatically have made the tenancy hereditary, a class of hereditary semi-noble tenants soon appeared on church lands and finally gained almost complete independence of the church.

In the south and in Sicily large landholders used their power to form enormous latifundia at the expense of the state and of the peasant. Their further encroachments were the appropriation of the right of first purchaser of the peasant's produce and the gradual abolition of hereditary tenancies. An increasing area of land was laid under pasture; the position of the peasant, whose customary rights were ignored, became extremely bad. Between him and the landowner there was the large tenant, who rented the entire estate and received with it the seignorial rights over the peasants. This system of feudalism corrupted by commercialism persisted until the eighteenth century, and in Sicily until the time of Joseph Bonaparte.

Unified Italy inherited a variety of agrarian regimes. The north was dominated by large estates worked by gangs of hired labor marshaled by a contractor. The wages, paid partly in kind, were very low; employment was of a seasonal character and the oppression by the gang captain extreme. Further south prevailed a great variety of metayage arrangements, with the landowner always getting a larger and better half of the crop. This was in fact a disguised form of wage labor, because the landowner directed through his manager a great many of the agricultural processes of his tenants. The poverty of the agriculturists was reflected in a diet based on maize, which caused frequent epidemics of pellagra. Still further south and in Sicily the latifundium remained the usual type of agricultural enterprise in the plains and valleys, while small peasant farms were prevalent in the mountainous districts. The latifundium was usually rented in its entirety to an entrepreneur, who exploited a part of it himself and subleased the rest, which in its turn would frequently pass through the same process of leasing and subleasing.

On the whole the situation was characterized by absentee ownership and the prevalence of large estates. The old agrarian systems were imposed upon a commercialized agriculture. The resulting dependence of the lower classes, with their slender income, upon market fluctuations of the prices of agricultural produce made their condition worse than it had ever been before.

The government of the new state was at first interested only in the complete abolition of feudal restrictions on the circulation of land. Even when the official investigation in the early eighties revealed the unusual squalor of life of the rural masses, little else was done than the passing of unenforceable laws providing for the reclamation of marshy lands, the breeding places of malaria. The agricultural laborer and tenant were therefore in a state of continuous unrest and willingly joined labor unions even when the latter were illegal (1885–1900). This inclination to combined action was strengthened by the fact that in many districts the entire rural population lived in large villages.

In 1891 the abolition of *usi civici* led to

clashes in the rural territory surrounding Rome. In the same year the *fasci* were organized in southern Italy; brought into life by radical agitation, these unions were a characteristic manifestation of peasant psychology with its faith that Christ and the king would support their demands for improved conditions. In 1893 a serious revolt led by peasant leagues broke out in Sicily. It was repeated on a smaller scale a decade later. After 1900 the agricultural labor unions were tolerated and in some cases encouraged by the government. The entire north was soon covered by a net of such unions federated provincially. Later an interprovincial Federazione Nazionale dei Lavoratori della Terra came into being. The most important achievement of these unions was the securing of collective contracts by which the unions supplanted the commercial gang leaders and with the aid of which they were able to obtain higher wages and a more equitable distribution of employment. Within a decade the small metayers found their interests antagonistic to those of labor and seceded from the labor unions to form autonomous leagues which were later often active in concert with the landowners. At the same time the landowners perfected provincial and interprovincial organizations of their own, so that by 1910 the successes of the agricultural labor unions were checked. Attention was then turned to collective leaseholds which were either collectively worked and managed enterprises or combinations of small tenancies for certain limited purposes. While the militant unions were led by socialists and syndicalists, the Catholics were fostering the development of agricultural cooperation, a movement which grew rapidly and whose several branches were brought together in the national Federazione Italiana dei Consorzi Agrari.

Troubles broke out again in the years following the World War, when the slogan "La terra ai contadini" (land for the peasants) was heard throughout Italy. The legislation of the war and post-war years, which provided for the temporary seizure of uncultivated or not properly cultivated lands and of lands which were not improved in accordance with preceding laws, could not stem the tide of forcible occupation of land by the peasants, which continued until the establishment of the Fascist regime.

On the whole little has been achieved either by mass pressure or by governmental measures. The most promising step of the government, an attempt to reclaim land and establish small holdings, failed because of lack of funds in the treasury and dearth of private capital. The position of the Italian agriculturist is still greatly in need of improvement.

HENRI SÉE

See: LATIFUNDIA; FARM TENANCY; SMALL HOLDINGS; LAND SETTLEMENT; AGRARIAN SYNDICALISM.

Denmark. Agriculture in Denmark is more than a method of farming; it is a political system and a culture. In Denmark the state is rural rather than urban, agricultural rather than commercial. It is ruled by the farmers in their own interest and its educational, cultural and political agencies are dedicated to concern for their welfare and to the most advantageous distribution of their products.

About 1870 the competition of American wheat fields and the protective tariff policy of Germany had reduced Denmark to industrial straits. The people were sinking into despair, and the peasants seemed doomed to bankruptcy. But the very difficulty of the situation stimulated the peasants to efforts which within the next fifty years made Denmark a peasant democracy. Most observers have traced the origin of this change to the activities of Bishop Grundtvig, who gave his life to the development of an educational system that was democratic and suited to an agricultural population. The work of Grundtvig was associated with the development of the people's high schools, which as far as the farmers are concerned are the central feature of the educational system of the country. These schools are not vocational, but fuse culture with vocational education and aim to educate all the people. Not maintained by the state, they are completely self-governing and in a large measure self-supporting through their fees and some local aid. The principal of one of these high schools is almost always a man of distinction, who is responsible to no one but his community for the innovations he may introduce or the methods he may use. The schools are for adults between sixteen and forty years of age, and every peasant hopes to spend at least one term at one of them. These schools have contributed both to the development of cooperation and to the democratization of the Danish state.

The cooperative society is the second agency of agricultural organization in Denmark. Of the 200,000 farmers of Denmark, 184,000 are members of the more than 5000 different co-

operative societies in the country. These societies deal with almost every known necessity, but the dairy cooperatives are by far the most numerous. All the societies are aided by the state in a variety of ways. They have developed a high degree of business skill, and compact and loyal organizations. Almost every farmer is a member of several such societies. Through them he prepares for market his own butter and cheese, bacon and eggs, and exports them to London. In addition he is a member of a distributive society through which practically everything he consumes is purchased. Indeed the entire agricultural life of Denmark is centered around the cooperative society.

The Danish state is a farmers' state. The peasants have a large representation in the Parliament and control the ministry, of which many members are farmers. In recent years the very small peasants known as *husmaend*, owning possibly a half acre of land, have been rising to power in cooperation with the socialists. In this sense Denmark is a class state. The peasants have used their power to nationalize the railways, which are made to serve their export business. They have adjusted taxation to their interest and in recent years the movement for the single tax on land values has made substantial progress, more progress than in any other country in the world. The farmers have, however, been very generous in their social legislation and their provisions for social insurance, while trade unions are very strong and are encouraged by the state.

As a result of this class control, the few remaining feudal estates have been largely expropriated and divided into small holdings. The state has created credit funds to be loaned to prospective farmers who can convince local committees of their ability. For such persons the state provides ready made and fully equipped farms from the land taken from the large estates. In line with this policy tenancy has been very greatly reduced.

Denmark is a state that is consciously planned. It is an exhibit of agricultural efficiency. In no country in Europe are education and culture so widely diffused, in no country is landlordism so nearly extinguished, and in no state in Europe has economic democracy evolved with so much intelligence as in Denmark.

FREDERIC C. HOWE

See: FOLK SCHOOLS; DAIRY INDUSTRY; AGRICULTURAL COOPERATION.

V. EASTERN EUROPE. *East Central Europe and the Balkan Countries.* By the beginning of the eighteenth century serfdom was well established in most parts of southeastern Europe. In the Alpine lands the peasant still enjoyed a considerable measure of freedom, but elsewhere he was bound to the soil; and in countries like Bohemia, Moravia, Lower Austria, Galicia and parts of Hungary, where the lords cultivated on a large scale themselves (system of *Gutsherrschaft*), he owed important labor services (*Robote*) to his lord. In the Czech countries the old native aristocracy had been overthrown at the battle of the White Mountain (1620), and the serfs were subject to alien control.

It was not until the advent of Maria Theresa in 1740 that the centralized Hapsburg monarchy was strong enough to check the growing power of the feudal lords. As taxation fell almost exclusively on peasant land, encroachment by the lords meant a loss of revenue to the crown and was declared illegal in 1751. The treasury had also an obvious interest in checking the constant increase in the dues and services owed by the peasantry to their lords. Maria Theresa therefore regulated and codified the existing obligations in the kingdom of Hungary by the Urbarium of 1767, and applied the same general principle to Bohemia and Moravia eight years later. On the crown domains she went still further, abolishing the servile status and introducing money rentals in place of dues and services. Her son Joseph II attempted to extend this policy to all domains. In 1781 he abolished the servile status in the Bohemian lands in a document known as *Leibeigenschaftsaufhebungspatent* and issued a series of decrees between 1785 and 1789 reducing the obligations of the peasantry to their lords and transforming them into money payments. Unfortunately these last measures broke down in practise and were withdrawn by the disillusioned monarch a month before his death in 1790. Reform from above had failed, and reaction was to persist for over half a century.

But the example of the French Revolution and the slow growth of a new national feeling were not without effect. Count Szechényi succeeded in obtaining freedom of migration for the Hungarian peasant in 1836, while a fierce peasant revolt in Galicia ten years later forced the agrarian problem upon the attention of an apathetic central government in Vienna. By 1848 the Danubian peasant had become class conscious, and a number of bad harvests in-

furiated him still more against the feudal privileges enjoyed by his lord. The revolution shook the old political regime, and on July 26, 1848, the new Constituent Reichstag at Vienna, in which nearly a quarter of the deputies were peasants, declared that "from now on, servile status, with all rights and duties springing therefrom, is abolished." A patent issued on September 7th gave effect to this resolution. The distinction between noble and peasant land disappeared, the peasantry acquiring the latter in full individual ownership. All obligations arising from personal subjection were abolished without compensation, while the money value of the dues and services was to be assessed by a government commission and was in fact ultimately paid off with government assistance. These principles were applied to Hungary, with some modifications, after the suppression of the great national rebellion of 1849.

In the basin of the lower Danube national and agrarian emancipation went hand in hand. A Serbian law of 1839 gave the peasants full proprietary rights over the land actually held by them six years previously, and the former Turkish lords lost their influence. In the Rumanian principalities the revolt led by Tudor Vladimirescu in 1821 was an outward sign of agrarian discontent, but when the Russians occupied the country and issued a constitution (the *Règlement organique* of 1831) they merely codified existing agrarian relationships. It was left to Prince Cuza, the first ruler of the united country, to strike at the root of feudal privilege. In 1863 he secularized the church lands, but his proposal to emancipate the serfs and abolish labor services (*claca*) met with such intense opposition from the aristocracy that he disregarded the constitution and issued the comprehensive Rural Law on his own initiative in 1864. The former serfs obtained, in full ownership, a quota of land varying according to the number of oxen they possessed, while compensation to the lords in respect of labor services and tithe, which were now abolished, was paid for the most part by the state.

In Bosnia and Macedonia agrarian feudalism still survived under Turkish (and Austrian) rule, but elsewhere in the Danubian region the peasantry had by the sixties been emancipated from serfdom. Under the individualistic legislation of the period, the clan settlement (*zadruga*), which prevailed among the upland pastoralists in the southern Slav lands, rapidly disappeared. Here, as elsewhere, the peasants lost the protection of custom before they were able to use contractual freedom. They were, indeed, singularly ill-prepared to face the rapid economic changes of the new era. With the advent of railways, a money economy and international trade, the days of the self-sufficing village community were numbered, and the rapid increase in population soon created a veritable land hunger.

The legislation of 1848 and 1864 had left what was once "noble" land in the hands of its former owners, and very large estates still played an important role in the rural economy of the Danubian lands. In Bohemia properties of over 125 acres comprised 41 percent of the total area, and some of these were of truly princely dimensions. The same was true of Hungary, where estates of over 140 acres occupied nearly 56 percent of the total area, while in the Old Kingdom of Rumania 48.5 percent of the arable land was in the hands of owners of 250 acres or over. The agrarian structure of these countries was thus dangerously top-heavy. Many of the landlords were absentees, and their land was often leased out on a produce-sharing tenancy (metayage). In parts of southern and eastern Hungary labor services were established on a contractual basis, and bad harvests led to considerable unrest in the nineties. Throughout the Dual Monarchy the regions of latifundia were those which sent their dissatisfied but enterprising peasant sons to seek a new home across the ocean. In Rumania the exactions of lessee trusts led to the last of a series of peasant revolts in 1907, and the agrarian question dominated the political stage in 1914. In many areas, such as Bohemia, Slovakia, Transylvania and parts of southern Hungary, the landed aristocracy was alien in race and sympathies to the majority of the population, and the land problem was national as well as social.

Then came the World War, with its profound effects on the psychology of the masses as well as on their material well being; the break-up of Russia, with its example of a new agrarian practise; and finally the collapse of the Central Powers and the formation of new national states. The old agrarian order was doomed.

While the German armies were overrunning the country, a Rumanian Constituent Assembly, composed mainly of landlords, voted the principle of the expropriation of the large estates in June, 1917, and, on the battlefield of

Mărăşeşti a few weeks later, King Ferdinand gave a solemn promise that the crown domains should be divided among the peasants. On December 15, 1918, the government issued a decree which filled in the details of agrarian reform. Land belonging to absentees and corporations was expropriated in its entirety, while other owners were called upon to surrender some five million acres of arable land according to a sliding scale which left owners of 250 acres or less untouched, but allowed no proprietor to keep more than 1250 acres. The provisional government of Bessarabia had already passed a revolutionary law expropriating all land over and above an allowed minimum of 250 acres, and the national assemblies of Transylvania and Bukowina made agrarian reform a condition of their union with the Old Kingdom. Finally acts passed in July, 1921, codified the earlier decrees and established a new scale of expropriation which was more severe but also more scientific. Compensation, which was given in government bonds from 1918 onwards, has become negligible as a result of the depreciation in the national currency.

In Czechoslovakia agrarian reform was almost equally drastic, but it has been applied more slowly. A law of April 16, 1919, placed all estates of over 375 acres of arable, or 625 acres of all land, under sequestration; they could not be disposed of without the consent of a specially constituted government land office. The law of May 27, 1919, gave small holders proprietary rights over such land as they had rented from the large estates since 1901; moreover, from 1920 onwards, sequestrated land has been divided up among landless peasants and others. The expropriated "home farms" (*Restgüter*), however, have been maintained intact. The division of the arable land will be completed by the end of 1929, when the former landlords will have lost a total of over 3,000,000 acres of arable land and nearly 7,000,000 acres of other land. Compensation is paid on the basis of land prices in the period 1913–15, and no allowance is made for currency depreciation since that time.

Agrarian reform in Jugoslavia has been somewhat chaotic. A decree of February 25, 1919, contained certain "preliminary instructions" providing *inter alia* for the abolition of the servile status, which still survived in Bosnia and Macedonia; the suppression of the colonate, a semi-servile form of metayage tenure common in Dalmatia; the expropriation of the large estates, especially in Croatia and what was once southern Hungary; and the nationalization of the forests. This was supplemented later by a number of confused and often contradictory decrees, and approximately 3,000,000 acres of land (less than half of which is arable) have been taken from the large estates. Schemes of internal colonization have not usually proved successful, and the reform has been carried out on political rather than scientific lines.

In Austria large estates accounted for only 6 percent of the total arable land, and agrarian reform was virtually limited to the Resettlement Law of May, 1919, which restored to the small cultivator former peasant land acquired for sporting purposes since 1870. The case of Hungary, however, is in marked contrast to that of its neighbors. The revolutionary agrarian legislation passed by Bela Kun in 1919 did not survive the Bolshevist regime. A law passed by his successors in December, 1920, did little more than give the government a first refusal of all rural property offered for sale, while recognizing the rights of certain categories of persons (especially the so-called "heroes") to allotments. Some of the land acquired under the capital levy scheme has also been used for settlement, but properties of 140 acres and over still compose nearly half of the total area of the country. Hungary is an island of latifundia in a green sea of agrarian reform.

Elsewhere the day of the feudal hierarchy is virtually over. The peasant is slowly becoming an important factor in politics and his standard of living has undoubtedly risen. But the change in land ownership has not been accompanied by a corresponding change in the average unit of production. Approximately one half of the large estates in Old Rumania, for example, were formerly leased out to small cultivators, and it is estimated that not more than 7 percent of the total arable land in Czechoslovakia has passed from large to small scale production in consequence of the reform. Moreover peasant holdings of inadequate size have been augmented. The growth of rural education and agricultural cooperation should, however, lead to increased efficiency in the future. The social results of this recent legislation are most far reaching; agrarian reform has opened out new possibilities in the lives of the masses of the people.

IFOR L. EVANS

See: SERFDOM; LATIFUNDIA; FARM TENANCY; SMALL HOLDINGS; PEASANTRY; NATIONALISM; PARTIES, POLITICAL.

European Russia. As early as the fourteenth century the position of free agricultural tenants in Russia was somewhat similar to that of personal serfs. In 1597 Boris Godunov completed the series of enactments and legalized the customary rules which bound the cultivator to the soil. During the next two centuries serfdom spread over an increasing territory, and the position of the serf became almost indistinguishable from that of a slave; by the end of the eighteenth century he could even be sold apart from the land to which he was presumably attached.

Serfdom had many economic and political functions. It was first of all a primary source of agricultural labor, and in the primitive condition of Russian agriculture labor was the most important factor in production. The value of a piece of landed property was determined largely by the number of serfs bound to it. From the point of view of the government also, serfdom was essential, for its assurance of continuity of forced labor (*barshchina*) or of money dues (*obrok*) furnished in the early years a stable economic basis for the military and administrative officialdom. Later serfdom performed the same function in assuring the prosperity of the gentry, who were themselves obliged to serve the state. The repeal of this obligation in 1762 removed one of the most widely accepted justifications of serfdom and led to discussion of its abolition. Pugachev attempted to make use of this sentiment in the revolt which he led a decade later. Serfdom also facilitated the control of the government over an immense and undeveloped territory. The landowner was made responsible for the preservation of peace and order, the collection of taxes, the provision of assistance when crops failed, and recruiting for the army. This devolution of powers is suggestive of the early stages of most colonial governments. The landowners, however, were not in all cases the base of the administrative hierarchy concerned with the rural population. The serfs attached to larger estates, especially to the *obrok* estates of the absentees, developed their own corporate organization, tolerated because it was an agency through which the joint responsibility of all the serfs for various dues and taxes could be enforced. This organization, the very existence of which stimulated class consciousness and self-government, influenced the later development under legal sanction of the land commune (*obshchina* or *mir*) with its pronounced tendencies toward equalization of land distribution.

The abolition of serfdom was accomplished in Russia by a decree of Alexander II in 1861. A number of factors had combined to bring about this change in policy. The spread of western ideas in governmental, social and literary circles; the frequency of local uprisings; a growing realization of the economic advantages of free labor; the necessity of maintaining Russia's prestige which had been shaken by the Crimean War, were all of importance. The act abolishing serfdom has been characterized as "the greatest legislative act in history," but it might also be said to have created the greatest economic maladjustments.

This act, supplemented and amended by later enactments, proclaimed the legal freedom of the former serfs and made provisions for a land settlement. The emancipated serfs were to receive individual grants of cottage and kitchen-garden land and communal grants of arable, pasture and meadow land. The state paid the former landowners in bonds and the peasants were required to repay in instalments. Alienation of allotment land (*nadel*) to non-peasants was restricted by a law of 1893. The small size of most holdings made it impossible for the peasants to make their payments, and the mortgage debt, principal and overdue interest, was canceled by law in 1906. Even with this relief, however, the situation remained unsatisfactory.

In Russia proper the power to regulate the use of the newly acquired communal land was granted to the land commune (*obshchina*), a body composed of the heads of the households of a given manorial area, which adopted decisions by a two-thirds vote. General redistribution of the communal land among its members was allowed at intervals of not less than twelve years by the terms of a law of 1894. The component of this land commune was, and as a working unit still remains, the family, headed by an elder, whose powers were considerable, and carrying joint responsibility for the obligations and arrears of all its members. The right of an adult married member of such a family to claim the carving out of a separate holding was granted only in 1886, and then only on condition that reasonable cause of family dissent be shown, and also that authorization of the *mir* be secured.

The liberated serfs (about 22,000,000) together with the state and crown peasants (about 9,000,000) formed a peasant class with a special legal status. To give effect to this position

they were organized in local corporations (*selskoe obshchestvo*) with elected executives, and possessed of certain administrative and judicial powers. It was through these corporations that the government enforced the joint responsibility of the peasants for arrears in taxes and the performance of statute labor, such as road repairs, and military service. From 1861 until 1913 this class was subject to the jurisdiction of its own elected judges or courts (*volostnoy sud*), which based their decisions largely on customary law. This legal status involved certain disabilities. Only the peasants, for instance, were subject to the sentence of corporal punishment. According to the Zemstvo Statute of 1864 the peasants constituted a separate group in elections to rural local government bodies (*zemstvo*); and later the same provision was made concerning elections to the national legislature (Duma). With the revolution of 1905 some of these disabilities lapsed and the status of the freed serf approximated more nearly that of a full citizen.

After 1861 there had been an unmistakable economic decline in the densely populated agricultural districts of central Russia. Elaborate official and *zemstvo* statistics showed in detail that the majority of the peasants had inadequate holdings, were underfed, underemployed, in arrears with taxes and were paying exorbitant rents for extra-allotment land. While in 1861 only 28 percent had inadequate holdings, in 1914 the proportion was probably about 70 percent.

Four notable and interrelated remedies for this situation were widely debated: more land for the peasants, industrialization of the country, improved methods of cultivation, and birth control. The last was completely out of the question, and the first was the most popular both among peasants with inadequate holdings and among liberal and revolutionary groups. The pressure in this direction monopolized the nation's attention. The purchase by peasants of 100,000,000 acres in the period 1862–1914, chiefly through the Peasants' Bank, and the settlement of millions of peasants in Asiatic Russia accomplished but little compared with the magnitude of the problem. And though by 1914 the peasantry owned four fifths of the arable land in European Russia, their land hunger was far from satiated.

Probably the only practicable solution of these difficulties was to be sought in improved cultivation by the individual, free from communal control and master of a compact holding. Stolypin aimed at such a change in the ukase of November, 1906, which, with further modifications intended to encourage individual cultivation, was made law by the Duma in 1910. Two types of peasants responded to the new opportunity: those who wanted a full sized manageable holding, and those who wanted to get rid of communal and family restrictions in order to sell their uneconomic holdings and find outside employment. Between 1907 and 1913 no less than one fifth of the farms under communal tenure (or 2,478,000 peasants with holdings of 45,900,000 acres) claimed separation from the commune; 24 percent of the claims were satisfied without the consent of the communes. In addition 3,500,000 in communes where redistribution of land had been in abeyance for twenty-four years became individual owners. The opportunity for individual ownership was welcomed by the many peasants who had been restive under family control and power vested in heads of households. As a result of these changes the village commune and patriarchal family arrangements were being replaced gradually by a system of economic individualism.

Then in the revolution of 1917–18 all nonpeasant land and all peasant lands held in private ownership were seized by the land communes on behalf of the majority with inadequate holdings. This was not organized nationalization, but a chaotic performance carried out in piecemeal fashion by several hundred thousands of communes. It indicates clearly the importance of the agrarian aspect of the whole revolution. The resulting average accretion of land per peasant holding was 22.5 percent, or from 5 to 6 acres per head of the farming population, but the increase was smaller in the densely populated regions and everywhere most holdings remain very much below the limit indispensable for bare subsistence under the present mode of cultivation. On January 5, 1918, the Constituent Assembly passed the Fundamental Land Act prepared by the Social-Revolutionary party. It proclaimed that "the right of private property over land within the borders of the Republic is henceforward abolished once and forever." The main features of this act were incorporated in the Soviet Land Code of 1922. The emphasis at first laid on the right of the land commune to distribute the land according to the labor power of those who worked it was, however, lightened under the New Economic Policy. Articles 134–137 of

the code revert to the Stolypin reforms by facilitating separation of the individual cultivator from the land commune. There is this important difference, however, that the family reappears as a collective labor unit and that peasant land cannot be held as unrestricted private property.

A. MEYENDORFF

See: SERFDOM; MIR; PEASANTRY; RUSSIAN REVOLUTION; NEW ECONOMIC POLICY.

Poland and Lithuania. Probably because of the slowness with which the subjection of the peasants occurred, there were almost no peasant uprisings in Poland in the early years of its history. By the seventeenth and eighteenth centuries, when serfdom was breaking down in western Europe, in Poland it was at the height of its development, with land and power concentrated in the hands of the nobility, and king and towns extremely weak. It was in this period that agrarian movements became important.

Although from time to time individual landowners advocated reforms, the majority of the gentry were opposed to change. Their reluctance to take any decisive action, even during the partitions of Poland, gave the foreign conquerors the opportunity to play the part of liberators. The peasants so definitely regarded the invaders as their benefactors that subsequent nationalist movements were condemned to failure. For instance, during the nationalist uprising in Galicia in 1846 the peasants themselves organized a massacre of the Polish landlords and thus crushed the rebellion.

Unrest and demands for land and personal freedom on the part of the peasants increased between 1846 and 1864. The emancipation of the serfs in Prussia (1848) and in Galicia (1849) caused the peasants in the Russian section to clamor more insistently for reforms. Seeing the necessity for some action, the Polish leaders and the Russian government tried to anticipate each other in satisfying these demands. The leaders of the Polish nationalist insurrection of 1863 issued a manifesto proclaiming the emancipation of the serfs. The Russian government countered in 1864 with a similar decree, which effectively quelled the uprising.

But none of these acts of emancipation solved the economic problems of the peasants. Many were left without land, and even those with holdings lacked adequate capital or credit facilities. In Prussian Poland there set in a strong wave of emigration to the United States and Germany. In Russian Poland the surplus rural population found employment in the newly organized industries. But in Galicia, where there was little emigration, and industrial employment was scarce, the onerous position of the peasants resulted in a populist peasant movement which later developed into the strongest of the Polish peasant parties. This particular movement also began to take on the tinge of nationalism. Although several proposals for general land reforms were made before the World War, nothing of importance was accomplished until the creation of the independent Polish state. Indeed just before the post-war reforms, 31 percent of the agricultural population consisted of landless peasants, while less than 1 percent owned 31 percent of the total land.

The Polish Land Reform Bill, enacted in 1920, was passed under pressure of the necessity for national unity in the face of the threatened Russian invasion. It provided for the creation of a land reserve, consisting of crown land, of confiscated estates of former officials, of certain church properties and of land from private estates in excess of 180 hectares. Compensation for the property seized was fixed at 50 percent of its market value. The land from this reserve was to be parceled out to landless peasants in lots of 15 hectares and in varying proportions to peasants whose holdings were less than 23 hectares in extent. Numerous difficulties have been encountered in the carrying out of these reforms. Perhaps the greatest obstacle to the realization of the desired changes has been the lack of funds in the state treasury.

As long as Lithuania was a part of Poland, the two countries had similar agrarian difficulties. Antagonism between nobles and serfs was heightened in Lithuania, however, by the Polonization of the nobility in the face of continued loyalty of the peasants to Lithuanian customs and language. Russian annexation resulted in still worse conditions for the peasants, and it was not until 1861 that the government decreed the emancipation of the serfs and enforced some distribution of land. Following an insurrection of 1863 the Russian government inaugurated an attempt at compulsory Russification, involving the suppression of the Lithuanian language and the Catholic religion. The opposition aroused by this policy led to frequent confiscation of land by the government.

A national populist movement sponsored in this period by Lithuanian intelligentsia became later the backbone of the struggle for Lithuanian independence.

The gravity of the economic condition of the peasants was striking; just before the war 17 percent of them were landless and 28 percent owned no more than 3 hectares of land. Although here, as in Poland, attempts were made to secure agrarian reforms before the war, it was only after 1918, when Lithuania became independent, that anything was accomplished. The Agrarian Reform Law, passed by the Constituent Assembly of Lithuania in 1922, provided for the expropriation of owners of large estates, with some compensation, and the distribution of the land to landless peasants and to those with very small holdings. As a result of this legislation many new farms have been created, and the situation of the peasantry has materially improved.

ESTHER R. MANGEL

See: SERFDOM; PEASANTRY; NATIONALISM; SMALL HOLDINGS.

Latvia and Esthonia. Agrarian movements in Latvia and Esthonia have been to some extent also nationalist movements. The original free inhabitants of the country had been converted into serfs in the thirteenth century, when the German Knights of the Teutonic Order seized the land on the pretext of converting its peoples to Christianity. The opposition of the peasants to these German lords persisted for many centuries; among the more important of the continual uprisings to which it led were those of 1343, 1560, 1784, 1805, and those during the forties and fifties of the nineteenth century.

Throughout these years the position of the peasantry depended also on the attitude of the frequently changing governments, for Poland, Sweden and Russia in turn controlled the two countries. In 1681 Sweden attempted to abolish serfdom and reform conditions of tenure; but when Russia acquired the countries in 1721 the Swedish laws were abolished, and the landlords went so far in their oppression of the peasants that the Russian government intervened with a measure of protection. Governmental interest was further stimulated by the French Revolution, and there resulted in Latvia in 1804 a reform which gave the peasants hereditary leasehold of the land.

This situation, however, was changed by the reforms of 1816 in Esthonia and of 1819 in Latvia, which emancipated the serfs without providing grants of land, and thus left the peasantry virtually destitute. Widespread emigration and recurring revolts followed. After 1841 a series of regulations delimiting the area of peasants' land and regulating the rights of leaseholders was passed. While these regulations introduced some improvements in the conditions of the peasants, they did not materially lessen agrarian unrest, for most of the land which the peasant tilled still remained the property of the lord.

Since the national and the agrarian movements in Latvia and Esthonia were both directed against the German aristocracy, it was natural that there should have been an early identification of the two and that national independence brought with it agrarian reform. The radical character of the post-war reform laws in these countries was due to the fact that the landowners constituted a group nationally and culturally alien to the majority of the population of the two newly created states, as well as to the influence of the Russian Revolution and the Soviet invasion. These reform laws expropriated the owners of large estates and parceled out their land among the peasants. In Esthonia former owners were compensated, but in Latvia they received no compensation. The number of small farms in both countries has increased tremendously as a result of this legislation. Whereas in Latvia before the reform the peasants had owned only 39 percent of the total land, by 1923 holdings of from 2 to 50 hectares in extent comprised 81 percent of the land, and in Esthonia the percentage of the total land in small holdings increased from 42 percent in 1919 to 87 percent in 1924. As far as one can judge, the reforms have resulted in notable improvements in the conditions of the peasantry in both countries.

ESTHER R. MANGEL

See: SERFDOM; PEASANTRY; NATIONALISM; RELIGIOUS ORDERS; SMALL HOLDINGS.

VI. UNITED STATES. During the colonial period of American history agricultural interests dominated the legislatures of the southern colonies almost exclusively. Such agrarianism as there was in that section was directed against the imperial policy of Great Britain, which was formulated in the interest of the British commercial classes. An important contributing

factor in producing revolutionary zeal among southern colonial planters was their feeling that they were victimized by the merchants in Great Britain from whom they purchased their supplies and to whom they sold their crops. Hence it may be said that so far as the South was concerned the American Revolution itself was an agrarian movement. In the North the colonial governments were usually dominated by the mercantile interests of the seaboard towns. In contrast to the South, where agriculture was carried on "as a business," in the North the farmer usually farmed "for a living." He was frequently a debtor to the city merchant or shopkeeper. During and immediately after the revolution his debts tended to increase, this condition becoming particularly intense in Massachusetts and Rhode Island. In both these states the farmers attempted to obtain control of the state governments, pass stay laws against the execution of mortgage foreclosures and provide for the emission of large quantities of paper money with which they might liquidate their indebtedness. They obtained control of the government in Rhode Island, issued paper money in abundance and almost literally thrust it down the throats of their protesting creditors. In Massachusetts, however, the efforts of the farmers met with no such success. In the western part of the state many of them united under the leadership of Daniel Shays, marched boldly into the courts and prevented the transaction of legal business. But troops were called out and Shays' mob was dispersed.

In the period 1783–87 while these disturbances were taking place in Massachusetts and Rhode Island, vested interests in the United States were neither very numerous nor united. Nevertheless they were class conscious and alert against dangers that threatened to curtail their development or seemed likely to jeopardize the position they had already attained. To aid these interests the federal constitution was brought into existence in 1787–89. During the ensuing twelve years while the Federalist party retained control of the central government, the financial, foreign and taxation policies of the United States were designed to assist the commercial, manufacturing, banking and speculative groups. The theory upon which Hamilton and other Federalists based their arguments in favor of such policies was that by advancing the interests of these groups directly, other groups, particularly the agricultural, would benefit indirectly. While at no time since Hamilton's day have those in control of the federal government stated their theories so boldly and frankly, it may well be maintained that in practise, with some minor exceptions, the policy of the government has never changed. At the same time other classes than these which may be designated as "business interests" have more or less unconsciously acquiesced in this theory.

From time to time the farmers, particularly the producers of such great staple agricultural crops as rice, cotton, tobacco, grain and meat, have protested. They have argued that their industry is basic and that consequently their prosperity should be the primary and direct concern of the government. The first American statesman of importance to hold this view was Thomas Jefferson. He succeeded in building up a great political organization composed in the main of western frontier farmers and a majority of the southern planters. The bond of union among his followers was opposition to the privileges that had been bestowed upon the business groups by the Federalists. They had no constructive program of their own comparable to that which the Federalists had put into execution. Hence aside from strict economy in the administration of the government and the purchase of Louisiana, which may be considered an agrarian policy, Jefferson's administration was of a negative character. His effort to curb the power of the Supreme Court failed and very little of the Federalist program was undone.

Under Jefferson's successors, Madison, Monroe and John Quincy Adams, the Republican party became almost as much a party of the business groups as the old Federalist had been. The frontier farmers and the southern planters became restive and with the assistance of certain labor groups in the eastern cities elected their candidate, Andrew Jackson, to the presidency in 1828 against John Quincy Adams. Again the results were on the whole negative. The destruction of the Second Bank of the United States, the lowering of the protective tariff, the removal of more Indians west of the Mississippi, and the appointment to the chief justiceship of a man less amenable to the dictates of the business interests than John Marshall had been, were the principal accomplishments of the Jacksonian epoch from an agrarian standpoint.

From Jackson's time to the Civil War, agriculture in the United States was relatively prosperous, but those engaged in it tended to

divide into three fairly well marked groups: the southern planters, the western grain growers and the eastern truck farmers. The last of these generally identified their interests more or less completely with those of the business people of the cities to whom they sold their produce, and in politics they usually followed the lead of the business men. Although mutually suspicious, the other two agricultural groups tended to act together in politics and exerted sufficient influence in Washington from 1830 to 1860 to hold the balance between agriculture and other forms of business enterprise more nearly even than has been the case since the Civil War. Between 1850 and 1860 the two groups diverged rapidly over the questions of a free land policy, slavery extension, government aid to transportation facilities and a persistent imponderable—the morality of slavery. The new Republican party which came into power in 1860 was an alliance between the eastern business interests with their satellites —the eastern truck farmers—and the western grain growers. The southern planters, rendered desperate by their loss of influence in the national government resulting from this alliance, and unwilling to submit tamely to impotent isolation, carried their states into secession and undertook the task of establishing a separate confederacy of their own. In the Civil War that followed, the southern planters lost all—their Confederate government, control of their state governments, most of their landed property, all their slave property and finally their own peculiar form of agricultural organization.

With the collapse of the most articulate agricultural group that has ever existed in the United States, business interests entered upon a period of almost unchallenged control of the federal government and most of the state governments. Far from being hindered by government regulation, they received at the hands of the central and local governments every favor they desired. The Hamiltonian theory was practised with almost no qualifications. What could not be gained by fair means was frequently obtained unfairly. Despite some talk about "the corrupt alliance between big business and politics," the people of little or no means accepted the situation cheerfully, for in the main, so far as they thought about the matter at all, they believed it best to let business men, whose wisdom had been manifested by their success, control the governments in their own interests, and hoped that some of the wonderful prosperity might eventually overflow to their own benefit.

Such dissent as there was came mainly from western grain and meat producers. During the Civil War these farmers had been prosperous, but with the cessation of hostilities came a rapid decline in their affluence. Foremost among the factors contributing to this result was deflation of the currency. This, coupled with an increase in the supply of agricultural commodities, due in part to the opening up of new grain lands under the generous provisions of the Homestead Act of 1862, brought a period of low prices, which with few interruptions lasted until the close of the century. There was no decline in interest rates, and the principal of such debts as the farmers had contracted had to be repaid in a dollar of enhanced value. Furthermore the prices of commodities which the farmers had to buy did not decline in a ratio commensurate to those they sold. Consequently many farmers demanded that the government cease its policy of contraction and enter upon one of inflation of the currency until prices were again somewhere near their war-time level. Failing in their efforts to secure endorsement of their demand from the old parties, some of the farmers organized the Greenback party and put candidates in the field for the presidency and for Congress during the years 1876–84. This attempt having failed, they turned their attention to the question of "free silver" (*q.v.*). Silver had been demonetized in 1873, but soon afterwards there was a rapid increase in the amount mined. The agrarians believed that if it could be remonetized at the old ratio of 16 to 1 with gold there would follow an inflation of sufficient proportions to give them relief. In 1878 they succeeded in having Congress enact a silver-purchase law. This gave some relief, but after a time the farmers again grew dissatisfied and demanded more silver. In 1890 this was granted in a new silver-purchase act. Then followed the panic of 1893, and still harder times for the farmers. President Cleveland, solicitous about the safety of the gold reserve, induced Congress to repeal the silver-purchase act. Even before this the farmers of the West, aided by some from the South, had organized the Populist party and demanded, among other things such as government ownership of railroads, telegraph and telephone lines, the free and unlimited coinage of silver at the 16 to 1 ratio.

Aggrieved at the action of Congress and President Cleveland, the silverites attacked with new vigor and in 1896 gained control of the Democratic party and nominated William Jennings Bryan for the presidency with the free coinage of silver as the paramount issue. This campaign marked the high tide of agrarian challenge to business men's control of the government.

After the defeat of Bryan agrarian discontent abated somewhat because of a period of relative prosperity for western and southern agriculturalists. But it was merely an abatement. Bryan returned to the attack in 1900 only to meet a more decisive defeat than in 1896. During the Roosevelt, Taft and Wilson administrations, 1901–21, there was no agrarian party in national politics, but there were a number of congressmen in both parties, mainly western Republicans, who were ever on the alert for the interests of their constituents. This group came to be designated as the "Agricultural Bloc," and exercised considerable influence, especially during the administrations of Roosevelt and Wilson. As far back as the seventies and eighties, a good deal of agrarian complaint had been made against the unfair practises of railroads and manufacturing corporations that held a more or less monopolistic position and were loosely designated as "trusts." The so-called "Granger movement" and certain local "anti-monopoly" parties had endeavored to bring railroads and trusts under state regulation and had succeeded to some extent. But since trusts and railroads were interstate in character, any regulation to be effective had to be national in scope. In 1890 Congress had made a feeble effort to prohibit trusts, and in 1887 had attempted to regulate railroads, but almost nothing of importance had been accomplished. In the first decade and a half of the twentieth century the agrarians renewed their efforts and obtained the support of the presidents. Many regulatory laws were passed and a number of suits against the trusts were successfully prosecuted. During President Wilson's administration Federal Land Banks were established which made it possible for farmers to obtain long term loans at lower interest rates than had ever been the case before.

During the World War high prices for agricultural products gave rise to excessive inflation of agricultural land values, particularly in the grain and meat producing regions of the West. When the prices of agricultural products began to return to their pre-war level, those who had purchased at high prices and even those owners who had retained their land throughout the war suffered greatly, for prices of other products did not decrease as rapidly. Consequently agitation began for some sort of agricultural relief for the growers of staples, the outcome of which was the introduction in Congress of the McNary-Haugen Bill. The ostensible purposes of the bill were to promote orderly marketing, provide for disposition of surpluses, stabilize prices, minimize speculation and encourage cooperative marketing by producers. The bill passed Congress in 1927 and in modified form again in 1928, but it was vetoed by President Coolidge in both forms. His position was that it discriminated in favor of certain agricultural products against others, that it was in essence a price fixing measure and consequently contrary to sound economic practise. No provision was made directly for stabilization of prices under the Agricultural Marketing Act of 1929. But the Federal Farm Board was authorized to extend credits to cooperative associations whose most important function is the regularization of the flow of products to market and the control of price fluctuations.

BENJAMIN B. KENDRICK

See: PARTIES, POLITICAL; PUBLIC DOMAIN; HOMESTEAD; GENERAL PROPERTY TAX; GRANGE; NON-PARTISAN LEAGUE; FARM BUREAU FEDERATION, AMERICAN; FARMERS UNION; FARMERS ALLIANCE; FARM BLOC; FARM LOAN SYSTEM, FEDERAL; FARM TENANCY; NEGRO PROBLEM; LAND SETTLEMENT; VALORIZATION.

VII. LATIN AMERICA. Well developed systems of land tenure existed in America long before the advent of Europeans. Although many of the Indians were primarily hunters or fishermen, having little interest in permanent land rights, such agricultural people as the Nahuas of the Mexican plateau, the Mayas of Yucatan and the inhabitants of the Inca Empire had recognized the need for orderly methods of holding the land and had devised complete agrarian systems. The basic form of tenure was communal; the land belonged to a group (either the members of a kinship unit or the duly recognized residents of a community), was inalienable and was distributed periodically among those entitled to its use. In some regions the distribution was annual, in others only occasional, as parcels of land became available for reallotment or as newly constituted

households required additional plots. In Mexico the group holding the land was the *calpulli*; in the Inca Empire it was the *ayllu*; both of these terms apparently originally signifying kinship units (clans), but both seeming to have become place units (village communities) as the groups became sedentary. Mexican society had advanced partially out of the communal stage and certain lands had become virtually private property before European invasion.

The Spanish conquest tended to preserve rather than to destroy these aboriginal agrarian systems. Society in Spain was still organized somewhat on the feudal basis, and the newly acquired territories were distributed among the conquistadors in large grants which in time became permanent and upon which the natives became peasants or serfs. The *encomiendas* or *repartimientos*, as these grants were called, generally allowed the Indians to retain their own method of holding their parcels of land within the great property. Thus a system of latifundia was imposed upon the system already existing without greatly disturbing the original order, and there developed a dual tenure of land by which the Indian village retained its rights to the communal holdings and the grantee became the overlord of the entire estate. In those parts of Latin America where aboriginal agriculturists existed these two systems survive to the present time almost unchanged.

Many attempts have been made to reform this semi-feudal system. Since most of the estates were held by European-born Spaniards during the colonial period, it was the landless creoles and mestizos and the Indian serfs who most stoutly demanded modification. Some historians consider that it was more against this system of land tenure, with its concomitant social, economic and political inequality, than against the rule by the mother country that the colonies of Spain revolted. Certainly the great unrest which made the revolutions possible was due in large part to the agrarian situation. Little, however, was accomplished toward land reform by the wars for independence, for the new rulers of the country (the creoles and the mestizos) merely replaced the Spaniards as the landholding class. Since independence, frequent efforts have been made to correct the evils of the inherited land system. Such attempts have been usually directed against the monopolization of land with its accompanying evil of peonage, against the communal character of the Indian holdings and against the great accumulation of landed property by the church. Within a few years after the revolutionary wars, most of the Spanish American republics abolished the ancient institution of *mayorazgos* (entailed estates), following the lead of the government established in Spain by the constitution of 1812. This move permitted the breaking up of vast properties which had been held intact for generations, although family pride in the ancestral estates prevented the accomplishment of all that was desired. In some of the countries, particularly in Argentina, changed economic conditions have hastened the division of many large properties. One of the principal aims of the reform movement of Juárez in Mexico and of the revolution of 1910 in the same country was the abolition of the haciendas or at least a reduction in their size. In Chile, where most of the land is held in extensive estates, measures have been proposed looking toward the decentralization of landed property. Several Latin American countries, notably Argentina, Paraguay and Chile, have also enacted homestead laws making possible the creation of many small farms out of the national domain. Unfortunately these homestead measures came too late to accomplish what similar laws achieved in the settlement of western United States.

Against the accumulation of land in the possession of ecclesiastical organizations many measures have been enacted. This movement, begun by Spain in 1767 when the vast holdings of the Jesuits were confiscated, and continued in 1813 and 1836 when properties of the Inquisition and of religious orders were taken over by the state, extended to the new republics, notably Mexico, where it has been estimated that not less than half of the real estate in the country belonged to the clergy. Here all ecclesiastical property was finally nationalized by the government of Juárez in 1859, to be disposed of to individuals.

Efforts to abolish the aboriginal communal system of tenure have been made in most of the countries where it existed. In 1866 Bolivia declared the Indian agrarian communities abolished and their lands awarded in severalty to the individuals composing the villages. This measure, however, had little effect, since many of the communities completely ignored the law and continued to hold their land as before The communal tenure of lands was abolished in Mexico by the constitution of 1857 and many of the village lands (*ejidos*) passed into the pos-

session of large haciendas. Similar attempts to destroy the communal system were made in Ecuador and Peru, but in these countries much of the land is still held in this ancient manner.

It is in Mexico that recent agrarian reform has been most far reaching. Here perhaps more than anywhere else were the evils of the old systems notorious. It has been estimated that in 1910 2 percent of the population owned over 70 percent of the land, and that from 80 to 90 percent of the rural population was landless in the various states of the republic. Furthermore the problem was made acute by the small amount of arable land (about 6 percent of the total), by the diverse racial elements in the population and by the proximity of the United States, where a far more democratic system of land tenure was in practise. After repeated efforts at reform had failed, the unrest finally found expression in the so-called "Agrarian Revolution" of 1910 and following years. This movement was begun, like most revolutions in Latin America, by the upper class political leaders, with such slogans as "Effective Suffrage," "No Reelection," "Mexico for the Mexicans"; but it soon assumed the character of a popular uprising against a method of land tenure to which the people ascribed most of their social, economic and political ills. After the first few destructive years the leaders accepted the popular demand for land as the principal aim of the revolution and the movement settled down to a determined program of agrarian reform.

By this revolution much has been accomplished. Large areas of public domain which had been alienated in great concessions were regained for the nation; both national and state measures were enacted looking toward the breaking up of the large haciendas; greater efforts were made to prevent the accumulation of real estate by religious organizations; and some 4000 villages have been given land, either having their *ejidos* restored or being provided with new holdings of a similar character. Altogether, over 8,000,000 acres have been added to the holdings of villages, mainly at the expense of adjoining large farms. While this last achievement marks a reversal of the Juárez policy of doing away with communal holdings, it seems to offer the only method of protecting the possessions of the large Indian element in the population, unaccustomed as they are to any other system of tenure. It is considered a temporary expedient which will serve until the Indians become used to modern conceptions of individual ownership of land. Some attempt has already been made to allot these communal lands in severalty. In the execution of this program of agrarian reform there have been many irregularities and abuses. Some large properties have merely changed hands. Haciendas have been seized with little semblance of justice. Many despoiled landowners despair of obtaining compensation even in the form of bonds of doubtful value. Some officials have grown rich overnight. Although the reform has not yet become so well established as to assure its permanence, it seems on the whole to have accomplished much of lasting benefit to the social, economic and political life of Mexico.

In general Latin America has been slow to abandon the mediaeval institutions of land tenure brought from Spain or the communal system of the aborigines. Increased contact with the modern world, however, the development of industry and commerce, with the greater independence of labor which they bring, and the education of the masses all tend to break down these ancient institutions or to bring about that condition of discontent which has led to agrarian reform in other countries.

GEORGE MCCUTCHEN MCBRIDE

See: PEONAGE; SLAVERY; VILLAGE COMMUNITY; LANDED ESTATES; PLANTATION; LATIFUNDIA; HOMESTEAD; INDIAN PROBLEM.

For other articles related to the entire subject of agrarian movements see: AGRICULTURE; AGRICULTURAL POLICY; AGRICULTURAL LABOR; AGRICULTURAL CREDIT; AGRICULTURAL COOPERATION; CREDIT COOPERATION; AGRARIAN SYNDICALISM; LAND TENURE; LAND TAXATION; LAND SETTLEMENT; SMALL HOLDINGS; FARM TENANCY; PEASANTRY; LANDED ESTATES; RURAL SOCIETY; FARMERS' ORGANIZATIONS; PARTIES, POLITICAL; SOCIALIST PARTIES.

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AGRARIAN PARTIES. *See* AGRARIAN MOVEMENTS; PARTIES, POLITICAL.

AGRARIAN SYNDICALISM is a movement for the protection and advancement of agricultural interests. These ends it attempts to achieve through the organization of all agriculturists into federations or unions which foster cooperation in production, distribution or purchase of supplies, or which in some cases attempt to advance agrarian interests by parliamentary methods. Modern agrarian syndicalism originated in France, and is strongest in France and Italy. It is rooted in the long tradition of the struggle of the people attached to the soil against the aggressions of other classes.

In Germany and Austria the parliamentary battle for the defense of agricultural interests has been waged by organized political parties, whereas strictly commercial interests have been promoted by highly specialized cooperative organizations. In France and Spain, where the cooperative movement has taken root more slowly, agrarian syndicalism has assumed the role of political and commercial defender against outside encroachments, and has also become an organ of entente between the diverse elements which compete in production within the agricultural profession itself—especially proprietors and laborers.

A small local syndicate in France or Spain may function as a cooperative for collective production and merchandising of any farm product or for collective purchase and distribution of any materials required in farm production. But as a rule a syndicate of provincial, regional or state proportions relegates specific functions to specialized, subordinate groups among its membership. Such a centralized syndicate acts as the pivot of group activity, coordinates the whole movement and gives the needed direction. As part of the same movement, each cooperative occupies itself with some specialized (usually commercial) phase of that movement.

French syndicalism, as typified by the Central

Union of Syndicates of Agriculture of France, is militant in the fields of politics and jurisprudence, is an agent of rural uplift in the social life of the farmer, and attempts to protect the farmer against fraud and profiteering. Collective production and sale, on the other hand, have been left almost entirely to the functioning of cooperatives.

In Italy the Fascist doctrine has affirmed that professional unity is the basis of every economic-social action; but syndical liberty is limited in the interest of the state. The development of the Italian Federation of Agricultural Syndicates has therefore been more along commercial than political lines, and large scale enterprises have been organized as, for example, the establishment of a fleet to transport phosphate from North Africa. Another variation is found in the land holding and operating syndicates—the *affittanze collettive*. This literally means "collective lease," but is now applied to any association which undertakes the joint management of land, regardless of the form of agreement. These societies vary greatly in different parts of Italy, adapting themselves to whatever method of obtaining and occupying land is in vogue in the respective districts in which they are organized. In the north of Italy farms are acquired and operated as a whole (*a conduzione unita*) on a share or cash rental basis, according to local custom. The society assumes the functions of the farmer, providing the necessary capital and taking the risks. At the same time the labor is performed by the members of the society themselves. Collective farms arose almost everywhere in Sicily as an outcome of the activities of leagues of defense of farm laborers in their struggle for the highest possible return for their labor. Groups of laborers complemented resistance and strike as weapons in their economic struggle by collectively assuming the direction and risk of production. Often the laborers desire to possess a piece of land on which they can cultivate produce for their own subsistence, and after a farm has been acquired jointly it may be subdivided among individual members (*a conduzione divisa*).

Agrarian syndicalism in Spain has recently been extended to embrace colonies settling on the various catch basins in connection with hydrographic developments.

Before the World War two forms of collective organization were common in Russia, the *artel* (*q.v.*) and the *mir* (*q.v.*). The Soviet government has fostered both of these forms, the principles of which have survived in the collectively operated land holdings (*kolkhoz*) and the communistic rural combines (*komkhoz*). The present aim is to increase farm production by means of these and similar agencies, which shall turn over their marketable surpluses to government agencies for distribution. The government has organized tractor and other machine bases to modernize the mechanical technique of production. Plant breeding stations are to supply improved seeds. Chains of government operated elevators are to handle the products.

The International Agricultural Syndicate embraces national federations of agricultural syndicates or, failing such, federations which effectively represent the vocational interests of farmers. The International Syndicate takes its stand on the defense of the vocational, moral, social and economic interests of agriculturists by means of the dissemination of information and the encouragement of all enterprises associated with farming. The syndicate, originally designed to embrace the states belonging to the League of Nations, has developed to world wide proportions.

LOUIS G. MICHAEL

See: SYNDICALISM; SOCIALISM; AGRARIAN MOVEMENTS; AGRICULTURAL COOPERATION; AGRICULTURAL LABOR; SMALL HOLDINGS; COUNTRY LIFE MOVEMENT.

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AGREEMENT OF THE PEOPLE. This term was applied to a document containing proposed provisions of a new constitution for England, which originated in the group known as Levellers. It was finally laid before the House

of Commons by a council of the officers of the army just before the trial of Charles I, but was never acted upon by that body. The Agreement was the first proposal ever advanced for a written constitution based on the authority of the people of England. It was sponsored by a party unable to accept the ancient form of government by king, lords and commons, but equally distrustful of the unrepresentative remnant of the Long Parliament then sitting at Westminster, and fearful of a government of mere force by the army. This party advocated instead a system of representative government defined in a fundamental document unchangeable by the legislature and in theory resting on the consent of the people, who were expected to subscribe to it.

Agitation for such a solution of the constitutional problem began in the army as early as 1647, and the central principle appears still earlier in some of the pamphlets of John Lilburne, who was the leading spirit among the Levellers. The immediate cause of the document itself, however, was the distrust of both king and Parliament aroused by the negotiations carried on with the Scots by the Presbyterian leaders in the Commons looking toward a restoration of the king without effective safeguards for the security and payment of the soldiers who had fought on the parliamentary side.

On August 1, 1647, the army presented to the king the "Heads of the Proposals," providing for a monarchy limited by law, but his fatuous belief that he could conquer his enemies by dividing them brought to nothing all such attempts at compromise. Meanwhile long discussions of the constitutional question were being held in the council of the army and on October 28, 1647, the Levellers presented to it their solution of the problem, "An Agreement of the People for a firm and present peace upon grounds of common right" (printed in Gardiner's *History of the Great Civil War*, vol. iii, appendix).

The failure of all attempts at compromise brought on the second civil war, which ended in the complete collapse of the royalist cause at Preston in August, 1648. Notwithstanding this defeat of the king the Presbyterian Commons continued to treat with him, and in September they came to an agreement with him for his restoration without guarantees either for the army or for "tender consciences." In desperation the army seized London, drove the Presbyterian members from the House, and thus compelled the remaining members to hasten the trial of the king. In the midst of these troubles a revised and much enlarged "Agreement of the People" formulated by the Levellers was debated by a council of the officers of the army, agreed to on January 15, 1649, submitted to the Commons on the 20th, and there allowed to die a natural death.

The most important principle of the Agreement (printed in Gardiner's *Constitutional Documents*, p. 270–82) is the assertion that all powers of government are derived by delegation from the people alone. The first form of the document contains more prohibitions than delegations of power, and in this respect is more nearly analogous to the bills of rights than to the frames of government in the later American constitutions. It is interesting to note that both the 1647 and 1649 versions of the Agreement give to the government all powers not reserved to the people either expressly or by implication, the converse of the principle of enumerated powers in the American Federal Constitution.

The "Heads of the Proposals" had included a demand for the distribution of parliamentary seats "according to some rule of equality or proportion," and this general principle was made specific in the Agreement of 1649, which included elaborate provisions for representation of the English and Welsh counties and the more important cities and boroughs, but omitted the rotten boroughs. This was accompanied by provisions for a uniform right of suffrage for all resident "housekeepers" twenty-one years of age and over, with few excepted besides the adherents of the king. Many of these electoral reforms, as well as other principles of the Agreement, were put in practise later under the Commonwealth and Protectorate and even extended to Scotland and Ireland. All such reforms, however, disappeared in 1660, not to return until the passage of the reform bills of the nineteenth century.

The Agreement of 1647 declared that "matters of religion and the ways of God's worship are not entrusted by us to any human power," although "the public way of instruction" was referred to the discretion of the representatives of the nation. In the 1649 version freedom of conscience was guaranteed to all "such as profess faith in God by Jesus Christ," but with the proviso that "it is not intended to be hereby provided that this liberty shall necessarily extend to Popery or Prelacy."

Other matters scarcely less important were included among these "native rights" of the people of England, but the chief significance of the Agreement as a whole lies in the fact that some of these rights are withheld from the government by the document itself. These prohibitions on the representatives and some of the positive provisions embodied in the Agreement are alike made fundamental and unchangeable. It was a serious defect that no mode of change by the people themselves was provided and that no definite provision was made even for the means whereby the instrument was to be put into effect in the first instance. However, the chance of success even for a more perfect plan was very slight at such a time. The great importance of the Agreement is not in its influence on English institutional development but rather in the place it holds in the growth of ideas, the later effects of which are to be found mainly in America and on the continent of Europe.

C. H. McILWAIN

See: DEMOCRACY; LEVELLERS; CONSTITUTIONS; BILL OF RIGHTS; SUFFRAGE; REPRESENTATION.

Consult: CONTEMPORARY: Many pamphlets in the Thomason collection in the British Museum, especially Lilburne, John, *Legall Fundamentall Liberties of the People of England* (London 1649); Rushworth, John, *Historical Collections*, 8 vols. (London 1659–1701) vols. vi–vii; *The Clarke Papers*, 4 vols. (London 1891–1901) vols. i–ii, with the admirable preface to each volume by Sir Charles Firth (for the debates in the army); Gardiner, S. R., *Constitutional Documents of the Puritan Revolution* (1st ed. Oxford 1889) including the valuable preface; Great Britain, Statutes, *Acts and Ordinances of the Interregnum*, ed. by C. H. Firth and R. S. Rait, 3 vols. (London 1911); Great Britain, Parliament, *The Parliamentary History of England*, 36 vols. (London 1806–20) vol. iii.

MODERN: Gardiner, S. R., *History of the Great Civil War*, 4 vols. (London 1893) vols. iii and iv, the best general account; Rothschild, Walther, *Der Gedanke der geschriebenen Verfassung in der englischen Revolution* (Tübingen 1903), the fullest narrative of the history of the document itself; Borgeaud, Charles, *The Rise of Modern Democracy in Old and New England*, tr. by Mrs. B. Hill (London 1894), and *Adoption and Amendment of Constitutions in Europe and America*, tr. by C. D. Hazen (New York 1895); Pease, T. C., *The Leveller Movement* (Washington 1916); Gooch, G. P., *English Democratic Ideas in the Seventeenth Century*, 2nd edition ed. by H. J. Laski (Cambridge, Eng. 1927).

AGREEMENTS, INTERNATIONAL,

are contracts between states which are in most cases expressed in treaties, conventions, protocols and other such formal or informal documents. In general an international agreement is the undertaking of an obligation by competent authorities and, because systems of government have been autocratic, the competent authorities are usually conceived as "heads of states" or governments as distinct from peoples. The contracting parties are therefore usually referred to as "high." There is, however, a tendency in many nations toward increasing the share in government of all sane adults—a tendency called democratic—and therefore the parties to international agreements are in some cases the "peoples" whose instruments or agents are the governments or heads of states. Moral responsibility for fulfilling the contracts rests upon those who have the actual power, whether the "people," or that small group which in most cases has an effectual influence, or the actual rulers in any state. The agreements, being between states, that is to say, persons in a political relationship, do not affect citizens taken separately, and are morally binding apart from changes of the system of government until the contracting state disappears.

The present system of agreements began about the sixteenth century, although personal agreements, similar to commercial or marital contracts, were made by rulers in all ages. The present state system, however, grew up under the influence of the theory of sovereignty, which used to imply in external affairs the moral isolation of each state and the absence of any responsibility on the part of each ruler or government in regard to other peoples, rulers or governments. International agreements were therefore once supposed to depend for their binding force upon the free choice of the parties, which obscurely implied that they had no binding force at all. The fantastic atomism of this conception was corrected by the early jurists who sought in a "law of nature" some explanation of the fact that sovereigns did appear occasionally to keep their word. Personification of the state, however, which omitted the major characteristic of personality, namely, moral responsibility, weakened the binding force of agreements; and the mythology connected with the actual exercise of power obscured the responsibility of those who held power. It has, nevertheless, always been obvious that international agreements would be useless unless most of them were in practise binding, and at no time have men been deficient in the feeling that their promise had some force to restrain their future acts. On such experience have depended the growth in the number of

international agreements and the criterion of the subject matter they cover.

Limitations of the operation of agreements exist if the contracting parties have already made other agreements on principles invalidating certain kinds of obligation. For example, the Covenant of the League of Nations in regard to the registration of treaties, and the Pact for the renunciation of war "as an instrument of national policy," are believed to invalidate secret military agreements and all treaties following wars whose terms are enforced. It is assumed in all cases that no agreements are valid which include obligations to do immoral acts. Secondly, the phrase *rebus sic stantibus* expresses the limitation understood in the case of agreements, that is to say, that circumstances must remain fundamentally the same if the obligation undertaken is to be morally operative. Whether a revolutionary change leaves the circumstances fundamentally the same is questionable, but in practise some approach of one party to the other is understood to be necessary before the circumstances can be regarded without prejudice as having changed fundamentally. An agreement is not morally inoperative if it is repudiated by only one party to it. Again, an agreement entered into under duress is not a real agreement, because one party is not free to choose. Conventionally, hitherto, since war was regarded as a legal method of deciding issues, obligations undertaken after defeat have been regarded as binding, but international morality seems to have developed almost as far as to imply the absurdity of this even in international law. Again, agreements may be rendered void by later agreements or by later statements of international law; or they may expire on the dissolution of a state party to the agreement; or they may be repudiated by one party if violated by the other; or they may contain express provisions as to the duration of the agreements.

The number of international agreements now operative is said to be about 25,000 (see Myers, D. P., "The Control of Foreign Relations" in *American Political Science Review*, vol. xi, 1917, 24–58). Up to June 30, 1928, 1765 agreements were registered under Article 18 of the Covenant of the League of Nations. These agreements may be roughly classified so as to show what services the state system now provides. First, there are lawmaking treaties, declarations, etc., which express or modify existing customary rules of interstate intercourse, which are the basis of international law. The Geneva "Red Cross" Conventions of 1864 and 1906, and the Final Act of the Hague Conference, 1899, are examples of lawmaking agreements which affect the future actions of the signatories. Some such agreements, however, express new rights acknowledged universally, as, for example, the Treaties of London of 1881 and 1889 with respect to the neutrality of Belgium, and the Minorities Clauses of the Treaties of 1919 and 1920 with respect to Poland, Rumania, etc. Secondly, all agreements which are not lawmaking may be subdivided into (a) those which envisage war or all the results of war, e.g. treaties of peace, alliance, guarantee, neutrality, etc.; (b) "economic" agreements either in matters of commerce, transport, property, etc., or in matters of employment and labor; and (c) agreements with regard to public health or the promotion of scientific or educational activities. These three divisions correspond to the three classes of services performed by modern government. The agreements under each heading are therefore means by which each state performs its services for its own citizens and subjects, by cooperation with other states. Inevitably each state thus performs services for those who are not its own citizens or subjects but are within the jurisdiction of the other state or states parties to the agreements. This implies the existence of a state system such that no state can now reasonably be conceived as a segregate world, in the original theory of sovereignty. If sovereignty, however, means only the responsibility of an autonomous unit in a social whole, then the word has some applicability.

Agreements, commercial or other, are entered into by private groups of persons who are under the jurisdiction of different states (international combines, shipping "conferences," etc.), and these create an international atmosphere within which government is compelled to operate internationally. But the interdependence of different governmental systems, which is expressed in agreements, delimits the competence of the instruments of government (assemblies, parliaments, etc.) within any state—the state in an agreement remaining a unit, whether its unity is expressed by the executive or by some power of its legislature. In Great Britain the crown expresses the unity of the system of government; in other countries written constitutions define the instrument of interstate intercourse, as in the United States, where the president, but only

with the consent of the Senate (Article 2 of the Constitution), is the instrument. Legislation to make obligations undertaken by agreement operative within any state, is limited by the terms of the interstate relationship. A new type of agreement, however, sets up organs to which states transfer the performance of certain tasks (e.g. the International Commission of the Danube), and such organs, as well as the states, may make agreements. Thus it is believed that the League can, in international law, become a party to a treaty, although this has not so far occurred.

The nature of international agreements has obviously been undergoing rapid development in recent years, and the state system now tends to produce new administrative interlocking of specialized departments for commerce, labor, etc., which are in relationship across frontiers, independently of foreign offices and the old diplomatic system. Thus states no longer are in contact only at one point in their "circumference," but interpenetrate administratively. International agreements, like municipal law, are tending to be not prohibitions or protections but contracts of cooperation in common tasks.

C. DELISLE BURNS

See: TREATIES; EXECUTIVE AGREEMENTS; ALLIANCE; SANCTION; SOVEREIGNTY; INTERNATIONAL LAW; INTERNATIONALISM; LEAGUE OF NATIONS; WAR.

Consult: Oppenheim, L. F. S., *International Law*, 2 vols. (4th ed. London 1928) vol. i, p. 700; Brierly, J. L., *The Law of Nations* (Oxford 1928); Satow, E. M., *Guide to Diplomatic Practice*, 2 vols. (London 1917) vol. ii, p. 172; Butler, G., and Maccoby, S., *Development of International Law* (London 1928); Potter, P. B., *Introduction to the Study of International Organization* (New York 1922); Crandall, S. B., *Treaties; Their Making and Enforcement* (2nd ed. Washington 1916); Wright, Quincy, *The Control of American Foreign Relations* (New York 1922) ch. xiv; Mathews, J. M., *The Conduct of American Foreign Relations* (New York 1922) chs. viii–xiii.

AGRICOLA (Latinization of Georg Bauer) (1494–1555), physician, natural scientist and father of the written technology of mining and metallurgy. He was born at Glauchau, Saxony, graduated from the University of Leipsic, and taught Latin and Greek at the Municipal School of Zwickau, later being principal there. In 1522 he went to lecture at Leipsic. He spent the years 1524–26 in studying philosophy, medicine and natural sciences in Italy. In 1527 he became town physician of Joachimsthal, a rapidly growing mining town in Bohemia founded eleven years before. He spent his leisure in visiting the mines and smelters, in reading all the Greek and Latin literature he could find on the subject of minerals and mining, and in acquiring knowledge from the more intelligent of the skilled workmen. He also purchased a share in a profitable mine, resigned his position as physician, and spent two or three more years in travel and study. In 1533 he became city physician at Chemnitz, a famous mining town in Saxony, and lived there until his death in 1555. Columella's treatise *De re rustica*, which reached its fifteenth or sixteenth edition before Agricola died, inspired him to attempt a service to the mineral industry similar to that Columella had rendered to agriculture. In 1530 he published *Bermannus* (Basel 1530), written in dialogue form and correlating the minerals mentioned by the ancients with those found in the Saxon mines, and in 1546 the first work on physical geology, *De ortu et causis subterraneorum* (Basel 1546), in a volume containing *De natura eorum quae effluunt ex terra* (Subterranean Waters and Gases). He also wrote *De natura fossilium*, the first systematic work on mineralogy; *De veteribus et novis metallis*, chiefly a history of metals; and *Interpretatio germanica vocum rei metallicae*, a glossary of Latin and German mineralogical and metallurgical terms. His masterpiece *De re metallica* (Basel 1556) appeared after his death. This work in twelve books, freely illustrated, covers the whole range of mining and metallurgical science as known to him. It passed through ten editions in three foreign languages, and for two centuries remained the best work on the subject. It was an immense advance over anything that had previously appeared; for, instead of following the speculative methods of the Greeks, it is based on accurate observation. Herbert C. Hoover, who made the only English translation of it (London 1912), unhesitatingly says that Agricola's ideas on the origin of ore deposits are much sounder than those of Werner whose writings, 250 years later, are generally regarded as the foundation of economic geology. Agricola was a contemporary of Paracelsus and deserves a much higher place in the history of science than the latter, although his works have received much less attention, probably because miners and metallurgists pay great attention to improvements in technology and but little to its history. The importance of his contribution to the building up of a sound technology of the mineral industry can hardly be overemphasized. He was probably one of the greatest factors in bringing about the industrial revolution in

Europe through converting into applied science the empirical practises then used in the production of metals. In addition to doing his scholarly work he was active in public life in Chemnitz and held many offices there.

THOMAS T. READ

Consult: Hoover, H. C. and L. H., biographical introduction to their translation of *De re metallica* (London 1912); Darmstaedter, E., *Georg Agricola, 1494–1555, Leben und Werk* (Munich 1926), containing an extensive analytical bibliography; Schmid, F. A., *Georg Agrikola's Bermannus* (Freiberg 1806); Jacobi, G. H., *Der Mineralog Georgius Agricola und sein Verhältniss zur Wissenschaft seiner zeit* (Zwickau 1881); Hofmann, Reinhold, *Dr. Georg Agricola* (Gotha 1905).

AGRICULTURAL COLONIES. *See* LAND SETTLEMENT.

AGRICULTURAL COOPERATION.

GENERAL. Broadly understood, agricultural cooperation represents the application of cooperative principles to the needs of the agricultural population. Agricultural cooperation as thus interpreted has as many subdivisions as there are distinct economic interests which can be promoted by combined action. So interpreted, agricultural cooperation cuts across the usual functional classification of cooperative forms. However, the more useful notion of agricultural cooperation is much narrower; it is limited to those varieties of cooperative effort which serve the needs of the agriculturist as one engaged in the farming business. Generally speaking, the contacts of an agricultural enterprise with the outside world center about the borrowing of capital funds, the purchase of equipment, materials and supplies as well as of services incidental to the basic production process, and the disposition of the product. Ordinarily, therefore, agricultural cooperation comprises rural credit cooperation, cooperative purchasing of farm equipment and supplies, and cooperative processing and marketing of products.

The nature of services rendered and the type of members served give a clue to the distinctive characteristic of agricultural cooperation as a movement. It is the only important branch of cooperation resting upon a large mass of small business units as a base. Only in agriculture has the small scale producer shown ability to survive competition with larger units, and only in agriculture has it been possible to utilize cooperative principles for the promotion of business efficiency. The paradox of a cooperative movement with a business membership is more apparent than real. It is just because the farmer realizes his inadequacy as a business man that he seeks the help of a cooperative which will relieve him of many of the important business duties otherwise so difficult and burdensome.

However, the business character of the membership leaves its peculiar impress on the movement. The ties between the members and the organization are not as many sided or as durable as are found in labor cooperation. The much talked of individualism of the farmer, often indistinguishable from the assertive independence of the petty business man, makes it hard to induce him to join a cooperative and to keep him actively interested once he has been enrolled. On the other hand the gross receipts per member, and hence the capitalization, of an agricultural association are far larger than in other forms of cooperation. It is not surprising therefore that general principles of cooperation are modified in several ways when they are applied to agriculture. The "one-man-one-vote" rule is adhered to quite generally, although the voting power is frequently proportioned to the amount of business furnished by each member and in some cases voting by proxy is allowed. Moreover agricultural cooperatives are generally open to new recruits from among the farmers. However, capital is often attracted at the cost of paying market rates of interest on members' shares and of permitting the ownership of more than one share. Also, in order to mitigate the depressing effect of competition on prices, members are not allowed to leave the organization when it is temporarily advantageous, although they may usually leave at stated intervals. It is significant that the instrumentalities employed in effecting these desirable results are not so much an appeal to the solidarity of interests as the tangible weapon of greater returns. Enforceable contracts are of real, although incidental, help in holding members together.

The real mission of agricultural cooperation is not to bring about a fundamental reconstruction of the business regime but rather to save the farmer from the disabilities entailed by the small size of his business and his lack of training in the ways of a commercial civilization. To accomplish this it must not merely supply all the needed services at reasonable prices but must also attempt to "rationalize" the production side of its members' business. Within lim-

its the farmer must be taught what and how much to produce, what is the best equipment to use and what occasions warrant the borrowing of fresh capital. In this as in its other activities agricultural cooperation may expect assistance from the state, because it attempts not to displace but merely to perfect the existing economic order. The comparative generosity of state aid is another feature which sets it apart from other forms of cooperation.

Conditions for the development of modern cooperation in agriculture were being prepared when the commercialization of economic life began to impinge upon the small agricultural producer. As business has grown and increasingly larger units have developed during the nineteenth century, the situation has become continually more precarious for the small, peasantlike proprietors who, with unbusinesslike methods, have waged an unequal struggle against the towns. The towns first of all absorbed the industries which had been closely associated with farming. Next they developed business men and sales organizations which as bargainers were more than a match for the small farmers. This meant that the farmers were hopelessly at a disadvantage in the struggle to hold their own. In certain countries, notably England, a larger and more aggressive type of farmer got control of the land and was able for a time to meet the business world on its own grounds. On the continent, especially in such countries as Switzerland, Austria, Germany, France and Italy, the struggle of the small farmer was a real one, often a tragedy. It was in these countries that cooperation among farmers first flourished.

So far as is known, the first instance of modern agricultural cooperation occurred in Switzerland, beginning in 1815. This was a cheese making enterprise at Kiesen, and consisted merely of a group of dairymen banded together on the basis of turning the milk into cheese, each man being left with his cheese to dispose of as best he could. This plan was subsequently adapted to all manner of undertakings connected with the processing of agricultural products for the market. Another less common form of this type of quasi-productive cooperation is the cooperative ownership of implements and machines. There are many instances of this among the small farmers on the continent, but very few in England and the United States, a disparity which is partly due to the relatively large size of the English and American farm. Because of the individualism of the farmer, cooperative ownership of machines is restricted to small farms, for which it seems an essential condition of survival. For the same reason there are only rare cases of collective cultivation of the soil. With the exception of a few instances in Italy and Russia, which are the result of peculiar circumstances, one would search in vain for genuine examples of cooperative farming.

Neither from the manufacture of raw products into a commodity demanded by the market nor from the ownership of equipment was the principle of cooperation carried over into the field of agricultural production proper. Instead the principle was applied with considerable success at the opposite end of the farming business, the point at which the farmer comes into contact with the market, in the sale of his products and in the purchase of his supplies. In the first of these, at least, cooperation has succeeded so well that it surpasses in importance the earlier form from which it sprang—the processing of farm commodities for consumption. Indeed processing at present is undertaken only in combination with marketing.

Cooperative marketing serves a well defined need. Even before the days of high pressure salesmanship, the farmer could not be as efficient in disposing of his produce as those who were engaged in selling as a special business. He is not fully conversant with market opportunities, nor is he always cognizant of the precise shape and form in which his produce may be wanted. Even if he is in possession of all the relevant information, it may be uneconomical for him, because of the relatively small sales of any specific item, to bring his product to the best market or to put it in the form wanted. To take butter as an example: the best of cream may be produced on almost any good dairy farm, but to turn this cream into butter requires hundreds of dollars' worth of equipment, unless primitive and expensive hand methods are used. To market the butter from an individual farm is either not feasible at all, or at best expensive. The farmer is therefore forced to leave a large part of his marketing to an agent, either a merchant or a cooperative company of which he is a member.

In its marketing phase, perhaps more than in any other, agricultural cooperation differs from what is ordinarily understood by cooperation. As an organization a marketing association adopts the form of a business concern

with a variety of security issues arranged so as to preserve the equitable distribution of control between members and to allow for considerable borrowing of funds from the outside. Its dealings with members are not unlike those of a commission house which makes a settlement with its customers on the basis of price received for the produce less the commission charge for handling it. The important differences are, first, the limitation of its services to members, although even this is not always the case, and second, the way in which the cost of handling is computed. While the charges of the commission house bear no apparent relation to the expenses incurred by the house, those of a non-profit making cooperative must obviously be based on cost. The way in which expenses incurred are transmuted into deductions from gross receipts varies according as each member's produce is handled independently or is pooled with that of other members. The method of settlement with members is also affected by the length of time for which the produce is pooled, that is, whether it is intended for immediate sale or is to be manipulated by the cooperative for the length of perhaps an entire season in the hope of selling it at the best possible price. The "manipulation pool" gains in importance with the development of "commodity marketing," which attempts to control a sufficiently large stock of a single commodity to insure a real influence in the market. Obviously an organization of this type differs also from an ordinary commission house in that it must control the disposition of produce by its members; it cannot allow them to sell to other concerns if it is to build up and preserve its position in the market.

A local marketing association can do a great deal for the farmers by pooling their produce, establishing agencies in more distant markets, helping to put the commodity in a marketable form and finally by increasing through combination the bargaining power of its members. The efficiency with which these services are rendered is in direct relation to the size of the organization. The greater the number of individual farmers combined, the less is the expense of handling the produce and the more impressive is the influence exerted by the organization in the market. The advantages of size can be achieved in several ways: small local associations may federate and set up a directing center to which certain important functions may be delegated; or an association may attempt expansion more directly by increasing its membership and having local branches for immediate contacts; or it may enter into contractual arrangements with other associations for a limited length of time. The method by which an organization overcomes the difficulties involved in the dispersion of its membership depends upon the importance of services which must be performed locally; upon the homogeneity of its potential membership; and finally upon the stage of development which cooperation has reached when an increase in size appears urgent. If strong local associations have grown spontaneously and have been at least moderately successful, if the raising of a particular commodity is in the hands of both large and small producers, if no particular savings can be effected by doing grading, packing and storing on a larger scale than is possible for a local association, then the federation or contract devices are the more practicable methods to adopt. Otherwise a centralized organization is preferable.

Among the best examples of farmers' selling organizations of Europe are the Danish butter and bacon companies. The great share of Danish butter is made in cooperative factories, under state inspection and control so far as quality and grades are concerned. For many years Danish butter has been rated at the top in quality. Its main market is England, to which it is sent through several export federations with agents in England. These butter companies have long been recognized as models of efficiency. Of similar character are the well-known "bacon factories" of Denmark. One of the most significant features of the Danish cooperative bacon companies is their control over production. They do not directly limit the amount of swine which may be delivered, but they do prescribe, within narrow limits, the type and quality. Since the authorities at cooperative headquarters now and then change the margins among grades so as to make it more profitable to send hogs to market at one weight rather than another, they are also in a position to increase or diminish the supply of hogs at the time according as lighter or heavier weight is preferred. Thus the quantity of bacon made during a given season can be appreciably controlled or at least greatly influenced.

While in Denmark and several other countries, such as Ireland and the Netherlands, the marketing associations are the outstanding type of cooperative effort, other European countries

excel in cooperative purchase of supplies wanted by the farmers. Europe as a whole is far in advance of America in cooperative purchasing. Here again it is the small size of the farm which furnishes an essential condition for cooperation. Much as the small farmer is interested in cooperative selling, he is still more concerned with cooperative purchasing. He is often near a good market for sale, such as an open air city market, but finds himself at a hopeless disadvantage in dealing with people from whom he must make purchases. Not only is machinery to be bought, but from year to year it is necessary to buy commercial fertilizers. In these latter purchases there has always been until recently a great chance for fraud, and where fraud was absent there was at least an opportunity for the dealer to take a high margin of profit. The cooperative company has an advantage over many private dealers in being able to buy in large quantities and for an assured market. Again, the cooperative market can render a great service in the matter of credit, first, by encouraging cash payments, and second, by providing credit at cost where it is really needed. On the continent, especially in Germany, cooperative buying is closely associated with credit cooperation of the rural type.

UNITED STATES AND CANADA. In America conditions are quite different from those in Europe. The farms are in the main larger; the farmers are more independent in economic matters and as cooperators they are harder to deal with. Successful cooperation is mainly of the sales type, although in the sections of the country where markets for selling are good, and where agriculture is of such a character as to require heavier purchases of goods needed in the round of production, the buying side is proportionately more in evidence.

Cooperation began in the United States much as in Europe, as a means by which certain small farmers could manufacture dairy products into forms which could be marketed. The first known instance of this was the cooperative making of cheese in the state of Wisconsin in 1841. Cooperation in the manufacture of cheese and butter has grown to great proportions; at first progress was slow, but since 1890 it has been persistent and widespread. Other lines of cooperation began, largely during the seventies, inspired by the Grange.

The occasion of the rapid growth of the Grange was clearly that of a surplus of agricultural produce; the trouble was not merely a weak demand in the ultimate markets but also a serious disorganization in the channels from producers to the market. Lack of grading, involving ignorance on the part of producers of what they were offering for sale; high and unregulated freight rates; middlemen who were able to make wide margins; a wholesale trade so far removed from the farmer and his comprehension of big business as to lead to all manner of suspicions; retailers unregulated by law, without the restraining competition of mail order houses or chain stores—all these combined to produce a multiplicity of both real and imagined grievances among farm people. They were easily induced to form cooperative companies, some of which succeeded, more of which were ill-starred.

While there were sporadic instances of cooperation in the manufacture of cheese and butter before the days of the Grange, and likewise a few efforts at cooperative grain selling, there were but a small number of such undertakings, and these not very important or stable. The Grange was instrumental in launching cooperation in butter and cheese manufacturing, taking these operations, often permanently, out of the home. At the same time grain and livestock shipping companies, or rather groups, were organized. The majority of the cooperative companies were not incorporated, while the rest were incorporated under the general corporation laws. When reverses came, as they were bound to come, the so-called cooperatives either went out of existence or became ordinary business units owned and managed for profit. By this means numerous farmers became business men, left their farms and moved into the villages. In spite of the fact that the Grange was instrumental in starting hundreds of cooperative undertakings, only a few were still in existence by 1880, four years after the beginning of the decline of the Grange. The remaining units were mainly organizations for the purchase of farm and household supplies, and these were located not in the heart of the farming district but in the eastern states.

The Farmers Alliance ran a very similar course in relation to cooperation, organizing and inspiring the organization of a number of companies. The story of their successes and failures is almost the same as that of the Grange period. The majority of the undertakings were in the Southwest and Middle West. They suffered both from the lack of a proper legal

foundation and the lack of intelligent leadership. The alliance itself came virtually to an end in the early nineties. The cooperatives it founded struggled on, with here and there an instance of survival which suggested permanence. This period covers the years from about 1880 to 1892.

In 1902 two farmer movements came to the front: the Farmers Educational and Cooperative Union and the American Society of Equity. Both undertook, more exclusively than had their predecessors, to solve the marketing problem. Both organized local cooperatives, including consumers' societies and selling companies. The Equity and its successor, the Equity Union, went even farther than the local undertakings and established several centralizer creameries, some of which are making over three million pounds of butter per year. Each of these organizations has established local livestock shipping associations, combined later into central livestock exchanges. Central grain exchanges have been attempted. The Farmers Union has established several big and apparently successful exchanges for handling supplies for farmers and their families. It cannot be said that either the union or the Equity has solved the problem of cooperation, yet they have both promoted very important cooperative companies.

The American Farm Bureau Federation, which came into existence in 1919, gave promise of sweeping the cooperative field. Unfortunately its most prominent effort, designed to revolutionize the marketing of grain, came to an untimely and inglorious end. The dairy marketing plans have not been put into practise and are not being pushed. The influence of the Farm Bureau has been important in connection with many marketing undertakings, yet it has not been a revolutionizing force within the field.

Real success in cooperative marketing of agricultural products has been achieved only for a comparatively few commodities, and has been due to those immediately concerned in the operations rather than to outside inspiration. That is not to say that cooperation is of no importance in the sale of some portion of all leading agricultural products. There are cooperatives, local and central, in the marketing of grain; of livestock; of dairy products, including milk, butter and cheese; of fruits and vegetables; of poultry and eggs; of cotton; of tobacco. Approximately 11,000 cooperative marketing companies are doing business at the present time in the United States; their aggregate membership, including some overlapping, is about 2,000,000. The amount of business done has in some years reached $2,500,000,000, or not far from a quarter of the annual sales of farm produce. In general these companies are bringing greater returns to the farm than could otherwise be obtained.

The cooperative marketing of fruit offers some of the most conspicuous examples of success. The California Fruit Growers' Exchange stands out as a model in many important particulars. Some forty years ago the citrus growers of southern California found themselves growing fruit for which there did not appear to be a sufficient demand. The prices offered were so low as to result in severe losses to the growers; often the prices would not cover the cost of picking and boxing fruit after it was ripe. As a result of the feeling that local private shipping companies were getting too much for the services rendered, attempts to organize cooperatives were made as early as 1891 and 1892. In 1895 the Southern California Fruit Exchange was organized. This company had many ups and downs, but was able to overcome difficulties sufficiently to keep going. In 1905 the name was changed to California Fruit Growers' Exchange. This organization, with the bulk of the citrus product under its control, has won a respectable place for itself in the business world. Its cost of doing business is remarkably low; its command of the market is as near to perfection as is often reached by any organization not having a monopoly; its return, therefore, to the individual member is such as to commend itself to the great majority of growers.

The company is composed of local associations of growers, twenty-two district exchanges and the central exchange. The locals own and operate packing houses and equipment for handling the fruit. The district exchanges are composed of locals, each local electing one representative to the district board. In turn the central exchange is composed of the districts united through a board, each district furnishing one representative. Sales are made by district managers acting under the advice of the central exchange sales department. Pooling is done through the locals, over lengths of time varying from a month to the full season, as they may agree upon.

The California Fruit Growers' Exchange does the largest business of any single cooperative company of the United States. Its sales in

1927 reached $85,000,000. Sales are made through agents, usually by auction, in all cities of considerable size. Not infrequently this organization is accused of exercising monopoly control over the orange and lemon trade. This is true only in a very restricted sense. To begin with, it exercises no control over the planting of orchards. Even the supply coming to the market it can regulate only indirectly. The secret of its success lies in the fact that the exchange is in a position to take advantage of market conditions in a way which is open only to big, efficient organizations. It has at hand, almost hourly, complete information in regard to its market, with the aid of which it is able to direct fruit to the places where it is most wanted and away from points where there is a threatened oversupply. Moreover the supply sent is varied on the basis of probable returns, the growers being advised to pick and ship for table use an amount not in excess of a given quantity, the balance to be sent to by-product plants for the manufacture of citrate of lime, lemon oil and the like. As a rule these plants handle only the inferior fruit; however, when prices are low, a correspondingly higher grade will be used in this manner.

The California Fruit Growers' Exchange, together with another much smaller cooperative citrus company of California, markets over 80 percent of the citrus fruit of the state. A large part of the Florida citrus fruit is likewise co operatively marketed.

The producers of milk, butter and cheese have had real occasion to look for better markets and to demand better marketing facilities and treatment than the commercial companies have afforded.

The dairymen furnishing milk for all the larger cities of the United States are organized into bargaining companies through which agreements with city milk distributors are made. As cities have grown and have had their milk supplied by increasingly larger areas, it has become evident that the individual dairyman was helpless as a bargainer against the highly organized city distributors. The early efforts at organizing the fluid milk dairymen were not very successful. In recent years, however, some forty associations, several of which deal with the distributors of more than one city, have reached a degree of development which promises to be permanent. These associations vary in membership from a few hundred to over fifty thousand. So far the prices are made by the bargaining parties on the basis of what the market will apparently stand without cutting off the demand or over-stimulating the supply. The prices paid by the distributors of milk have been much higher in relation to butterfat values since the organization of the cooperative than was formerly the case.

Cheese making is much more localized than the production of butter. This accounts for the earlier efforts on the part of cheese producers to establish a cooperative marketing system. There are two main cooperative companies: the National Cheese Producers' Federation, with headquarters in Wisconsin, and the Tillamook County (Oregon) Creamery Association. These associations undertake to grade and sell the product of the cheese factories which belong to the federations. They are handling about one tenth of the cheese of the country.

Since butter is made in almost every county of the country, the butter producers are a widely scattered group. For many years it was evident that the butter market was in need of reorganization. Apparently the private dealers had made all the progress they were capable of; still they left much to be desired. In 1921 a cooperative association of large proportions and with an ambitious program was launched in Minnesota. This organization, known as the "Land o' Lakes Creameries, Inc.," was not the first attempt of its kind, but at present it is the outstanding instance of the cooperative marketing of butter. Since a large percentage of the creamery butter of the country is made within a few hundred miles of St. Paul, it was logical that this city should become the center of cooperation in the selling of butter. The company comprises between four and five hundred cooperative creameries, over a third of the whole number of such creameries of the three states of Minnesota, Iowa and Wisconsin. It has accomplished remarkable things in the matter of changing the quality of butter, increasing the proportion of the high grades and also increasing the demand for it. Its sales are now approaching the hundred million pound mark, and its receipts are distinctly above the returns available through other channels. The returns are better because the butter is more economically handled, going through fewer hands and being shipped to its destination by more direct routes.

Cooperative grain marketing got under way after the unsuccessful attempts made in the first years of the twentieth century. Over four

thousand elevators were cooperatively owned. These elevators have done well in reducing the local costs of handling grain. They have never been able to federate effectively for handling grain on the central markets or for export. Several states have highly centralized wheat pools, but for the most part their successes have been nominal. In 1929 the Farmers National Grain Corporation was organized to provide a national marketing agency for these pools and local elevators. It has the support of the government and its main purpose is to arrange for the orderly export of grain to relieve the depression in the American market. The organization is still in its incipient stages, so that little of significance can be said of it at present.

In Canada wheat pools have reached great size and have attained a high degree of perfection. They are conducted on the federated plan. In recent years they have handled over half of the wheat, and some of the other grain, sold by the farmers of the western provinces. They conduct an export business, maintaining agencies in the leading foreign markets. These pools, three in number, acting jointly through a central sales agency, do the largest business of any cooperative on the continent; their gross receipts are about twice as large as those of the California Fruit Growers' Exchange.

So far we have dealt with cooperative marketing and with but a few instances of cooperation in the processing of agricultural produce. In America other applications of cooperation to agriculture are few and thus far have not attained great importance. However, we may briefly mention the more important undertakings.

Of these the more specifically agricultural types of cooperation are found in irrigation and insurance. About six and a half million acres, or slightly less than a third of the land under irrigation, are watered by cooperative companies. Irrigation is a process which lends itself quite well to this type of management. In insurance the conspicuous examples of rural cooperation are the numerous farmers' mutual fire insurance companies. In some states, notably Pennsylvania and Iowa, they are statewide in their operations and carry a large share of the risks of this sort. In Michigan the "Gleaners" carry life insurance and fire insurance and also act in a limited manner as a credit society.

The American countryside has had and continues to have many examples of consumers' cooperation among the farmers, but they are neither successful nor important. Again and again cooperative stores have been started, and while the number of new ones is usually considerable, the whole number hardly increases from year to year. The casualties among them are high, especially in periods of falling prices such as that following the World War. While cooperative stores are successful in Europe, it seems impossible for them to gain a foothold in America, at least while conditions remain the same as at present. Two institutions militate against the cooperative store: the mail order house with its attractive prices and good service, and the chain store with its narrow margins on which the retail work is done.

In concluding we may note some recent developments which point to the disappearance of some of the old problems and the emergence of new tendencies in agricultural cooperation. The early efforts sponsored by the Grange were defeated partly because of the lack of a legal foundation for the work of cooperatives. This has been remedied by state and federal legislation, mostly since 1900. Acts were passed providing for the incorporation of cooperative companies, giving them security and advantages which they could not enjoy under the general corporation laws. The new legislation and court decisions permit organization along Rochdale lines (limitation of shares and distribution of dividends according to patronage), the creation of non-stock associations with net returns settlements, and make the contracts between a marketing association and its members enforceable against the latter by allowing the collection of "liquidated damages" and the use of injunction and specific performance proceedings. Laws have also been passed providing immunity to cooperative companies from antitrust laws in cases where technically the marketing companies appeared to make themselves liable to prosecution.

Related to changes in law is the emergence of governmental support to agricultural cooperation. Nearly all states have departments of markets which almost without exception have facilitated the work of farmer cooperatives. Experiment stations have made a series of studies which have served to furnish information concerning the successes and difficulties attendant upon the workings of cooperative undertakings. The Bureau of Agricultural Economics of the federal Department of Agriculture has a division of cooperation, the purpose of which is

to study and promote the interests of cooperation among farmers. Through the War Finance Corporation and the Intermediate Credit Act the federal government has put money at the disposal of cooperative companies. Finally the new Federal Farm Board has been active in stimulating the organization of national agencies of cooperatives which could undertake a regulated export of agricultural products. The recently organized National Chamber of Agricultural Cooperatives, a combination of marketing cooperatives, is to exert pressure upon the government and public opinion of the country as well as to promote a further increase in membership of these cooperatives.

The recent trends in cooperation are clearly toward larger units. It has been demonstrated again and again that cooperative companies, like other organizations for doing business, cannot hope for success while running on the basis of small output. The cooperative creameries, for example, which were started forty years ago, were designed to accommodate the farmers dependent upon a load hauled over poor roads by horses. Now with good roads and gasoline trucks the sphere of activity may well be four times as extensive. The larger cooperatives of all sorts show the lowest unit costs.

Again, and this is even more significant, cooperative companies in the past have viewed the market as a great stronghold to be attacked and conquered. Now it is evident that any successful attack must be accompanied by organized action respecting the use to be made of the conquered forces. In the early years of cooperation it was taken for granted that the market could absorb all possible production at a remunerative price, if only the predatory characteristics of those guarding access to the market could be subdued. Now it is understood that marketing means taking care that the demand for goods be not demoralized by oversupply. This is the greatest lesson, and one of the hardest for the farmer to learn. In this phase of the subject little progress has been made, but the outlook is hopeful.

BENJAMIN HORACE HIBBARD

See: COOPERATION; CREDIT COOPERATION; CONSUMERS' COOPERATION; AGRARIAN SYNDICALISM; AGRARIAN MOVEMENTS; FARMERS' ORGANIZATIONS; RURAL SOCIETY; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL POLICY; GRANGE; FARMERS ALLIANCE; FARMERS UNION; FARM BUREAU FEDERATION, AMERICAN; MARKETING; AGRICULTURAL MARKETING; AGRICULTURAL INSURANCE; IRRIGATION; FOOD SUPPLY; FRUIT INDUSTRY; DAIRY INDUSTRY; FOOD GRAINS; LIVESTOCK INDUSTRY; COTTON; TOBACCO.

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AGRICULTURAL CREDIT. Credit for agriculture differs in important particulars from credit for other purposes. First to be noted is the small size of the usual producing unit. From a credit standpoint this means a large number of small loans to administer, approximating consumer's credit in this respect, especially in countries with many small holdings. The greater the number of borrowers among whom a given volume of loans is divided, the better the burden of risk is distributed; but unless each risk is scrutinized carefully, the advantage of such distribution is lost. The small size of the producing unit makes impossible the organization of the enterprise on a corporate basis with limited liability of stock holders, and thus greatly restricts the sources of agricultural credit. Moreover, if a business is large enough to be incorporated, its entrepreneur can ordinarily sell stocks and bonds for most of the capital needed, whereas if it is not large enough to be incorporated, the entrepreneur must ordinarily provide nearly half of the capital himself. A further consequence is that the individual borrower is weak in bargaining for loans.

Next in importance is the close relationship between the business and family affairs. The capital available for any farm business is largely dependent upon the financial status of the family. A farmer with limited resources borrows with difficulty, almost regardless of his managerial ability. A young man in agriculture ordinarily has to wait until he has acquired some capital of his own before he can borrow the additional capital he needs to start even as a share tenant, and even then his operations are likely to be restricted because he cannot obtain capital enough. He must wait until he has acquired much more before he can start as an owner-operator. Hence such matters as age at marriage, size of family, family thrift, standard of living, and desire for education for the family, profoundly affect farming operations through affecting the rate of accumulation of capital and the amount of capital that can be borrowed. In this respect agricultural credit is somewhat similar to credit for retailing and shopkeeping, and in distinct contrast to industrial credit. However, when business and living are closely associated, as in agriculture, owning the business becomes necessary in order to insure a permanent home for the family, whereas retailers and shopkeepers are more content to rent their places of business indefinitely, thus reducing their credit needs.

Inheritance also figures in an especially important way in the problem of agricultural financing. The settlement of an agricultural estate ordinarily requires the sale of the property, or at least the writing of a mortgage against it. Each new generation of farmers starts with a new crop of mortgages. In many countries under normal conditions the new mortgages written when estates are passed on have nearly equaled the payments on existing mortgages, so that the total burden of farm mortgage indebtedness in the country has tended to remain about constant. In the United States this process has been greatly disturbed since 1900 by the rapid rise in price levels and land values up to 1920, and the rapid decline in land values since then. In general farmers have made larger payments on their mortgages in the United States than in Europe; but they have also more generally followed the practise of retiring, while still in their early advanced years, to the villages or small cities and selling or renting their farms. The recent depreciation of money greatly reduced for a time the mortgage indebtedness on farms in several countries of Europe.

From the standpoint of the credit agency, the combination of farm business with living makes it difficult to draw the line closely between loans for production and those for consumption purposes. A loan for an automobile is clearly of this confused sort. A loan to build a new farm house cannot be looked upon purely as a consumption loan. In the southern cotton states of the United States a large volume of loans is made to farmers to meet their living expenses while the crop is growing. This practise prevails to a greater or less degree in all regions depending largely on cash crops. With farming so little and so lately removed from a largely self-sufficient condition, farm entrepreneurs are not likely to understand the credit aspects of their businesses or to keep the proper sort of financial records. Many will want loans that are not good risks; but more will not appreciate possible advantageous uses of loans. This places an added responsibility on the loaning agency.

A distinction perhaps should be made between loans for production and loans for marketing, the latter including loans to farmers' cooperative marketing associations or dealers

of various kinds, covering the operations of transportation, storage, processing and merchandising. Marketing loans may be for very short periods covering the time required to move produce through the marketing channels, or for as much as a year or longer to permit the carrying over to another year of produce from a year of large surplus. Marketing loans negotiated by regular middlemen tend to be treated as regular commercial loans.

The self-sufficiency of the farm unit is an important factor in its credit needs. The general drift in agriculture is clearly toward more dependence on the market for household and farming supplies, but it is easy to exaggerate the extent of this movement. Even in the United States, where agriculture has been commercialized as much as anywhere, 20.3 percent of the value of farm production between 1923 and 1928 was food and fuel used by the farm household. Where holdings are small, as in most of Europe and Asia, the farm produces a much larger proportion of the family living, and the marketable surplus of any one farm is very small. These circumstances reduce still further the size of the loan required by the individual farm, and at the same time the amount of cash income available to liquidate loans.

There are a number of important characteristics of agriculture growing out of its close dependence on nature which affect the character of its credit. One of these is the slow turnover of its current operating capital. Frequently the ninety days which is the usual limit for commercial paper is too short a period for the repayment of crop or livestock loans. Sometimes six or even nine months are needed if the selling is not to be hurried. Some loans, however, such as those for feed for milk cows, may be liquidated in thirty days. Another characteristic of agriculture is the low ratio of operating to fixed capital. Perhaps only a few months are needed to mature and harvest a crop, but a large fixed investment in land, buildings, machinery and work stock is required in the first place. Although only a few weeks elapse between the purchase of dairy feed and the receiving of the returns for the milk or cream sold, a large investment is involved in the dairy herd.

A factor of some importance in contrasting agricultural and commercial credit is the device of production by stages. In industry there has developed a vast scheme of separation of the whole manufacturing process into parts or stages which are carried on in separate plants, usually under more or less separate management. This means that each of these plants needs a loan for only a short period, until it can dispose of its product to some unit next farther along in the process. This development has the effect of shortening the period for which commercial loans need to be made, and of increasing the ratio of the operating to the fixed capital. In agriculture production by stages has developed to a considerable extent in the case of a few products, such as the growing of young animals in grazing regions and the fattening of them in grain areas, but development along these lines has been nowhere as marked as in industry; nor is it likely to proceed very rapidly. In fact more significant at present is the increasing practise of growing feed and keeping livestock on the same farms or ranches.

No doubt the greatest importance of natural factors in the agricultural credit problem is in the element of risk. Estimates of the total crop damages in the United States for the decade from 1909 to 1919 are as follows: wheat, 28.77 percent; corn, 31.99 percent; oats, 24.52 percent; barley, 28.65 percent; flaxseed, 36.44 percent; rice, 19.04 percent; hay, 20.35 percent; potatoes, 30.12 percent; tobacco, 20.35 percent; cotton, 35.49 percent. These data are averages of estimates made by crop reporters and must be understood as subject to an uncertain amount of bias in either direction. The damage results almost entirely from climatic misfortunes and from plant diseases and pests. In individual areas and in individual years it may be much more severe, amounting frequently to complete crop failure, occurring sometimes two or three years in succession. Moreover most of the foregoing forms of crop damage affect a large area at a time, frequently several states. This means that any local institution, such as a local bank or even a Federal Reserve Bank or an Intermediate Credit Bank, may find the security of a large part of its loans affected at one time. If, however, crops are short over most of the area where produced, the price may rise more than sufficiently to offset the reduction in yield. Nevertheless the more usual situation is that the crop will be short or especially short in some part of the area, constituting a real impairment of credit obligations in that section.

Of almost equal importance is the risk that the weather will be so propitious over most of the producing area that prices will be very low. Unusually large acreages may produce the same effect. Not only are many of the farmers unable

to meet their loans fully under such conditions, but they may need to hold their crop until late in the marketing season in order to obtain a price that is reasonable for such a supply. A large crop may glut the marketing channels if it is sold in the usual percentages by months.

The livestock risks are not so great as the crop risks. Seldom are whole herds wiped out by droughts, storms, floods or disease epidemics. Nevertheless enough damage to livestock occurs to make risk a real factor in the problem. Loans on feeder stock take the chance that the price will decline between the dates of purchase and of sale and thus wipe out the margin of gain. However, where the farmer has the feed available, such loans are properly considered good risks.

The hazards described are greater to the banker for the minor than for the major crops, because fluctuations in acreage and yield are proportionately greater. The lesser crops are likely to be more localized and hence all subject to the same weather effects at one time. Risks are greatest in specialized farming areas and cash-crop areas. Combined livestock and crop farming offers fewer hazards than crop farming alone. The close relation between the farm business and family living becomes a factor in risk in that in many cases the family living must first be provided out of the income from crops before any payment can be made on the loans.

Loans on farm real estate have the usual real estate hazards, such as fire and tornado, which can be insured for the most part, and also those of price decline and unusual depreciation from misuse of property. Land values are more subject to "booms" than are building values, because buildings can easily be reproduced at cost. Also, when land values recede they recede over wide areas, as in the whole of the north Atlantic section of the United States from 1880 to 1900. In newer farming areas, as in the northwest states, land values fluctuate somewhat with rainfall periods. The possibilities of exploitative farming add to the hazards of misuse of property in agriculture.

It is sometimes thought that further commercializing and capitalizing of agriculture will greatly change the nature of its financing and remove many of the limitations described. In areas where farms are getting larger and farming less labor-intensive, undoubtedly operating loans are larger and more frequent and somewhat more commercial in character. But changes in this direction are proceeding slowly at present, even under the unusual influences existing in the United States. No doubt a lack of capital is an important limiting factor in the sections where new systems of farming which require more livestock or machinery are involved. Lack of capital is also preventing the purchase of the larger acreages of land needed. Capital will not flow in readily so long as the basis of the loan is a mortgage on a family farm, even though it be an enlarged family farm—principally for the reason that larger farms mean larger mortgages than are considered good risks. Yet it seems probable that the family farm, enlarged as new conditions require, will continue to be the major basis of operation. Large scale operation in one unit promises to have a real, but after all a limited, development. Chain farming systems—family units under one general supervision—may easily have a more important development. Such organization plans permit corporate organization and sale of stock as a means of raising the fixed capital. Loans for current operations will be larger and somewhat more liquid with such organizations. These developments, however, will occur only in certain regions. Taking the world as a whole, small units will probably continue to prevail and the changes affecting credit will be in the nature of a slow increase in production for the market and an accompanying greater use of banking facilities.

A more promising development for overcoming the limitations of credit for agriculture is that of consolidation of the loans of small units by various types of cooperative and semi-public credit institutions such as have been developed particularly in Europe and the United States. As a basis for discussion of these institutions a more complete analysis of the various credit needs is essential. The customary classification of these needs is threefold: short term, intermediate and long term. In the United States short term credit is ordinarily limited to six months; intermediate credit, to periods of from nine months to three years; and long term credit, to periods of five years or more.

The short term needs for credit are principally for labor, feed, fertilizer, seed, sprays, livestock for feeding purposes, the holding of crops for a market, twine and sacks, boxes, barrels and other containers. The labor needs are conspicuously for the final harvesting operations but also for the planting operations and to a lesser extent for the care of the growing crops. Borrowed funds are also sometimes used in part

to hire the labor that cares for livestock on the range or in the feed lot. As already stated, in some situations loans are made for living expenses while the crop is growing. In general farmers are more likely to meet their regular labor bills than most other expenses out of current receipts. Loans to hire labor for the regular farming operations are often far from liquidating within the period of a short term loan—the labor is often partly upon growing livestock, land improvements and the like. Loans for seed become very important in the case of a few crops, notably wheat, potatoes and garden crops. Such loans are entirely liquidating within three to nine months, if the season is not bad. Fertilizer loans are extremely important in the old cotton states of the United States, and in many sections of the Old World. Most fertilizer applications extend their benefits over more than one crop, and hence loans for such purposes may be only partly liquidating in one season. Where fertilizer is used regularly the carry-over from earlier applications makes up the difference. The only livestock loans that are liquidating within the period of short term loans are those for young cattle, pigs and lambs to go into the feed lot in the autumn, or into pastures in the spring as grazers. Loans for these purposes are ordinarily for six months. In market milk areas milk crops may become the basis of such loans if the farmer has most of the needed feed available. Loans to buy feed are made to farmers who have the livestock but not enough feed or not the proper kind of feed to make a balanced ration. Such loans are highly liquid. Loans to finance the holding of farm products by farmers and others are sufficiently liquid as long as the loan is for an amount safely below any probable price decline, and the products are in safe storage. There is a serious question whether the farmers themselves can be trusted to exercise the best judgment as to when to hold and when to sell; a wide price margin is thus essential. Cooperative organizations may in time exercise better judgment than the farmers acting singly; and the market analysis provided by public agencies may also prove to be of great assistance.

The credit needs commonly placed in the intermediate class are the following: farm buildings, land improvements such as clearing, draining and liming, fencing, farm machinery, work stock, breeding stock, milk cows, and orchards and small fruit stock. Many of these, such as farm buildings, land drainage and orchard stock, especially, are not liquidating within the accepted period of an intermediate type of loan; and in practise they are often covered by regular real estate mortgages running usually for five years. Farmers frequently expect, however, to be able to repay loans for such purposes within two or three years out of the regular income of the farm, and hence would prefer a shorter instrument than a regular real estate mortgage. Also, many such loans are too small to make a regular real estate mortgage desirable. In many cases the farm already has a mortgage upon it which it may not be possible to enlarge or to supplement with a second mortgage. In practise in the United States farmers are often able to borrow the funds for such purposes at their local banks on notes which they keep on renewing until they are all paid. But this arrangement works badly in a period of credit stringency, such as that following the World War, when a large volume of "frozen credits" is produced. Loans for breeding stock, milk cows, work stock, farm machinery and small fruit stock come much nearer to liquidating within the accepted period of intermediate credit.

Long term land credit is commonly secured by mortgages. In the United States the most usual periods for farm mortgages are still five years and ten years, although an increasing number of them are long term amortization mortgages. In Europe the amortization mortgage is much more common. The practise is also developing of dividing heavy loans into first and second mortgages at different rates of interest. Farms are also frequently bought on a contract to pay at a certain rate, together with interest, until enough has been paid to make a mortgage secure.

The slow turnover of capital in agriculture was early recognized as a difficulty in the handling of agricultural loans by commercial banks. Erick Bollman, an early writer on banking in America, said in 1816: "Banks in farming districts are a nuisance." The farmers in turn complained that the commerical banks did not serve them as well as they did the merchants and frequently opposed them. Some of the early banks made loans to agriculture rather freely, even going so far as to use loans on farm lands as the basis of banknote issues. But trouble followed sooner or later in most cases. In consequence, when the National Banking Act was passed in final form in 1864, national banks were forbidden to take real estate as security for loans. Furthermore the requirement of $50,000 of capital stock for cities of 6000 or less kept banks

from being formed in the agricultural districts. The farmers got much of their credit from merchants and manufacturers of farm machinery. But state banks began to increase in numbers presently, and in 1900 the National Banking Act was amended to permit banks to organize with only $25,000 of capital in cities or villages of 3000 or less. Then followed a period of rapid increase in banks, as a result of which even rural communities, except in the South, were well supplied with banking service—frequently too well supplied. But the difficulty of slow turnover of capital remained. The Federal Reserve Act of 1913 was the next important forward step. It made six-month agricultural paper eligible to discount by the Federal Reserve Banks, and allowed member banks to make a limited number of mortgage loans on real estate. The Federal Reserve Board has interpreted its provisions liberally, even accepting six-month loans for the purchase of livestock and farm machinery such as tractors. In some of the agricultural states over half of the discounts in 1918 were on agricultural paper. The evidence is now clear that in 1919 and 1920 the Federal Reserve Banks discounted too large a volume of agricultural paper maturing in six months, an important factor in the credit stringency which developed in 1920–21.

In the meantime the Federal Farm Loan System had been established in 1917, with twelve regional banks and a supplementary system of joint stock land banks, for the purpose of loaning to the farmers on land mortgages for the purchase of land, equipment, livestock or fertilizers, or for erecting buildings or improving land. The mortgages must run for not less than five or more than forty years, and are to be paid on the amortization plan. Bonds are sold to obtain the funds loaned.

Intermediate credit was provided by an additional act in 1923 which established an Intermediate Credit Bank in each of the twelve Federal Farm Loan districts, affiliated in management with the Federal Farm Loan banks, and coordinate with them under the Federal Farm Loan Board in Washington. These banks may purchase or discount notes, debentures or other securities of banks, agricultural credit corporations and cattle loan companies. They make loans directly to cooperative associations but not to individual farmers. The loans must be for not less than six months nor more than three years. The funds are raised chiefly by the sale of short time debentures secured by the rediscounts. The Act of 1923 also permitted the Federal Reserve Banks to rediscount agricultural paper up to nine months. In 1926 about a sixth as much six to nine month paper as three to six month paper was rediscounted.

In 1927 the Federal Farm Loan System was carrying $1,825,000,000 of farm mortgages and the life insurance companies $1,999,000,000, the two together carrying forty percent of the farm mortgage loans of the United States. The business of the Federal Loan System is growing at the rate of about $100,000,000 a year. The Intermediate Credit Banks have had a very limited growth, the total loans for the five years (1923–27) being $374,000,000 of direct loans to cooperatives, and $257,000,000 of rediscounts, almost all of these being loans by credit corporations and livestock loan companies.

The further needs of the agricultural credit system of the United States are loans to tenants to enable them to purchase farms; loans to good farmers in the poorer agricultural districts; the transferring of more intermediate credit from country banks, where it is being carried on notes and renewed as needed, to the intermediate credit system, so that when the next credit stringency comes the country banks will not have so many "frozen loans"; strengthening of the country banks; and provision of credit on better terms for the southern states. The intermediate credit system needs to be more aggressively administered.

The two principal agricultural credit systems of Europe are those of Germany and France. The German system is a mixture of cooperative and public, and that of France a mixture of private and public, about like our Federal Reserve System. Long term mortage credit is provided in Germany by nine Landschaft banks, which sell debentures and make amortization loans running from thirty to seventy-five years. These are cooperative in that the members are unlimitedly liable for the loans; but are public to the extent of being granted special public prerogatives, such as the right to take possession of property without foreclosure. Intermediate credit for land development has been provided for by a system of public agricultural improvement banks, which, however, have not been widely used. Other forms of intermediate credit and short term credit are provided cooperatively by small local credit associations, known as Raiffeisen and Schultze-Delitzsch banks, both operating for the most part on the basis of unlimited liability. This is especially true of the

former. These public and cooperative agencies compete for business with an extensive system of strictly private farm mortgage companies and banks and commercial banks.

In France land credit is provided by the Crédit Foncier, modeled after the Landschaft banks but now maintaining the same relation to the public as the Bank of France, that is, a private institution with certain public privileges and responsibilities. Its loans are on amortization mortgages running from ten to seventy-five years, or on one to nine year mortgages without amortization. The Crédit Agricole is an adjunct of the Crédit Foncier which makes short term and intermediate loans. The cooperative credit institution in France is known as Crédit Agricole Mutuel.

JOHN D. BLACK

See: CREDIT; CREDIT COOPERATION; LAND MORTGAGE CREDIT; FARM LOAN SYSTEM, FEDERAL; CATTLE LOANS; FEDERAL RESERVE SYSTEM; BANKING, COMMERCIAL; AGRICULTURAL MARKETING; AGRICULTURAL INSURANCE; AGRICULTURAL COOPERATION; FARM TENANCY; AGRICULTURE.

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AGRICULTURAL ECONOMICS.

UNITED STATES. As a separate branch of the social sciences in the United States agricultural economics has been in existence scarcely a quarter of a century. Agricultural colleges, authorized in the Land Grant Act of 1862, were actually established only after the Civil War, and legislation in 1887 provided for a system of experiment stations joined to the teaching institutions. The work of both these agencies, however, as well as that of the United States Department of Agriculture and state departments of agriculture, was organized primarily on a technological basis, and their field of research and teaching was limited to the natural sciences as applied to agriculture. The federal government had, from the days when agricultural matters were handled by a section of the Patent Office, given some attention to commercial or economic problems as they arose, but it was not until 1922 that the Department of Agriculture formally organized a Bureau of Agricultural Economics. In like manner agricultural college faculties had from time to time made broad pronouncements on agrarian questions, but formulated their opinion concerning such issues on the basis of rather meager scientific investigation. The delimitation of agricultural economics as a special field of work in state institutions lagged behind even its tardy development in the United States Department of Agriculture.

Agricultural economics as a comprehensive treatment of the business phases of farming has developed from several more particularized interests, especially farm management, marketing, land policy and rural credits. In the early years of this century a small group of workers in the Office of Grass and Forage Plant Investigations of the Bureau of Plant Industry of the United States Department of Agriculture began to study actual practises on various farms with a view to determining why some farmers succeeded while others failed. In 1905 this work was recognized to the extent of being made the special task of a separate Office of Farm Management in the bureau. This office conducted numerous farm management studies emphasizing cost accounting, and in 1912 W. J. Spillman, in charge of the office, published a bulletin entitled "What is Farm Management?" (U. S. Department of Agriculture, Bureau of Plant Industry, *Bulletin no. 259*). This discussed in considerable detail the actual work of the office and also the general principles which it advocated for the successful organization and operation of the farm.

Meanwhile George F. Warren had been for some five years developing similar lines of activity at Cornell University. In 1911 the experiment station of that institution presented a detailed farm management survey of Tompkins County (Cornell Agricultural Experiment Station, *Bulletin no. 295*), which was the beginning of a large development of such work by experiment stations throughout the country. In 1913 Warren published a college text on *Farm Management* (New York), which was the pioneer work in the field and is still in wide use.

That conditions were ripe for development of this field was evidenced by the rapid spread of farm management courses in agronomy departments of most of the important agricultural colleges, generally followed by the setting up of a separate farm management department in the college and a farm management section in the affiliated experiment station.

The interest in problems of foreign markets, agricultural prices, marketing methods and reforms dates from the beginning of commercial agriculture in the United States. This interest received a sharp impetus from the "high cost of living" discussions which attracted such wide attention in the years immediately following 1909. An Office of Markets was established in the United States Department of Agriculture in May, 1913, to deal specifically with this group of problems. Meanwhile state departments or bureaus of marketing were being formed, classes in marketing were being organized in not a few of the larger agricultural colleges, and both research and teaching in this field were being expanded and to some degree systematized.

Somewhat broader than either of these special approaches was the movement begun at the University of Wisconsin about 1902 by Henry C. Taylor with the support and aid of Richard T. Ely. Although Taylor was primarily interested in the economics of production, he was less strictly commercial than the members of the farm management group. He was more concerned with problems of agrarian policy, particularly as related to land utilization and land tenure. The first book which included the term "agricultural economics" in its title was published by Taylor in 1905 (*An Introduction to the Study of Agricultural Economics*, New York). This volume had no sections dealing with marketing, rural finance, agricultural labor, wages, standard of living, costs of transportation, taxation or related problems that are so important in subsequent discussions of the farm problem.

At the same time that Taylor and Warren were establishing agricultural economics as a discipline in the agricultural college, Thomas Nixon Carver, approaching the same problem from the field of general economics, was conducting a regular class in agricultural economics at Harvard University, and in 1911 published a textbook of *Principles of Rural Economics* (Boston), followed five years later by a book of *Selected Readings*. Although the *Principles* had a strongly classical flavor it supplemented previous writings by providing a "historical sketch of modern agriculture" and a systematic discussion of the "distribution of the agricultural income" as wages, rent, interest and profits. It contained also a chapter on problems of rural social life which discussed rural population, standards of living and group organization for the improvement of rural conditions.

Since the appearance of these three pioneer books, a voluminous literature has grown up. It includes several other general treatises and a host of specialized books on marketing, cooperation, credits, agricultural commerce, tariffs, economic history of agriculture, agricultural geography and the recent farm depression. A veritable flood of bulletins has come from the state experiment stations and the United States Department of Agriculture. *The Journal of Farm Economics* is in its eleventh volume (1929) and runs above five hundred pages annually. It is the official organ of the American Farm Economic Association, which has a membership of nearly nine hundred.

The discussion of theoretical aspects of the subject has lagged behind the flow of current and specialized material. This is a natural consequence of the practical character of much of the work in the field and the fact that the whole matter has been in rapid flux, with immediate problems monopolizing the attention of most of the workers. The situation is being remedied by the appearance of such volumes as John D. Black's *Introduction to Production Economics* (New York 1926) and Clarence L. Holmes' *Economics of Farm Organization and Management* (Boston 1928), which reflect the tendency toward broadening the theoretical foundations of the discipline. Equally strong is the tendency toward improvement of the statistical technique applied to the analysis of many of the problems presented.

The scope of research programs and the methods used in the several branches of the field have been reexamined recently by the Advisory Committee on Social and Economic Research in Agriculture of the Social Science Research Council. This committee, representative of all groups of workers and schools of thought, is responsible for a survey which provides a comprehensive and critical analysis of the entire range of methods of research and indicates quite clearly the trends of development. Further, more detailed investigations for

the separate branches of the discipline may be expected from the representative subcommittees of the advisory committee.

In the last decade the United States Department of Agriculture has considerably enlarged the scope of its work relating to economic aspects of agriculture. Particularly helpful was the consolidation of the Office of Farm Management and Farm Economics, the Bureau of Crop Estimates and the Bureau of Markets into a comprehensive Bureau of Agricultural Economics. This bureau, with its large staff of trained workers, carries on a comprehensive program in the gathering and analysis of data. It occupies a position of leadership among the state agricultural experiment stations, complementing their work and supplementing their resources where local funds and personnel are inadequate. Each state, however, is entirely free to develop an independent program dealing with local problems and meeting local needs. In general state as well as local interest and financial support have turned increasingly toward the study of the economic basis of agriculture in recent years, and the Purnell Act of 1925 makes available to each state experiment station an annual sum amounting to $60,000 (in 1930 and thereafter), of which one of the chief specified uses is the expansion of research work in agricultural economics.

Meanwhile agricultural economics has been progressing rapidly as a teaching discipline. There has been an increase in residence and extension teaching in colleges and universities. The secondary schools also have turned their attention to this subject as a part of their programs of vocational agriculture; they have sought to develop both subject matter and methods which should meet the needs of those whose training will not go beyond the high school stage. Measures have been taken to assist the teaching and research personnel in securing advanced graduate training to a larger extent than has been possible hitherto. This is bound to produce not only an improvement in teaching but also a more thorough grounding of agricultural economics in general economic theory.

E. G. Nourse

Europe. Agricultural economics in Europe is of considerably earlier origin than in America. For nearly a century *Agrarpolitik* (agriculture in relation to state and society) has been an established university course in Germany. As early as 1851 Léonce de Lavergne, of the Institute of Agronomy at Versailles, gave a course in *économie rurale*. Emile Levasseur devoted to rural economics a part of his *Cours d'économie rurale, industrielle et commerciale*, first published in 1869. In some countries teaching still follows the outlines formulated by the early trail breakers. However, most of the present day college and university courses are a reflection of current research interests. Viewed in this light, agricultural economics is a development of only the last thirty years.

Since agricultural economics deals with practical problems, it is not surprising to find that the emphasis laid on the different branches of the discipline differs from country to country. In England "costings" have received the major portion of attention. In Denmark, Switzerland, Czechoslovakia and Sweden simpler farm accounts form the basis of agricultural economic research work. Norway is interested in the statistical measurement of the results of varying degrees of intensity of culture. Political events in central Europe have centered attention upon the land reform movement involving problems connected with the transformation of large estates into small properties. The agricultural economist of Italy has developed to a high degree the technique of farm land and farm income valuation. In France rural law and legislation are basic considerations. On the whole one is struck with the general absence of market and price studies so popular in the United States.

Of all European countries Germany, perhaps more than England, represents the fullest and most advanced development of agricultural economics. In addition to their interest in *Agrarpolitik* the Germans have devoted extended attention to farm management (*landwirtschaftliche Betriebslehre*), agricultural credit and cooperation, farm labor and the economics of land tenure and of land settlement. The students of farm labor are devising methods for increasing labor efficiency. In attempting to "taylorize" the farm the leaders of this new specialty (Seedorf at Göttingen, Falke at Leipsic and Derlitzki of the Farm Labor Experiment Station at Pommritz) have conducted researches dealing with the psychology of personnel management, analysis and standardization of tasks, relation between tool and task, environmental conditions of work and systems of payment. German economists pursue the study of the problems of land tenure and settlement with

unrivaled intensity. The foremost institution in this field is the Forschungsinstitut für Agrar- und Siedlungswesen, established by the government in 1921 and directed by Max Sering of the University of Berlin. Its numerous publications dealing with a variety of economic-agricultural subjects display a distinctly international viewpoint.

England, like Germany, has a well developed program of organized research in the general field of agricultural economics, notwithstanding what might be termed a too weighty dependence upon "costings." It is one of the few countries devoting organized research attention to the marketing of agricultural products. The Agricultural Economics Research Institute at Oxford under the direction of C. S. Orwin and the Ministry of Agriculture and Fisheries constitute coordinating centers. The institute has from its foundation in 1913 emphasized cost accounting as a method of research. The ministry also maintains an agricultural economic advisory officer at a number of colleges and universities for the purpose of conducting cost accounting studies. There is a definite realization that the restricted number of farms that can be handled by the "costings" method seriously limits the application of its results. During the last few years the tendency has been to experiment with other research tools, such as the collection of farm financial records and a wider use of the survey in order to furnish a broad base for generalizations, even though these will be less exact in details than "costings" figures.

Simpler methods of farm accounting for research purposes are used in Switzerland and Denmark. Ernst Laur, professor of rural economics at the Zurich Politechnicum and director of the Union Suisse des Paysans, set the example for the extended use of accounting in obtaining farm organization data and research material on the economic status of a nation's agriculture. For the past thirty years the union has conducted each year a short course in farm accounting attended by a selected group of farmers from various sections of the country. Those who attend these courses agree to submit their accounts to the organization annually for analysis. As a result of this practise Switzerland has perhaps a larger volume of reliable data on the economic phases of her agricultural operations than any other country.

In Denmark the accounting methods are similar, but the records, instead of being kept by the farm operators themselves, are compiled by paid consultants employed by cooperative bookkeeping societies. Denmark had in 1927 about sixty agricultural bookkeeping organizations with over one hundred paid consultants. For research purposes the records of the local societies are analyzed by the semi-official central organization known as the Bureau of Farm Management and Agricultural Economics (Det Landökonomiske og Driftsbureau) and directed by O. H. Larsen, professor of rural economy at the Royal Veterinary and Agricultural College in Copenhagen.

The Institute of Agricultural Accounting and Rural Economics at Prague (Zemědělského ústavu účetnickospravovědného Ceskoslovenské republiky), directed by Professor Vladimir Brdlík, also deserves mention. It published in 1926 an extensive four volume statistical analysis in several languages of the organization and output of agricultural production in Czechoslovakia.

Agricultural economics in Italy places an emphasis upon land valuation. This is due to the fact that the system of property taxes and of taxes on agricultural incomes, originally based on the principles of the "Milanese Census" of 1718, which measured and mapped each property as a basis for its valuation for tax purposes, has since developed into a complicated and intricate process of evaluating sources of farm incomes, calling for considerable training. In Italy the work of appraising land and farm incomes approaches a profession. The best examples of Italian scholarship in this field are Luigi Einaudi's "La terra e l'imposta" in *Annali di economia* (vol. i, 1924) and O. Bordiga's *Trattato di stime rurali* (2 vols., 1923–25).

No summary of the development and status of agricultural economics in Europe can fail to note the importance of unofficial agricultural associations as research and extension agencies. Throughout Europe these associations perform many of the educational, research and extension functions ordinarily handled by public agencies in the United States. Reference has already been made to the Union Suisse des Paysans. Boerenbond Belge and the Deutsche Landwirtschafts-Gesellschaft are also noteworthy examples of associations of this type. Perhaps the most influential farmer-controlled organizations from the standpoint of economic research and extension are the agricultural chambers as they exist in Germany, Austria

and Hungary. These chambers maintain experiment stations, conduct short courses and issue publications. Economic problems have a definite place among their numerous activities. The activities of the International Institute of Agriculture at Rome are also largely economic in nature. Three of its four major technical divisions deal with economic and social questions.

ASHER HOBSON

See: ECONOMICS; RURAL SOCIOLOGY; MARKETING; FARM MANAGEMENT; PERSONNEL MANAGEMENT; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; LAND SETTLEMENT; LAND VALUATION; AGRICULTURE, INTERNATIONAL INSTITUTE OF; FARMERS' ORGANIZATIONS.

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AGRICULTURAL EDUCATION. Education in agriculture is manifestly age old, arising slowly out of experience and the ancient philosophies concerning the nature of the world and the mysteries of plant and animal life. In its formal aspects, however, as a phase of technical or vocational education propagated by means of schools and societies, it is relatively a recent development. Modern science had its beginnings in the sixteenth and seventeenth centuries, and a long time elapsed before it came to be significant for agriculture. The University of Halle, founded in 1694, led the way in the introduction of new methods and subjects, including what were then beginning to take shape as the natural sciences. Locke, Rousseau, Pestalozzi and Philipp Emanuel von Fellenberg (1771–1844) were later noteworthy for their important contributions to education in natural science and to the development of schools of practical arts and manual labor, using farming and gardening as a basis. Much progress had been made in the teaching of the natural sciences by the end of the eighteenth century, and a number of important agricultural schools date from that time: in Bulgaria at Tirnova (1791); in Hungary at Zarvas (1779), Nagy-Micklos (1786) and Keszthely (1797); in Germany at Moeglin (1806), Tharandt in Saxony (1811) and shortly thereafter the agricultural college of the University of Leipsic and the agricultural college at Hohenheim (1818); in France at Grignon (1829).

The progress of science in relation to agriculture was especially stimulated by the researches in agricultural chemistry of Sir Humphry Davy (1778–1829) in London, Jean Baptiste Boussingault (1802–87) in Paris, Justus von Liebig (1803–73) at Giessen and Munich, and by the work in botany of Carolus Linnaeus (1707–78) at the University of Uppsala. During this same period, zoology, geology and mineralogy, important factors in the study of agriculture, also took shape as specialized fields of science.

While in a measure progress in agricultural education and experiment was a concomitant of progress in natural science, the fruitful application of the knowledge and methods of science to agriculture awaited more than a

century of development in the applied fields of natural science. But during the seventeenth and eighteenth centuries there developed in Europe a body of literature on agricultural subjects which played an important part in furthering the movement for agricultural education.

Throughout the nineteenth century the countries of central and western Europe matured and diversified their facilities for agricultural education and research. The maintenance of such facilities came to be regarded primarily as a function of government, although privately supported institutions and others fostered and maintained by voluntary farmers' societies, often with state subsidies, continued to develop. In general, elementary and secondary schools of agriculture profited most from the early impetus and soon became widespread. At present they differ greatly in organization and scope in the several countries, revealing adaptation to local requirements under the differing conditions as to literacy, agricultural resources, national wealth and public policy. These schools are predominantly the places where young persons are trained for farming, and they emphasize the acquirement of practical skills. As a result the colleges and university departments of agriculture have been freed for the higher aspects of education and research and they attract persons whose primary purposes are to prepare for scientific and professional posts and for the management of large properties. The close of the nineteenth century found these higher institutions in some of the central and western European countries on a sound scientific basis, the acknowledged leaders in the training of men, and models of organization.

Following the European War of 1914–18 there was a noteworthy expansion in every country of Europe. In respect of both lower and higher agricultural education and of facilities for experiment and research, the grants for new institutions and for the strengthening of existing institutions far surpassed in amount and significance the expenditures during any similar period in history. The acuteness of the food supply situation during the war and the urgency of subsequent economic rehabilitation unloosed new impulses and relatively large public funds for the substantial development of scientific agencies to aid farmers. While in other continents, with the exception of North America, there has not been comparable expansion, in every civilized country progress has been marked during the first quarter of the present century.

Facilities for experiment and research were developed during the nineteenth and early twentieth centuries both as parts of colleges and university departments of agriculture and as independent institutions. Throughout Great Britain and the continent the so-called agricultural experiment stations were, and are, typically independent institutions, each devoted to a single major field of agriculture, physically and administratively dissociated from the colleges and universities. There are a few exceptions. By reason of the existence of many independent experiment stations for the solution of problems of immediate practical utility, the scientists in the colleges and university agricultural departments and institutes have enjoyed greater freedom quietly to pursue knowledge in whatever direction their abilities and inclinations led them and to devote themselves to the broader, fundamental aspects of their fields.

With the exception of the British institutions, the college and university departments of agriculture in Europe have no responsibility for that modern educational device known as extension teaching. Such work, called agricultural propaganda in Europe, proceeds either directly from the ministries of agriculture or, more commonly, from farmers' societies, which frequently receive governmental subsidies for the purpose. Some form of propaganda service for agriculture now exists in nearly every European country, with the possible exception of Austria, Hungary, Rumania and Czechoslovakia, where this type of service is less clearly differentiated.

The progress of agricultural education and experiment in Europe supplied the pattern and the stimulus for its development in America. Of special influence in the early efforts in the United States was the work of the manual labor schools of Fellenberg at Hofwyl, Switzerland. Between 1819 and 1840 many schools of similar type were established in the United States, with agriculture and various mechanical arts as the center of interest. While many of these efforts were short lived, they laid the foundations for later successful institutions. Societies for the promotion of agriculture were the chief agencies in calling attention to the need for experimentation and demonstration in agriculture, for the selection and improvement of cattle, for the development of an agricultural literature and for the organization of courses and schools of instruction. Agricultural fairs, based on the successful English models, were

organized even in colonial times, and after 1807 these became important and permanent educational agencies, especially for the comparison and improvement of livestock. Agricultural periodicals, which began to appear at the close of the eighteenth century, served not only to set before the people useful information on a wide range of agricultural subjects but also to focus the attention of farmers and others on the desirability of establishing institutions in the United States for the teaching of science as well as the theory and practise of agriculture. Furthermore, prior to 1850, chairs of natural history, of agricultural chemistry and of agriculture as such found place in some of the colleges and universities of this country. These and other efforts combined to prepare for the great forward movement in agricultural education in the United States which came soon after the middle of the century. The first of the present system of agricultural colleges was chartered by act of the Michigan legislature on February 12, 1855.

The most significant legislation for agricultural education in the United States is the Morrill or Land Grant Act of July 2, 1862. It provided grants of public lands to the several states and territories, based on their representation in Congress. The proceeds from the sales of these lands were to be permanently invested and the income therefrom inviolably applied to the creation and maintenance of institutions, of which there was to be at least one in each state, and which were to give instruction in agriculture and the mechanic arts as well as in other scientific and classical subjects. These Land Grant colleges and universities were designed particularly to afford the industrial classes both a liberal and a practical education and subsequently have had a profound influence. Not only have they become the primary centers for higher education and research in agriculture and the mechanic arts, but many of them have risen to the first rank in the liberal arts and in the professions. Because of their sudden establishment in all of the states, their early years were full of difficulties. Qualified teachers in natural science were few, and there were practically no persons trained to teach agriculture. Agricultural textbooks were largely of foreign derivation, and there was very little tested knowledge based on American conditions. Little progress had yet been made in laboratory methods in science. Farming operations were crude. and in the agricultural depression which followed the Civil War there was little incentive for students to take up a college study of agriculture. For thirty years the enrolments in agricultural courses were low, and farmers were skeptical. But progress was being made, teachers were being trained, facilities assembled, texts prepared, laboratory methods worked out, public confidence won, and in time the economic and the social as well as the scientific value of this vast educational undertaking was demonstrated.

Congress increased its financial aid to these colleges by the passage of the Second Morrill Act of 1890 and the Nelson Amendment to the Second Morrill Act in 1907. From the first, and in increasing extent, the state legislatures appropriated state funds to these institutions, and in most of the states such appropriations now constitute the chief source of support.

From the establishment of the Land Grant colleges and universities, the making of experiments and scientific investigations was considered an essential part of their work. It was apparent that if these institutions were to serve the country they could do so only through the development of a body of tested knowledge. By 1870 the organization of experimental work had begun. In 1875 the first of the formal agricultural experiment stations was established at Middletown, Connecticut (it was moved to New Haven in 1877), and in the following ten years such stations were established in sixteen additional states. These efforts led to federal legislation (Hatch Act, 1887; Adams Act, 1906; Purnell Act, 1925) for the establishment, and later the fuller development, of experiment stations in connection with all the Land Grant colleges and universities. The development of organized research marked the beginnings of vitality and public confidence in these institutions.

The long depression in farming came to an end about 1897. The new century opened with widespread general prosperity for agriculture, accompanied by its expansion and diversification. The first fifteen years of the twentieth century were marked by a rapid influx of students into the agricultural colleges. Many of the institutions underwent phenomenal growth in facilities and departments of instruction, and in specialization of teaching and research. Postgraduate study became a necessity for the prospective agricultural teachers and scientists, and a few strong graduate centers emerged.

A further expansion of facilities and fields of work, which followed the World War, is still actively in progress.

The agricultural colleges early sought to aid farmers in their immediate problems by means of addresses before agricultural associations, at fairs and on other occasions, and by contributions to the agricultural journals. About 1870 meetings called Farmers Institutes, at which members of the college staffs offered popular instruction in agriculture, were held first in Kansas and Massachusetts, then in other states. The movement for organized extension teaching from the colleges got under way about 1892 and gradually became a recognized function. It was expanded to include itinerant lecturers, local short courses, movable schools, correspondence and reading courses, publication of bulletins on practical and scientific matters of interest to farmers, field experiments and demonstrations, and fair exhibits. As the demand for this work grew, a movement developed to obtain federal aid for the extension services. These efforts culminated in the passage by Congress of the Smith-Lever Act (1914). Under the stimulus of this act, which required practically equal funds to be provided by the several states, the benefits of the agricultural colleges and experiment stations have been brought to the farms and rural homes throughout the nation, with marked results in improving agricultural practise on the technological and business sides and in the elevation of country life. The extension service field force is by now a highly developed and efficient organization. It comprises specialists in the several major branches of agriculture and resident agents in the counties, known as county agricultural agents, home demonstration agents or boys' and girls' club agents.

Before the passage of the Morrill Act of 1862, the lower, practical schools of agriculture had largely disappeared. For a time the agricultural colleges offered a considerable amount of instruction of secondary grade in order to attract farm boys. The close of the nineteenth century saw the beginnings of a new movement to encourage the teaching of nature study, elementary agriculture and school gardening in the elementary schools. By 1915 the teaching of agriculture in public rural elementary schools was required in twenty-two states, and was actually offered in some schools in practically all of the states. This work is still in process of development and adaptation to the educational and prevocational needs of country children.

As the colleges matured and raised their standards they gradually discontinued their instruction of secondary grade or relegated it to brief winter courses. Furthermore it became evident in America, as it had long been evident in Europe, that only a relatively small proportion of farm children would find it practicable to attend the agricultural colleges, and that the latter were destined to become primarily centers for the training of leaders—teachers, investigators and experts—and that provision for secondary instruction should be made independently, either in special agricultural schools or in the established high schools. Between 1880 and 1915 a number of special schools of agriculture were opened which flourished for a time. Out of a wide variety of experience and educational experiment finally emerged the nation wide system of public high school vocational departments of agriculture. The most rapid development of such departments followed the passage by Congress of the Smith-Hughes Vocational Education Act in 1917, under which large grants of federal funds came to the states for the establishment and maintenance of vocational agricultural education as a permanent part of the public high school system of the United States, and for the training of teachers for these vocational departments. Within the following five years every state had both provided facilities for the training of teachers and instituted courses of one to four years in length in a great many of the rural and village high schools.

The American structure for elementary and advanced agricultural education is now complete in its main outlines. The future will be concerned with a better adaptation of these institutions to their function in the educational system, with improvement in the professional preparation of teachers and in the methods of instruction, and with the discovery and formulation of a scientifically sounder body of knowledge for utilization at the several levels of instruction.

A. R. MANN

See: AGRICULTURAL SOCIETIES; AGRICULTURAL FAIRS; AGRICULTURAL EXPERIMENT STATIONS; COUNTY AGENT; EXTENSION WORK; FOLK SCHOOLS; VOCATIONAL EDUCATION; FARM MANAGEMENT; RURAL SOCIETY.

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AGRICULTURAL EXPERIMENT STATIONS are institutions for research in agriculture, each with a trained personnel headed by a director or other administrator, provided with reasonably permanent financial support, and equipped with buildings, experimental fields, livestock, laboratories and other necessary equipment. Discoveries in the natural sciences promoted agricultural research by stimulating inquiry into the relation of science to agriculture. Research stations were preceded by individual experimentation, especially of wealthy and public spirited "country gentlemen," but the superiority of properly constituted institutions over individual effort soon became apparent. Nothwithstanding a growing recognition of the public importance of agricultural research, experiment stations, especially in Europe, for many years received their principal or entire support from private sources.

The Rothamsted station, established in 1837, is the most noted of the great centers of agricultural research in Great Britain. The Royal Agricultural Society, established in 1838, "proclaimed the alliance between practical farmers and men both of capital and of science," and became a potent factor in promoting scientific agriculture. Recent outstanding developments in British agricultural research are the increase in its support by the imperial government and the extension and coordination of research throughout the empire. The Development Fund, instituted in 1909 and augmented in 1921, is the chief source of government subsidy, and additional aid is granted through the Empire Marketing Board appointed in 1926 on the recommendation of the Imperial Economic Conference in recognition of a unity of interest in the progress of agriculture.

The Australian Council for Scientific and Industrial Research, created in 1925, provides for cooperation in agricultural research in the state departments of agriculture and in the universities. In New Zealand research is conducted on experiment farms, in the colleges and universities, and in the privately endowed Cawthron Institute. The Veterinary Research Station at Onderstepoort, South Africa, conducts a broad program of investigation. Guelph College, now affiliated with the University of Toronto, was for several years the only Canadian agricultural experiment station. The first plan for coordinated effort in Canada, formulated in 1884, was called the Dominion Experimental Farm System and consisted of a central station near Ottawa and branches in the various provinces. Agricultural research in India is conducted mainly in the provincial departments of agriculture organized in 1906 and in the Imperial Agricultural Research Station at Pusa. Research in tropical and subtropical agriculture is receiving increased attention in India and in the colonies and dependencies. The Imperial College of Agriculture at Trinidad was opened in 1922, and the Amain Institute in Tanganyika, East Africa, organized by the Germans, is being restored. These institutions are parts of a plan, evolved at the First Imperial Agricultural Research Conference held in London in 1927, for a chain of tropical and subtropical experiment stations.

In continental Europe also, recent public policy in agricultural research is marked by expansion, coordination, centralization and increased support. Much of the early stimulus to agricultural research came from Germany through von Liebig and other scientists and through experiment stations, the first of which was founded in 1852. Experiment stations have been established for a long time in France and were reorganized in 1921 into a more centralized system under the Institute of Agricultural

Research subordinate to the Ministry of Agriculture. In fact the growth of experiment stations as agencies for agricultural improvement is universal.

Agricultural experimentation in America, as in Europe, was begun by individual effort and stimulated by agricultural societies and men of public spirit. President Washington, in 1796, recommended to Congress the establishment of a National Board of Agriculture. The New York Agricultural Society founded a chemical laboratory in 1849; and in 1856 the Maryland legislature established an agricultural college and provided for experimentation on the college farm. Research, including field experiments in many phases of agriculture, early became part of the regular work of the Federal Department of Agriculture, established in 1862.

The Land Grant Colleges, founded by the Morrill Act of 1862, experienced a growing need for reliable information, for residence teaching and for more helpful contact with farmers. Accordingly the establishment of agricultural experiment stations was recommended at a convention of representatives of these colleges called by the United States Commissioner of Agriculture in 1872. Before Congressional action was secured, several states established stations—Connecticut and California in 1875, North Carolina in 1877, New York in 1879 and New Jersey in 1880. By 1886 the Committee on Agriculture of the House of Representatives, reporting favorably the Hatch Bill, said that experiment stations had been organized in many state colleges and that "a very large number of the colleges established under the Act of 1862 are doing important work of precisely similar kind." The bill, adopted in 1887, granted $15,000 to each state and territory for support of experiment stations "to conduct original researches or verify experiments . . . bearing directly on the agricultural industry of the United States . . . having due regard to the varying conditions and needs of the respective states and territories."

The national system of state experiment stations operates under the coordinating influence of the Office of Experiment Stations of the Federal Department of Agriculture, which also administers the nationally financed stations in Alaska, Guam, Hawaii, Porto Rico and Virgin Islands; serves as a clearing house of agricultural information for the United States and foreign countries; and issues publications reporting the status, progress and needs of research. The principal publication, *Experiment Station Record*, has been published since 1889.

The Adams Act, passed by Congress in 1906, provided an additional $15,000 for station work in each state. The Purnell Act of 1925 broadened the field of research to include agricultural economics, home economics and rural sociology, and further increased the federal support so that in 1929–30 the federal appropriations for the experiment stations in each state aggregated $90,000. Federal support and cooperation have afforded a guiding influence in agricultural research, without curtailing the necessary freedom for independent endeavor. It is indicative of state and local interest that revenues of the experiment stations have increased more rapidly from sources within the states, such as state appropriations, station revenues from the sale of products, fees, contributions by individuals and local communities, etc., than from federal appropriations.

Testimony to the value of experiment stations is found in the rapid increase in public funds for their support in many countries, despite the demand for retrenchment in public expenditures since the World War. That conflict, and the agricultural depression which followed it, emphasized the dependence of agriculture on technological and economic information. A more fundamental cause of the advancement of agricultural research may be found in a growing faith of the masses in the power of science to solve their problems, and in the well founded belief that this research benefits not only the rural but quite as much the rapidly growing urban population to whom improvement in agriculture offers the best assurance of an adequate supply of food in the face of a diminishing supply of virgin agricultural land.

ERIC ENGLUND

See: AGRICULTURAL SOCIETIES; AGRICULTURAL FAIRS; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL EDUCATION; COUNTY AGENT.

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AGRICULTURAL FAIRS. The agricultural fair is a rural institution which is found in virtually all countries of the western world. It is not a market but an exhibition having for its chief aims the improvement of agriculture and the provision of a wholesome form of amusement for the rural people. In the United States and Canada it is known as the agricultural fair, while in Europe, Australia and in some other portions of the New World, it is known as the agricultural show.

The history of the agricultural show in England dates back to the last quarter of the eighteenth century, when agricultural clubs and societies were first organized. These clubs had for their object the improvement of agriculture, and the show was one of the chief means of achieving this end. The establishment of these clubs and the holding of shows were only a part of a larger agricultural awakening which was under way at the same time that the industrial revolution was in progress. The making of hay through the use of clover and other improved grasses came to be common at this time, and scientific breeding resulted in the development of much larger and better sheep and cattle. Arthur Young and gentlemen farmers wrote on agricultural subjects and added zest to the organization movement which culminated in the establishment of the Board of Agriculture in 1793. Among the earliest agricultural shows in England were the Lancashire Society Show held in 1761, and the Bath and West of England Show held in 1777. These were followed by many other local shows and plowing matches. The first national show was held by the Board of Agriculture in 1821.

The practise of holding local and national shows in England has continued to the present time and is also in vogue on the continent. Some of the more important shows in other European countries, are: the Concours Général Agricole de Paris, the East Prussian Agricultural Exhibition, the National Show organized by the General Association of Breeders in Spain, and the International Exhibition of the Cheese Industry and Trade of Italy.

The history of the development of the agricultural fair in the United States is similar to that of England, but the movement came about a quarter of a century later and was not well under way until 1819. Agricultural clubs and societies were organized as early as 1785, and suggestions were made that these societies organize fairs and offer premiums for the best exhibits.

Considerable interest in agricultural organization centered in Washington, D. C., and it was there that the first fairs in the United States were held. A series of three fairs was begun in 1804. These probably grew out of a suggestion made by the first United States Commissioner of Patents that market days be established for the sale of cattle and local products. The exhibit, however, must have been the chief feature of these events, inasmuch as the city government and private citizens contributed funds for the payment of premiums. After a lapse of a few years the Columbian Agricultural Society began in 1810 to hold a series of five fairs at which sales were also featured. Auction facilities were provided at the close of the fair for the sale of cattle and various articles. This procedure, it was thought, contributed to the success of the fair.

The fact that these Washington fairs combined exhibits with markets might furnish a basis for the inference that the agricultural fair sprang from the old mediaeval fair or market. History, however, seems to show that this is not the case. In England the agricultural fair was conceived and first fostered by agricultural clubs, and in America it was likewise first suggested by clubs. The real beginning of fairs in the United States is found in the activities of the Berkshire Agricultural Society organized under the leadership of Elkanah Watson at Pittsfield, Massachusetts, in 1810. This society became the first permanent fair association in America. In 1819 the legislature of the state of New York appropriated $20,000 for two years to be divided among its county fairs. After a few years the states generally adopted the policy of subsidizing fairs.

The period running from 1850 to 1870 has been designated too absolutely as the "golden age of the agricultural fair" in the United States. Since the seventies the institution has experienced a phenomenal growth in the number and kinds of fairs held, in the attendance,

in the value of premiums offered and in the value of buildings and grounds owned by fair associations. Rubinow states that "fairs and expositions have multiplied so rapidly that it is not feasible to try to chronicle the actual number in the United States. More than 3,000 fairs, including state, district, county, community, township, school and street types, are held every year at various seasons." E. L. Richardson, President of the International Association of Fairs and Expositions, which embraces in its membership fair associations of the United States and Canada, states that 39,468,550 people were in attendance at all fairs held in the two countries in 1927. The average value of buildings and grounds of members of the International Association is placed at $1,078,539.

State and county fairs are generally conducted by corporations known as fair associations or agricultural societies. They are usually incorporated and as a rule receive state aid. Inasmuch as cooperation is an important aspect of a fair, it has been urged that voting be restricted to one vote per member, irrespective of the number of shares held. The community fair is usually fostered and managed by some rural organization. Where no organization of any kind exists, merely a loose association is effected for the purpose. The conduct of the state and county fairs is made amenable to the state authorities through the auditing of books of record and through the inspection of exhibitions by duly authorized agents. State fairs usually employ a permanent secretary, while county associations can get along with one serving only part of the year. This officer, who may also be the treasurer, is the life and spirit of the organization. He must know agricultural life and be familiar with social organization. He is usually assisted by a number of committees as follows: premium, finance, program, grounds, reception, school, entertainment, contest, young people's exhibits, concessions, entries and exhibits, and memberships. The most successful fairs cooperate with all public and private agricultural organizations. The support of the state department of agriculture, the college of agriculture, the experiment station, and the extension service with all its local organization, as well as cooperative societies and all private agricultural societies, is solicited by the successful fair secretary. Team work or cooperation is in fact the essence of success in fairs. The exhibits having the greatest educational value are frequently those which are prepared by departments of agriculture and colleges of agriculture.

The financing of the fair is often a problem. State appropriations, gate receipts and private subscriptions are sometimes insufficient to meet all expenses. Concessions for amusements are therefore generally regarded as necessary, and these concessions, it is complained, are not always of a desirable sort. To be eligible for state funds for maintenance, fair associations in Ohio must bar games of chance, doll racks and other similar concessions, and it has been demonstrated that successful fairs can be conducted without them. Horse racing is often a popular feature in the United States, and pony races and horse jumping are organized in England.

The chief functions of the agricultural fair are the education of the public and the furnishing of wholesome amusement. Exhibits and demonstrations can be presented so as to attract the crowd and drive home important principles of applied agriculture. Demonstrations are concerned not only with the production of better crops and livestock but with the preparation of these goods for the market. Lectures on various agricultural topics are desirable if they are of a popular kind. The crowd is in a playful mood and is looking for entertainment as well as instruction. The occasion of the agricultural fair is in fact a show day, a gala day, and a time when a friendly spirit of rivalry prevails.

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See: FAIRS; AGRICULTURAL SOCIETIES; AGRICULTURAL EDUCATION; RURAL SOCIETY; AGRICULTURE, GOVERNMENT SERVICES FOR; COUNTY AGENT; AGRICULTURAL EXPERIMENT STATIONS.

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AGRICULTURAL HOLDINGS ACTS. *See* ALLOTMENTS; SMALL HOLDINGS.

AGRICULTURAL INSURANCE. The term, as commonly used, embraces all forms of insurance needed by farmers or agriculturists. In a narrower sense it refers particularly to such forms as crop and livestock insurance, which apply largely or exclusively to farm risks.

Hail insurance on growing crops, the only form of crop insurance generally available, is said to have originated in Germany in the latter part of the eighteenth century. It was introduced into the United States about 1880, and since 1910 has been written in considerable volume. During the season of 1919, which marked at least a temporary high point in such insurance, the hail premiums on American crops amounted to approximately $30,000,000, and the insurance in force exceeded half a billion dollars.

In the United States, as well as in several other countries, hail insurance is written by three groups or classes of insurance agencies: first, joint-stock insurance companies which write various kinds of property insurance; second, mutual hail insurance companies; and third, state hail insurance funds or departments, which in this country are limited to North Dakota, South Dakota, Montana and Nebraska. In volume of hail insurance written, the joint-stock companies are approximately as important as the other two groups combined. The cost of hail insurance in the United States varies with different crops and localities and also with the agency employed, the rates ranging from about $2.00 to $15.00 per $100 for the season, with a weighted average cost of about $5.00 per hundred.

Insurance of crops against damage by frost has also been written in parts of Europe and elsewhere. In the United States such insurance has been limited largely to sugar cane in Louisiana and to citrus fruit in Florida and California.

Attempts to write so-called all-risk crop insurance for individual farmers, covering against substantially all important hazards beyond the control of the farmer, including losses due to price fluctuations, have hitherto proved discouraging. Since 1920, when a second major attempt to develop such insurance resulted in heavy losses, due in this case to a well-nigh unprecedented drop in agricultural prices, such insurance has been limited largely to protection covering loans or advances made to organized groups of fruit and truck growers in selected areas. All-risk crop insurance, covering at least a substantial part of the annual investment in crops, represents a real need on the part of farmers. Particularly is this true in cases where considerable diversification is impracticable.

In many of the European countries a very large percentage of all horses, cattle and other livestock is insured. This insurance is carried mainly in mutual companies, although a number of joint-stock companies also are found in this field. The numerous local livestock insurance societies are usually in part reinsured in larger regional societies, and not infrequently they are subsidized by the state governments. Mutual livestock insurance in some form is said to have existed in Europe for seven hundred years or more.

In the United States most livestock insurance companies that have been organized either on the mutual or on the joint-stock plan have rapidly disappeared for lack of patronage. The few and relatively small mutual livestock companies, about twenty-five in number, that have survived for any considerable number of years are limited almost entirely to Pennsylvania and Ohio. Most of the livestock insurance in the United States carried on the joint-stock plan is now on the books of one relatively small company, although during the recent high price period which came to an end in 1920 there were nearly a score of such companies in operation.

That livestock insurance has remained so unimportant in the United States, as compared to its development in many of the older countries, is no doubt in part explained by the absence of numerous small farmers to whom the loss of a single animal is a serious disaster. To some extent the situation may be the result of an inclination on the part of American farmers to carry unduly heavy risks individually, rather than to pay the necessary cost of protection on a commercial basis or to cooperate with other farmers in a mutual livestock insurance company. In this form of insurance, even more than in others, successful operation on a mutual basis requires close supervision for the avoidance of needless losses and unjustifiable claims.

American farmers quite generally carry fire and windstorm insurance on their property. Most of the joint-stock fire insurance companies, as well as the larger general mutuals, insure some farm property against these hazards. In this field of insurance, however, American farmers, as well as those in Europe and elsewhere, have succeeded well in their mutual enterprises. There are nearly two thousand farmers' mutual fire insurance companies in the United States, with

a total membership of about 3,240,000 and total risks approximating ten billion dollars. This insurance is carried at an average annual cost of about twenty-six cents per hundred dollars, which is very materially below the average of commercial rates. About 13 percent of these farmers' mutual fire insurance companies write also insurance against windstorm.

There are, in addition, about sixty specialized mutual windstorm insurance companies in the United States that insure farm property either largely or exclusively. These companies carry total risks amounting to about two billion dollars. The cost of windstorm insurance on farm property varies for different parts of the country from about one fourth to one half the cost of fire insurance.

A number of mutual companies have recently been organized to insure American farmers against the hazards involved in the ownership and operation of automobiles. The largest of these mutuals now operates in a score of states, while another operates in four states. The others are more local in their operations. These mutuals have hitherto given protection at a substantial saving to their members as against the cost of automobile insurance on a commercial basis.

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See: INSURANCE; FIRE INSURANCE; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL COOPERATION.

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AGRICULTURAL LABOR. Since the pursuit of agriculture has from time immemorial made the greatest demands upon the activities of the human race, both the type and conditions of the employment it gives rise to are economically and socially of extreme importance. Even nowadays four fifths of the demand for manufactured products emanates from tillers of the soil, and the bulk of the world's population is engaged in the manual processes of food raising. Among early civilizations slave labor played an important part and represented the main alternative to a system of occupation by small owners in times when hired labor was scarce. It was employed in Egypt, in Persia and in Babylon, and the Romans made such progressive use of slaves that during the later periods of the republic most rural workers were slaves, laboring under overseers, often for absentee masters. Designated as *soluti* (when free from personal restraint) or as *vincti* (when worked in fetters), these *servi* numbered within their ranks both general laborers and specialists. Records are available as to the cost of their maintenance, the nature of their dietary, and the numbers necessary to cultivate different types and areas of land; calculations based on this material show that, while the expense of maintaining a Roman slave must have been equivalent to the wage paid to a hired European worker of the late eighteenth century, his effective output fell below that of the latter. Pliny and other contemporary writers, indeed, commented upon the uneconomic nature of slave labor. Among the Greeks, although agriculture was generally regarded as the most honorable of all professions, it was nevertheless considered to be a suitable employment for slaves, who ultimately outnumbered other types of workers. In western Europe where the transition from village community to manor presents difficult problems in connection with the status of individuals, slavery existed until after the Norman conquest of England. Thus *Domesday Book* records 35,000 "freemen," and 25,000 slaves, as compared with 200,000 villeins and cottars who, if physically free, were economically attached to the soil. Thereafter slave labor, as opposed to peonage, was confined to the southern states and the West Indies, where its history is common knowledge.

Throughout Europe serfdom, as represented by the manor, was predominant for centuries, the various classes of tenants holding their arable strips and enjoying other rights in return for services (e.g. boon-work and week-work) rendered to the lord. This system, which called for the cooperative use of implements and

numerous combined acts of husbandry, was ill adapted to survive the introduction of a monetary system or the growth of population, so that even in the thirteenth century weekly wage earners began to appear. This factor, combined with the gradual substitution of money rents for personal services, permitted tenants to devote themselves to the cultivation of their own holdings. So important a movement, occupying centuries in development and assuming various shapes in different countries, was expedited by the onslaught of the Black Death, which placed those who survived it in a position to secure greater personal independence at the expense of less equality of status, and initiated competition in wages and in rents. Thereafter, while the executive rigorously suppressed uprisings, the English landowners adopted sheep farming as a means of reducing their labor expenditure. Despite the survival of a considerable amount of villein-tenure in the shape of copy-hold, the ownership of land fell progressively into the hands of those who by trade and commerce had secured the means to acquire it. Enclosure, whether for the extension of grassland farming in the fifteenth and sixteenth centuries, or as part of the reverse process entailed in the increased production of wheat at the end of the nineteenth, inflicted hardship on the lowest ranks of the agricultural community, for at each period tens of thousands of peasant occupiers and owners were either deprived of their holdings or otherwise unfavorably affected. Too much credence, however, must not be given to exaggerated statements that the "yeomanry" was, upon either occasion, wiped out. After the Napoleonic wars the condition of the English agricultural laborer, who in the meantime had participated in the changing fortunes of his industry, definitely deteriorated. Faced by unemployment and by the hardships attendant upon the prevailing system of poor-relief, he once more attempted to exercise force, upon occasion destroying the newly invented machinery which he believed to be responsible for his economic disabilities, just as his forbears had treated manorial records. The industrial revolution simultaneously deprived his wife and family of earnings gained in cottage industry. The Poor Law system, which had alternated between excessive severity and the indiscriminate charity associated with "Gilbert's Act" and "Speenhamland," was drastically altered to meet the new conditions. Subsequently "outdoor relief" was generally refused to the able bodied, the burden of local taxation (a disproportionate amount of which fell upon rural areas) was lightened, and farmers were enabled to meet with more confidence the demand for an augmented home supply of foodstuffs. The hereditarily landless laborer, despite such electoral concessions as the Reform Acts, was definitely confirmed in the situation toward which he had drifted after the fifteenth century. The period of high farming that followed saw him, despite the repeal of the Corn Laws, numerically at his greatest strength and enjoying an alleged "Golden Age." His social circumstances were still, however, untouched.

In other European countries serfdom survived the Middle Ages, being ultimately abolished by revolution, as in eighteenth century France, or by more constitutional means, as in nineteenth century Germany, in most cases peasant proprietary taking its place. In Russia, prior to the Great War, despite measures to establish them as tenants, those peasants who were not cultivating the open fields on mediaeval lines were laboring on the estates of great landowners under conditions akin to servitude. While the universal post-war demand for freer access to the soil by those cultivating it resulted in the expropriation of millions of acres and their reallotment in small units, practical experience was unfortunately not always regarded as an essential qualification on the part of claimants; thus the urban populace too often secured preferential treatment and the transference did not afford a convincing demonstration of the value of widespread peasant ownership. Within a few years, however, modifications were effected in the land legislation of many European states, with the result that private ownership was in certain circumstances recognized in Soviet Russia, and elsewhere the area that an individual might hold was increased. In England, while the total of statutory small holdings (i.e. those below fifty acres) tended to remain stationary, the number specially created exceeded 20,000, provided at a very heavy cost. Here the main qualification was not experience but military service.

In the United States of America the early colonists introduced the systems of tenure and of cultivation with which they were familiar; but scarcity of labor, together with abundance of land, invariably raised difficulties, and to meet them, combined or forced labor were the

only alternatives. Two hundred years later, when railway construction and other works of development had withdrawn men by the hundred thousands from agriculture, the widespread adoption of machinery saved the situation in the face of rising costs and falling prices. In the southern states, notably Alabama and Georgia, peonage, either of criminals or colored labor, flourished until rendered progressively ineffective by legislative action.

In France, Denmark and such areas as are comprised in the southern and western portions of Germany the problem of the agricultural laborer assumes a different aspect, for peasant farmers utilize immigrant or seasonal helpers from neighboring states to work under conditions often the reverse of satisfactory. Small farm units, therefore, not only make excessive demands upon the time and strength of their owner and his family but may also give rise to extraneous abuses. On the other hand, in the United States and in Canada, the difficulties of assimilating a permanent influx of all the races of Europe and Asia has had to be faced, their divergent values as citizens and workers adding complications, of which not the least has been the tendency to form national group settlements.

In so far as the proportion of hired workers to farmers is concerned, the British Isles provide an extreme case, for employees outnumber employers by more than two to one. On the other hand in the United States less than half the total agricultural population is of the wage earning type. In most countries there has emerged, at some time or other, a system of voluntary "gang-labor." In the arable districts of England in the middle of the nineteenth century many thousands of persons, mainly women and children, were so employed under conditions which soon called for active intervention. In California Japanese, in Texas Mexican, workers have thus been utilized on a large scale. Such cases must be distinguished from the universal employment at certain seasons of extra hands which makes the enumeration and definition of agricultural workers so difficult and frequently gives a fallacious appearance to official statistics. Part time employment varies with the type of farming pursued, and in many instances (e.g. the presence of sugar beet or the proximity of forests) the establishment of grouped small holdings is facilitated by the opportunities thus afforded for winter, or off season work. Actual copartnership in agriculture has seldom met with success, for the relatively low profits—with a possibility of none—to be divided, combined with the slow turnover of capital, have formed an insufficient incentive to extra toil.

The agricultural worker, master perhaps of a dozen tasks, none of them simple and all calling for broad judgment as compared to that demanded of the urban machine minder, has earnings low in comparison with those of the industrialist, but not so meager as a casual inspection of cash payments alone would indicate. Thus the total emoluments of the rural employee may include such payments in kind as the provision of food and fuel; free occupation of plots of land; use of teams; additional money for specific work (e.g. harvest); piece work earnings; provision of a dwelling free or at an uneconomic rent; overtime remuneration. There must be added the earnings of wife and children, the labor of the latter being often regarded by employers as particularly valuable in keeping their land clean. Such are the factors which, in combination with the freer and healthier life of the countryside, generally maintain a sufficient supply of labor. That unemployment in agriculture is not a common feature is evidenced by the widespread disinclination to insure against it by both employers and employed.

The use of machinery, which in parts of the world has made possible the cultivation of as much as a square mile by one man, has naturally tended to reduce the number of workers; but in the Old World, where physical and economic conditions are peculiar, the manual work performed by cheap labor is displaced slowly. Thus in the arable districts of England it is usual to find four persons employed per hundred acres; while the grassland farmer utilizes about half that number of slightly better paid hands. The effect of the size of the holding on labor density is striking, for on English farms of from one to five acres the total number of workers (including members of the occupant's family) is 13.4 per hundred acres; on five to fifty acres it falls to 6.5; on fifty to three hundred acres to 3.3; and on over three hundred acres to 2.6. The higher proportions are of course universally found in suburban market gardening and fruit growing districts. In densely populated Holland and Belgium, as also among the teeming Chinese, where land is relatively scarce and therefore dear, the maximum output is desirable; in the western world this is

secured by peasant proprietorship, and in the East is secured also by the cheapness and abundance of human labor. In both cases a high return is secured from the soil, and output per acre is the criterion of successful farming. In the New World the greatest output per person employed is aimed at on land which is abundant and cheap. Thus it happens that the bulk of the foodstuffs imported into Europe in competition with the high-yielding soils of that continent comes from land giving perhaps half the returns obtained there; for although the laborer in the United States, Canada and Australia may be paid twice what he would earn in Europe, the cost of his labor per unit of produce is relatively small, so great is the economy of large single-producing units. It is, indeed, generally found that, as the size of holding increases, the value of the output per person employed moves upward. In English arable farming the proportion of the total expenditure attributable to labor ranges from 20 percent up to nearly 50 percent, averaging some 30 percent. The most promising remedy against increasing labor costs would appear to be an extended use of mechanical aids and a close study of the psychology of the worker. In the latter connection it can be shown that reduction in hours of labor within limits does not adversely affect output.

The agrarian policy, so widely pursued during the decade after the war, inevitably touched the hired land-worker, whose economic position was thereby improved. In England the provision of wages boards was effective in raising cash wages by some 20 percent, and in real wages the English worker is, together with the Dane, the highest paid agriculturist in Europe. Although it is difficult to compare conditions on the western side of the Atlantic, it may be pointed out that wage payments have in general conformed to fluctuations in the cost of living and that nothing but the depression through which agriculture passed prevented the rural worker from securing those higher real wages that fell to the general laborer. In 1926 American farm wages averaged 71 percent above the pre-war parity as against a cost-of-living increase of 72; industrial wages ranged from 100 to 150. In England, with a cost-of-living index augmented by 66 to 68 percent, agricultural wages in 1926 stood at 76 percent, and those of general laborers about 100 percent, above the normal.

In one respect the agricultural worker falls behind his industrial brother, for the trade union movement, starting in England in the first half of the nineteenth century and taken up largely by the industrial trades of that and other countries, is still mainly confined to the industrial trades. Despite the work of enthusiastic philanthropists and political organizers, the rural worker remained aloof. In England, for example, rarely more than a tithe of the possible membership has at any time been secured, the actual numbers fluctuating with political and social conditions. The reasons are obvious: an industry composed of scattered and often inaccessible units; the close personal relationship engendered between master and man; the small financial resources of the workers, to whom a subscription of even a few cents a week implies sacrifice; the conservative habits of mind of those associated with the land; the futility of the strike as a lever in face of the slow processes of nature and the abundance of alternative forms of labor. Thus every attempt at direct action in agriculture has been foredoomed to failure, and those responsible for the direction of union policy have wisely devoted their energies to campaigns for social betterment.

In almost every country of the world the amenities of the rural worker's life have steadily increased. Since the middle of the nineteenth century, housing, education, the hours and conditions of labor, and emigration have received growing attention, and accordingly the disparity between the standards of the town and those of the country is being reduced. Work has been made more congenial and its hours curtailed. The growth of invention, represented by the automobile, the wireless, the telephone and the bicycle, enables the countryman to participate in the advantages of urban life, and may check the widespread movement townwards, which everywhere, from the mid-nineteenth century on, has been a familiar feature. It may be claimed that in civilized countries the hired land worker enjoys as good an expectation of life as does his town cousin; indeed his better physique secures his preferential selection in such callings as the army and the police force. He is often housed as well as his employer. There are few states which do not encourage, by means of special schools, technical colleges or provision for scholarships, his education and that of his family. In most countries, again, his feet are set upon the first or second rungs of the agricultural ladder, since he is generally accorded

preference when seeking a state-provided holding. Once so established, special provision is always made for supplying him with credit, machinery and an outlet for his produce; in certain cases group settlements give the practical training which he may need. Further ascent of the ladder is then a matter for himself alone. Workers in all countries and in all ages have climbed to the top; but it must not be forgotten that success in agriculture, as in other walks of life, depends upon ability, character and determination, not merely upon technical skill fostered from outside sources.

J. A. VENN

See: AGRICULTURE; AGRICULTURAL MACHINERY; AGRARIAN MOVEMENTS; AGRARIAN SYNDICALISM; MIGRATORY LABOR; PEASANTRY; FARM TENANCY; SMALL HOLDINGS; ALLOTMENTS; AGRICULTURE, GOVERNMENT SERVICES FOR; POOR LAWS; WAGES; TRADE UNIONS; LABOR MOVEMENT; SOCIAL INSURANCE; RURAL SOCIETY; SLAVERY; SERFDOM; PEONAGE; FORCED LABOR.

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AGRICULTURAL MACHINERY. Implements operated by animal power have been employed in agriculture since prehistoric times. Oxen and horses were used in plowing, harrowing and in turning revolving pumps and mills. In the eighteenth century important improvements were made in the implements used in cultivation. This period witnessed the introduction of Jethro Tull's horse drill, horse hoes, horse rakes, Meikle's threshing machine, Eli Whitney's cotton gin, crude machinery for crushing sugar cane, and plants for boiling sugar and preparing indigo. Yet the general application of mechanical contrivances in tilling the soil, planting seed and garnering the crop did not come until the second quarter of the nineteenth century.

Since then the steel plow has come into general use not only in the new countries, where lack of man power placed a premium on superior implements, but also in older, more settled agriculture. Numerous adaptations have been made for special purposes such as hillside plowing and the plowing of different varieties of soils. Sulky plows, disc plows and two-bottom (gang) plows pulled by four to six horses have been widely adopted. Plows with many bottoms have been developed for use with tractors. Much progress has been made in the development of various types of harrows, pulverizers, land packers, combinations of the harrow with seeders and planters, and two to four-row cultivators. Sowing and planting have been facilitated by the invention of grain drills, automatic corn planters, cotton and potato planters and special machinery for spreading fertilizers.

During the first three decades of the nineteenth century there were many attempts to invent a horse drawn reaper, but no practicable implement was achieved until the appearance of Hussey's and McCormick's reapers. By easy steps the reaper was perfected through the addition of a self-rake, a platform for the binders and finally an automatic binder using at first wire and then twine. An adaptation of the grain binder is the corn binder, and machines for harvesting soy beans, sweet clover and grain sorghums. Flax harvesting has been facilitated by the recent invention of the flax puller. Cotton picking machines appear to be the next addition to the series of mechanical harvesters.

Threshing machines run by horse power, steam or gasoline have gradually replaced the flail and hand winnowing devices. Threshing machines have also been developed for grass seed, soy beans and peas. A most important recent development is the grain combine, which unites the processes of harvesting and threshing. At first this machine could be used only in fields where the grain ripened uniformly, as in the semi-arid dry farming areas. In recent years it has come to be fairly common to cut the grain and throw it into windrows for drying, the combine following later, picking up the windrows and threshing out the grain. A combine adapted to corn harvesting, husking and shelling is said to be in process of development.

The old laborious processes of hay making have largely been eliminated by mowers, horse rakes, tedders, stackers and loaders; and hay drying equipment has been invented to reduce risks of loss from rain. Handling and utilization of forage crops have been greatly advanced by silage cutters and blowers, huskers and shredders.

Dairying has been transformed by separators, testers, milking machines, automatic pasteurizers and bottlers, automatic churns, butter workers and by mechanical arrangements for providing water pressure and for handling feed and manure.

Automatic spraying machines have greatly facilitated the care of fruit. Special machinery for dusting cotton and for handling corn forage has been developed to meet emergencies created by the boll weevil and the corn borer. Other miscellaneous improvements include potato digging machines, ditching machines and automatic pumps.

Agricultural production and farm life have been profoundly affected by the automobile and the motor truck. The last two decades have witnessed the adaptation of the gas tractor to almost all kinds of field work and the expansion of uses of stationary engines. Recently there has been a rapid extension of electric power into the countryside and many progressive farm homes have been motorized.

In spite of great progress in the invention of farm machinery, a large part of the world still employs the primitive methods of antiquity. In most of Africa and Asia and parts of Europe mechanization of farming has been retarded by ignorance, inertia, lack of capital and extremely small size of holdings, although the latter difficulty is in some instances overcome by cooperative ownership of farm machinery or by systems of hire. Great Britain, with its comparatively large scale system of agriculture, has been in the forefront of European countries in mechanization of farming. In those parts of continental Europe where large scale farming predominates considerable progress in the adoption of farm machinery has occurred, but such progress was retarded by the breaking up of large estates following the World War. Low wage levels, which prevailed in some continental countries and in South America and South Africa, removed the incentive to the adoption of labor saving devices even where otherwise favorable conditions have obtained.

Canada, the United States and Australasia have held leadership in the adoption of farm machinery and mechanical power. In 1921 the average value of machinery per farm in Canada was $935. In the United States, mainly because of the large number of small farms in the South, the average value of implements and machinery per farm in 1925 was only $423, but the aggregate value was more than two and a half billion dollars and, even allowing for changes in the purchasing power of money, about ten times the value in 1870. The increase in value of machinery in this period was five times the total months of man labor employed in farming. In 1921 tractors were reported by 6.1 percent of occupied farms of Canada, and in 1925 by 7.4 percent of farms in the United States, the latter figure having doubled in five years. Introduction of motor trucks and automobiles, largely for production uses, has been extremely rapid in both countries. In the United States total primary power on farms, other than man power, is estimated to have increased from 1.6 horse power per worker in 1870 to 4.1 in 1920. Of total power utilized in 1924 it is estimated that 61 percent was animal power, 16 percent from tractors, slightly less than 4 percent from motor trucks, 12.5 percent from stationary engines, slightly over 1 percent from windmills and 5.5 percent from electricity.

The agricultural machine, like the industrial, represents a new, more rational combination of the simple components of an operation originally performed by man. It makes possible therefore the employment of motive power and reduces the necessity for intelligent manipulation. In agriculture the adoption of the machine brought with it first an extended use of animal power and later of power generated by steam engines, internal combustion engines and electric motors. It also permits a more perfect execution of many operations or the performance of tasks originally beyond the reach of man because of quantitative or qualitative limitations of the human body. Efficient tillage machinery accomplishes more effective cultivation, resulting in a larger product per acre. Shredders and silage cutters have made possible more efficient utilization of feeds. Mechanical sprayers and dusters are more effective than hand implements in applying safeguards against insect and disease devastation. Pasteurizers and fruit sorters make possible products of higher quality. Hay dryers perform work left originally to the natural forces of the sun and the wind. Yet a most characteristic contribution of machinery to agricultural production still remains to be mentioned: it facilitates

the accomplishment of work in the short span of time when weather conditions are most favorable.

The most important effect of the introduction of farm machinery is economy of human labor. More than thirty years ago it was estimated that in the case of nine principal crops the aggregate saving of farm labor was 79 percent and the saving in cost, 46.3 percent. Very large economies have been made possible by developments since that date. For instance, combines operated by one or two men cut and thresh upward of thirty acres a day, and frequently at less than half the cost for corresponding operations when binders or headers are employed. Economy of farm labor in the United States due to the introduction of farm machines may be roughly measured by the fact that from 1870 to 1920 the acreage of improved land per farm worker increased about 50 percent. Product per worker nearly doubled during that period. Rough comparisons of productivity in the United States and various countries of western Europe indicate a product per man in the United States from two to six times as great. Further allowance, of course, should be made for labor and other costs involved in manufacture of machines.

Although adoption of labor saving devices in agriculture has been generally slower than in manufacturing, the process has been at times sufficiently rapid to result in an embarrassing displacement of labor. In the early thirties of the nineteenth century there were uprisings of farm laborers in the south of England directed against newly introduced threshing machines, and in the comparatively prosperous decade 1850 to 1860 there was considerable unrest in the same area due partly to adoption of machinery. Adoption of farm machinery in the most highly industrialized countries of western Europe was less destructive to the welfare of agricultural labor, by reason of the large outlet furnished by urban industry, than the less extensive adoption in countries of southern Europe where the industrial outlet was more restricted.

The serious agricultural depression in England which began about 1875 was largely the result of competition due to the combination of newly opened grain lands and newly adopted farm machinery in America. On the other hand the introduction of machinery and other improvements tended to mitigate the hardships of the more progressive British farmers. Since 1920 the rapid introduction of tractors, automobiles and other farm machines has aggravated and prolonged agricultural depression by greatly reducing the demand for feed for horses and mules, while stimulating cultivation of large areas of level semi-arid lands in various countries.

Introduction of farm machinery has resulted in notable geographic shifts toward lands of relatively level topography, particularly to cheap lands of low rainfall in Canada, Australia, the Argentine Republic and the western part of the United States, which could not be economically cultivated under more laborious methods. This tendency has reacted unfavorably on many humid areas unfitted by topography for the extensive introduction of machinery. In the United States these geographic shifts, combined with the cityward movement and certain industrial shifts, have also resulted in important changes in the geographic distribution of political power.

Corresponding to the geographic shifts, profound changes are occurring in systems of farming and of farm organization in various regions. In areas of level topography there is a tendency toward greater mechanization, large scale operation, specialization in production and less dependence on imported casual labor; in areas less favorable to field machinery the tendency is toward development of labor saving methods for non-field operations, adoption of types of field machines better adapted to a rolling terrain, elimination of rougher lands from the farming areas and the development of an agriculture favored by nearness to market.

The whole process of agricultural mechanization combined with the progress of transportation and urbanization has been an important influence in substituting world markets for local markets, and commercial and capitalistic agriculture for self-sufficing farming. Many observers compare the process of agricultural industrialization to the industrial revolution and believe that it will result in the displacement of the domestic system in farming by large capitalistic operating units. Such changes would inevitably involve a profound transformation in the characteristics and status of the agricultural personnel and an equally significant modification of rural social structure.

LEWIS CECIL GRAY

See: AGRICULTURE, GENERAL PROBLEMS; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURAL LABOR; AGRICULTURAL COOPERATION; SMALL HOLDINGS; AGRICULTURAL CREDIT; AGRICULTURE, GOVERNMENT SERVICES FOR.

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AGRICULTURAL MACHINERY INDUSTRY. Agricultural implements represent a group of commodities used on the farm and not a group of products manufactured by a single branch of industry. The term "agricultural implements industry," as employed by the United States Census Bureau, excludes enterprises manufacturing farm tractors, vehicles and barn equipment, as well as establishments a minor share of whose output consists of agricultural implements. While in 1927 over 460 million dollars' worth of farm equipment was manufactured in the United States, the value of the total output of the agricultural implements industry did not exceed 203 million dollars. However, in terms of a broader classification, the manufacture of agricultural implements and machines may be considered as a specialized branch of foundry and machine shop work.

As a hand trade the forging of plow irons, sickles, scythes, axes and similar tools is an industry which antedated by centuries the industrial revolution. It was the business of the village blacksmith to make and repair these implements for his neighbors. The improved technique of iron working and the wider markets created by transportation developments resulted in the appearance of small establishments specializing in the production of tools for the agriculturist. This specialization eventually led to improvements in design and to the better adaptation of the implements to the needs of differing localities. Village mechanics or non-specialized manufacturers could not successfully compete with these plants which thus formed the nuclei of a new, growing branch of industry. Plow making was perhaps the first to acquire a separate identity; in the United States it was recognized as a distinct industry even before 1830. In Pittsburgh, which shortly became the leading center, a factory using steam power manufactured a hundred plows a day as early as 1838. By 1843 Massachusetts boasted of 73 plow makers with an annual output of 60,000 units. The industry was not merely expanding; its technical processes were increasingly mechanized and the individual factories were growing in size. By 1855 John Deere at Moline, Illinois, reached an annual output of over 13,000 steel plows. A similar specialization and improvement could be observed in the manufacture of cradle scythes, shovels and other light implements. In the South several factories were engaged in the exclusive manufacture of Whitney's cotton gins.

A more important stimulus to the development of a factory industry organized on a large scale and producing interchangeable parts came from the invention and rapid adoption of harvesting machinery. Until the late thirties the improvement of agricultural implements was directed at raising the quality of cultivation; after this period the inventions were principally in the nature of labor saving devices. Although 33 English, 2 continental and 22 American inventions of reapers were recorded before 1831, conditions had not yet reached the point where they might be utilized; it was not until the rapid settlement of the western prairies brought about an extreme shortage of labor that a market was created for machines of demonstrated practicability.

Under these exceptionally favorable circumstances a large scale manufacture of harvesting machines grew overnight. McCormick's reaper was not of great practical value until 1845. After trying Cincinnati and Brockport (New York) and finding them unsatisfactory as to location, he established his plant in Chicago in 1847. By 1849 he had 19 local agencies and in 1851 his sales reached the thousand mark. In the following decade six important concerns were organized and by 1879 there were about a hundred relatively large manufacturers of harvesting machines. In the meantime important inventions were crowding the field: the self-rake in 1852, the Marsh harvester in 1857, the wire self-binder in 1874 and the twine self-binder in 1879. With the exception of the last, these inventions superseded neither the original reaper nor one another, but constituted a series of accretions enabling one machine to perform an increasing number of operations. Patent arrangements permitting, it was easy to graft them one upon

another and offer the farmer an increasingly self-sufficient machine. This allowed the expansion of existing plants and the establishment of new plants to feed the enormous demand and did not call for the elimination of those enterprises whose product was becoming obsolete. That is not to say that there were no struggles among manufacturers: patent lawsuits were frequent and protracted, machines of different makes were subjected to competitive field tests to the delight and edification of rural audiences, and competition extended to terms of sale and to the securing of the best local agents by exclusive contracts.

The period of agricultural depression, which lasted from the late seventies until 1896, coupled with the retardation in the occupation of free land, meant a slowing down in the rate of growth of this industry. Also, the perfected harvesting machine had become by this time a complicated contrivance, the manufacture of which was costly and could be carried out efficiently only on a large scale. A terrific jolt to the industry was given by Deering in 1879, when he transferred his plant to Chicago and began manufacturing the twine self-binder. In the struggle which ensued between the twine and the wire self-binders, the number of important manufacturers was reduced from about one hundred to twenty-two. In the following two decades competition was severe: it developed into a real trade war between McCormick and Deering, the two largest producers. Although steel was being used to a much larger extent than before, and minor improvements were being continually made, the sale price of machines was rapidly declining. By the turn of the century the number of firms was reduced to fourteen. In 1902, with the aid of the Morgan interests, five of the largest manufacturers merged to form the International Harvester Company. After purchasing during the next year three more enterprises, the harvester combination found itself in virtually monopolistic control of the harvesting machine field.

In the subsequent period the International Harvester Company proceeded to use its strong position and its abundant supply of liquid funds to acquire control of essential raw materials, to increase its foreign sales, but above all to expand its activities in the manufacture of other lines of farm equipment. The marketing of the product always constituted an important business phase of this industry. The farmers had to be familiarized with the operation of the "new-fangled" devices; as the machines grew more complicated and expensive it became increasingly necessary for the manufacturers to finance the purchasers; efficient services for the replacement of parts had to be maintained. The pioneers in the industry were forced to build up an entirely new distribution system; neither local mechanics nor general merchants could be relied upon to understand the intricacies of the new machines nor to furnish credit to the farmers. Local agents had to be introduced from the outside and their work supplemented with sales talks and mechanical demonstrations by men directed from the center. In the trade war which developed, agents were tied down by exclusive contracts prohibiting them from dealing in competing machines of other manufacturers; moreover each company attempted to attach to itself as many of such local representatives as possible, thus effectively limiting the retail outlets of other companies. Because credit to retail purchasers was furnished by manufacturers and because competition was severe, the retail sale price of harvesting machines was virtually fixed by their makers. Under these conditions the manufacturers not only owned their production plants but also controlled the large distribution apparatus. The product and its manufacture having been perfected and the sale of harvesting machinery virtually monopolized, costs could be reduced and operations expanded only through the employment of the existing machinery for the sale of an increasing variety of farm equipment.

The acquisition of "new lines" by the harvester combination put the producers in those branches of the industry on the defensive. Among them the consolidation movement had a checkered history. The price cutting of the period 1880–1896 had affected them as well; but combination had not been feasible because of the smaller size and greater numbers. A most important obstacle to agreement in each line was the manufacture of a great variety of implement types scarcely comparable as to quality or cost of production. In spite of this some important consolidations were attempted and achieved. In 1893 the spring tooth harrow combination represented a merger of 21 companies controlling 85 percent of the total output. In the early 1900's an abortive attempt was made to combine the wagon manufacturers. At the same time a plow combine nearly reached completion before it was wrecked by the objections of one or two leading manufacturers. In 1903 a company was organized which controlled half of the national

production of grain drills. In other lines attempts to mitigate the severity of competition led to formation of trade associations which endeavored to induce manufacturers to study their production costs, reduce the variety in similar types of implement produced and to establish a standard costing procedure and thus to formulate indirectly a set of standard minimum prices. The activities of the harvester combination furnished a new incentive to the formation of consolidations in order to take on an increasing number of lines.

Under the circumstances the manufacturers of plows were best able to take effective action. In this branch of industry there were a number of big concerns whose products were in demand during a large part of the year and which had therefore found it advantageous to develop and control a separate marketing organization. They soon found that this organization could also be used for the distribution of an increasingly varied line of implements manufactured by other non-competing concerns. The conditions were thus ripe for taking the next step and controlling the manufacture as well as the distribution of other types of farm implements. This tendency to abandon specialized manufacture, caused as it was by the pressure from the marketing end, has continued to date, two mergers of the same type having occurred during the last year. In the meantime the consent decree entered against the harvester combination in 1918, by which it was ordered to sell three of its five lines of harvesting machines and not to employ more than one agent or representative in any one town, has made the business organization of the industry somewhat more homogeneous. It increasingly tends to consist of a number of large, full line houses with a greater number of smaller specialized manufacturers compelled to cooperate with manufacturers of other non-competing lines in marketing their output.

The past quarter century has witnessed an important addition to sources of motive power on the farm. Even before 1900 stationary internal combustion engines were employed in agriculture, largely in connection with threshing. On the very large farms steam power was used for pulling plows, the energy at first being transmitted to the plow through a system of cables and later by attaching the steam engine to the plow. From these unpromising beginnings the early tractors were developed in the 1900's. Although lighter than the steam engine they were still very heavy, called for the use of extremely large agricultural implements and were practicable only where cultivation of the soil was conducted on a large scale. By 1910, however, internal combustion engineers devised smaller, lighter tractors, and in 1914, 3000 units of this type were sold by American manufacturers. The war further encouraged the manufacture of tractors. The diversion of man power to war uses, coupled with the need for increased agricultural production, stimulated further mechanization of farm operations. The equipment used in manufacturing war munitions proved easily adaptable to the production of tractors, so that with the termination of the war a large amount of equipment became available. The post-war period brought a further improvement in tractor design: by 1925 general purpose small tractors had become both practicable and popular. Since tractors have several other important uses, their manufacture is not generally considered a part of the agricultural machinery industry; because of the nature of the product as well as of the manufacturing processes involved it is more nearly a branch of the automobile industry. However, it interlocks with the agricultural machinery industry at more points than one: large manufacturers of agricultural equipment, in conformity with the tendency to carry a full line, produce tractors just as they previously manufactured stationary internal combustion engines and still continue to manufacture horse drawn wagons; tractor manufacturers tend to expand into the production of plows; finally the use of the tractor is influencing, and is bound to influence in the future, the design of agricultural implements in connection with which the tractor is employed.

The United States is by far the largest producer of agricultural equipment. Because of its possession of the essential raw materials and technical skill and because of the existence of a rapidly expanding domestic market, the industry soon developed to the point where it was exporting its products to foreign markets. The most important of these were the countries of the New World in which agriculture conducted on a large scale was rapidly preempting hitherto virgin land, but which were not sufficiently advanced industrially to make feasible a domestic manufacture of the heavier and costlier agricultural machines. Argentina, Canada, Russia, France, Australasia and British South Africa together absorbed very nearly the entire American exports. The characteristically American export product is the harvesting machine; since

the war farm tractors have also been exported on a large scale. The International Harvester Company expanded its foreign business to a point which called for the organization of an extensive chain of foreign branch houses and the establishment of plants in Germany, Russia, Sweden, France and Canada. Smaller companies took care of their exports by establishing permanent connections with foreign jobbers.

The table below represents a statistical summary, based on census and Department of Commerce data, of the historical development of the industry in the United States.

In addition to the United States the industry has also reached an impressive magnitude in the United Kingdom and Germany. The early development of the iron and steel industry and of the engineering trades, as well as her dominant position in world commerce, fitted England to become an important producer of agricultural machinery; the relative insignificance of English agriculture and the virtual monopolization by America of the production of harvesting machines were of course negative factors. England began early to manufacture improved plows on a considerable scale and developed a large export

Years	Agricultural Implements Industry*			Exports of agricultural implements† (in $1,000,000)	Farm Tractors	
	Number of establishments	Number of employees	Value of products in $1,000,000		Value of output in $1,000,000	Value of exports in $1,000,000
1849	1333	7,220	7			
1859	1982	14,814	18			
1869	2076	25,249	52	1		
1879	1943	39,580	69	3		
1889	910	38,827	81	4		
1899	715	46,582	101	12		
1904	648	47,394	112	23		
1909	640	50,551	146	26		
1914	601	48,459	164	32	18	4‡
1919	521	54,368	305	73	173	29
1921	353	30,359	164	46	51	8
1923	312	30,962	151	50	92	15
1925	303	28,696	169	77	121	33
1927	277	33,646	203	91	160	46

* This industry embraces only establishments which were engaged primarily in the manufacture of implements of cultivation, of harvesting machinery, of machines for preparing crops for market or use and of miscellaneous small agricultural implements. For the period 1899–1919 the data cover only establishments with an annual output of $500 or more. For the period 1921–27 the data cover establishments with an annual output of $5000 or more.

† In addition to the items enumerated above, this includes dairy machinery, farm tractors and windmills. For the years previous to 1919 the exports are given for fiscal years ending June 30. The figure for 1869 is for the fiscal year ending June 30, 1870.

‡ This is an average for the period 1910–14.

The manufacture of farm equipment for local needs is found in practically every country. It is usually confined, however, to the production of cheaper, lighter implements and to the adaptation of foreign models to peculiar local needs. The production of separate lines of farm equipment is extensively developed in some countries. Sweden is an important producer of cream separators and exports this product to the four corners of the earth. The manufacture of tractors was stimulated recently in France and Italy in order to reduce the need for imports and to obtain a lower priced product. In Australia and New Zealand a local industry developed, which attempted to adapt agricultural implements to the peculiarities of the agricultural processes of that continent.

in this line. Heavier machines were manufactured by works not specializing in farm equipment; the largest of them depended upon the Dominion and Argentine markets for the disposal of the greater part of their output. At the same time England imported 30 percent of the equipment used on its own farms; after the war this proportion increased due to the growing popularity of American tractors. Because of the inroads of foreign competition the industry was at the outbreak of the war in a depressed condition; it has been in a worse plight since the beginning of the last decade. During this period it has shown a tendency to form combinations; nearly all of the largest firms and those of the highest standing are now members of one or another of a small number of groups. The trade

association of the agricultural engineering industry is promoting standard cost keeping systems and the regulation of price and discounts through "sympathetic agreements."

In Germany the industry developed in the second half of the nineteenth century through the attempts to adapt English and American implements to a variety of local needs. An important stimulus was also found in the proximity of large foreign markets, such as Russia and the Balkan countries, which were in obvious need both of cheaper implements and longer credit terms than could be provided by English and American exporters. In the late seventies the general industrial development of the country and the necessity for the intensification of agriculture as a protection against overseas competition encouraged the further growth of this branch of manufacture. The organization in 1883 of the Deutsche Landwirtschafts-Gesellschaft, which carried on an active educational campaign among farmers, and the multiplication of cooperative credit and purchase societies have tended to enlarge the absorption capacity of the domestic market. By 1900 there were in Germany, according to Gustav Fischer's estimate, 1200 plants employing 23,000 persons. Plows constituted the most important product, some of the German makes being well liked in many European countries and in South America. Since 1902 the German industry has lived under the regime of protection, so that by 1906 exports exceeded imports; before the outbreak of the war two thirds of the total output was exported and fully a half of this was sold to Russia. The war has resulted in an increased output for domestic uses and in a reorganization of the manufacturing processes to permit mass production and greater standardization of implement types. With the termination of the war many war munitions plants have turned to the production of agricultural equipment; the Krupp plant, for instance, has almost tripled its production in this line. It is estimated that the German industry in 1920 numbered 800 plants employing 75,000 persons. More recently Germany has considerably enlarged its production of farm tractors, and in 1928 for the first time exports of tractors exceeded imports.

The fortunes of the agricultural machinery industry are very closely related to the prosperity of agriculture. The world wide agricultural depression which has prevailed since the war and the elimination of Russia as a large importing country have put the industry in an unsatisfactory condition. A greater standardization of simple implements, the development of new types of machines better adapted to use with tractors and designed to mechanize the performance of tasks still done by hand (cotton pickers, improved sugar cane machines), business reorganization which will enable single concerns to manufacture and sell more or less complete outfits of farm equipment, are present day tendencies which are expected to restore more normal conditions in the industry. The application of electricity to farming, still in the experimental stage, is an unknown factor and may completely revolutionize the industry.

SOLOMON KUZNETS

See: AGRICULTURAL MACHINERY; TRUSTS; AUTOMOBILE INVENTION; MACHINES AND TOOLS; POWER INDUSTRY.

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AGRICULTURAL MARKETING.

HISTORY. It is only in relatively recent years that the always vague and shifting line of demarcation between the marketing of agricultural and of non-agricultural products has become significant. The sheep or the corn which the early cultivator of the soil bartered for the copper or fine clay of a neighboring group was but one of a few exchangeable products, hardly to be distinguished in method of disposition from the weapons of wood or metal which might find their way into the channels of trade. With the growth of city civilizations trade in foodstuffs became a somewhat specialized ac-

tivity, but the techniques of marketing wheat or spices, silks or fine gems, are essentially similar. The product of agriculture is but slightly differentiated in methods of distribution from the product of a small scale, hand industry.

The recorded history of marketing in the ancient world deals chiefly with the foreign commerce of the great city centers of population in Egypt, Babylon, India, China, Greece and Rome. At all times a large share of this commerce was in foodstuffs and other agricultural products. Athens exported olive oil, figs and honey. But Athens was not an agricultural state and had to import half her food supply. Her wheat, for instance, came largely from southern Russia by way of the Black Sea. The data are lacking, however, to show us just how these primitive Russian farmers marketed their wheat and in what form they took their pay. The Code of Hammurabi shows clearly that Babylon carried on a vast commerce as early as 2300 B.C. Silver and gold were used for money, banking functions were carried on by the merchants, and wheat, wines, sheep and wool were among the agricultural products exported. Egypt for many centuries was shipping linen, paper and wheat to neighboring lands. Rome's commerce is well known, especially after the first century of the empire. This was the period of the "hygienic markets and splendid shops of Rome," as it was the period of great prosperity of Roman agriculture and stock raising. There was a tremendous development of trade, both wholesale and retail. Safe and easy communication was established with all nearby countries; the Mediterranean and Black seas were regarded as Roman lakes; the great rivers of western Europe and the Nile were highways for Roman commerce; caravans of camels traversed all southern Asia and northern Africa; the sea route was used to India, Arabia and the north coast of Europe. Regular commercial relations were established with China, India, Africa (northern, central and southern), central Asia, southern Russia, Germany, Norway, Sweden, Britian, Gaul, Spain. Into the shops of Rome came metals, precious woods, precious stones, amber, silk, furs, as well as luxuries for the table from the farms of the world. From the fields of Italy came poultry, cattle, wheat, olives and wines.

With the breaking of these lines of trade in the disturbed years of the early Middle Ages and the return to community self-sufficiency in the manorial system, the marketing of agricultural products became again largely a local affair. Most farming before 1300, when that system reached its highest development, was largely self-sufficient and involved very little actual bartering or buying and selling. But if the manor produced most of its own foodstuffs it was also independent of outside communities for the supply of most of its clothes, furniture, weapons and instruments of production. This self-sufficiency was only relative and of short duration. The spices and luxuries of the East slowly filtered into Europe through the barriers of difficult transportation and hostile separated communities. Agricultural products played their part in the reviving trade. In the great fairs to which foreign merchants brought their wares, and in the lesser markets which provided a means of local exchange, corn and wool and wine were traded for the product of the city guildsman or the luxuries of a far land.

Periodic fairs, large and small, were the most important marketing mechanism of the Middle Ages. A considerable amount of intra-manorial exchange was accomplished in the payment of the various manorial dues, but in good years there was always a surplus to be sold at the local market and thence carried by the itinerant trader to the larger fair. These institutions apparently grew up first as religious rather than as commercial activities. They usually began in religious assemblies about monasteries or shrines on feast days. Said one French writer: "There is no great festival without a fair; no fair without a festival." The religious element remained important; but at the great fairs of Bordeaux and Champagne, or St. Giles and St. Botolph, it was the commercial opportunity that was dominant throughout the days or weeks that merchants and customers were assembled. And as with the increase of population, the facilitation of transport and the growth of cities the periodic fair was supplemented and finally largely supplanted by regular local markets, a complex commercial system developed.

Even this relatively direct form of marketing involved an elaborate organization of merchants and traders, speculators and lenders of money; it resulted in the formation of commercial leagues and the establishment of foreign trading centers. As cities grew in size and influence, the principal role in the marketing mechanism passed from the trader gathering surplus grain

from one local market after another, to the merchant and his factor bargaining for the control of the next year's crop from a whole region. And slowly, throughout the seventeenth and eighteenth centuries, the public markets of the cities were replaced by the wholesale exchange and the retailer with his permanent shop and stock of goods on sale every business day. The same process of elaboration of the marketing mechanism was going on in the textile trades or in the woolen industries. The disorganization of such changes was more noticeable in regard to agriculture, for the danger of famine or dearth was ever in the background. Local supplies were drawn to the cities, and as in modern times agricultural surpluses frequently existed alongside of agricultural dearths. Governments unsuccessfully attempted to prevent dearth by controlling exportation, and the trader was more and more successful in freeing himself from governmental supervision.

Not only were changes in the methods of distribution of agricultural and of manufactured products occurring simultaneously and in similar directions during the seventeenth and eighteenth centuries; in many countries there was taking place an "agrarian revolution" which was bringing into prominence new agricultural products and a new organization of agricultural production. The changes were in line with the increasingly commercial emphasis of society. But the adjustment was of short duration. By the end of the eighteenth century there had begun that process of industrialization which so altered the position of agriculture in the economic order. Great as have been the transformations in methods of distribution of agricultural products whenever city civilizations have arisen, there has never until the past century been a time when agricultural products were not the most important articles of commerce. Now, although the food supply is still basic, society is timed to the furnaces of the steel mills rather than to the harvest and the fruit crop, and the complexities of the financial superstructure are greater than they have ever been before.

Not only must the agriculturist move in the shadow of the industrial system, but all his contacts with the commercial and industrial system have become more direct and immediate. The farmer no longer lives in relative isolation and self-sufficiency, relying upon the merchant to gather his bit of surplus grain; he must now plan for the market—indeed his whole method of living must be directed toward the commercial disposition of his products. An increasing complexity of the market mechanism has resulted, for this system into which the farmer must fit includes also the great grain and raw material producing areas of the new continents or of the "backward countries." It is a system in which the development of world exchanges first facilitates and then enforces competition between the staple products of the smallest farm in the United States and the largest ranch in Australia.

With all its increasing complexity the system is still inadequate to effect a smooth or stable adjustment of agriculture to the economic order. Even where large scale machine methods and modern systems of accounting are applied to agriculture, its dissimilarities to other industries are striking. It is, in the first place, not one but many industries, where one farmer may produce staple food products for a world market, industrial raw materials for a distant industry and dairy products or fresh vegetables for the nearby urban communities. Even with specialization there are definite limits to the consolidation of agricultural units. More important is the almost insuperable difficulty of regulating the quantities of agricultural products. It is not merely that weather is uncertain and production seasonal but that there is no method of controlling the output of the innumerable small producers throughout the world. The maladjustments which result from these difficulties press almost equally as hard upon groups which remain outside the industrial-capitalistic system as upon those which have been drawn almost entirely within it.

Agencies and methods of organization have grown up from within and from without the system of agricultural marketing. Railroad rates and automobile costs, the concentration of the milling and sugar industries and the demands of textile manufacturers set a pattern to which the system of agricultural marketing must conform, while the development of world commodity exchanges, of cooperative marketing, of methods of refrigeration and storage bring stabilization and pattern from within. The pattern is yet incomplete and constantly shifting, but its main outlines can be traced.

UNITED STATES. In the United States agriculture is now quite generally on a commercial basis, that is, the farmer sells most of what he produces and buys most of what he consumes.

The marketing process consists of six fundamental operations—production, transportation, storage, credit, risk bearing and sale.

To perform the various marketing services implied by these functions many different types of middlemen have been evolved. Transportation is of considerable importance in the United States, where the average haul of food is about one thousand miles. The railroads are still the most important transportation agency for agriculture as for other industries. Indeed the development of methods of refrigeration has increased their importance. But it is also true that automobile transport has had far reaching effects on agricultural marketing. The truck and the paved road have increased the radius of influence of local markets and made possible new utilizations of land. They have reduced not only the farmer's social isolation but his economic remoteness, with results which cannot yet be measured.

Storage in the United States has made enormous progress in the last fifty years, particularly in the fields requiring artificial refrigeration. Millions of tons of foods are now stored in the summer awaiting the autumn and winter demands. The quality of the food remains good; the price is greatly stabilized to the farmer's advantage. Such storage is feasible for butter, eggs, poultry, fresh meats, cream and many kinds of fruits and vegetables. Dry storage is provided for grain in the form of country and terminal elevators. Warm storage takes care of such foodstuffs as bananas, sweet potatoes and white potatoes.

Although the furnishing of credit has become one of the most specialized of modern services, the farmer is not entirely dependent upon the ordinary commercial agencies. In most countries governments have provided special systems of agricultural credit (*q.v.*). Risk bearing may be distributed by the farmer in many cases by means of insurance. Risk is also lessened by a wise treatment of the fundamental factors of uncertainty, many of which are subject to human control. Grading and standardizing are doing much to lessen business disputes, particularly disputes over the rejection of consigned goods. Better quality production, more thorough culling, better packaging and loading—all these activities are lessening the risks of loss and damage in transit. There remain, however, many economic risks which cannot be eliminated.

The sale of any product is today a highly specialized activity. The relationships of the various middlemen who are concerned are constantly shifting with new methods of production and distribution. The usual classification of sellers has been the threefold one of wholesaler, jobber and retailer. The functions of wholesaler and jobber, both of whom buy in large quantities and sell in smaller amounts, tend to overlap. In most industries both are gradually being replaced by other, usually more specialized, types of distributors. This tendency is apparent in the marketing of agricultural products, although it operates more slowly than in the case of large scale industries.

Among the newer types of middlemen, brokers and commission merchants are dealers who act as agents between buyers and sellers, but do not take title to the goods. Brokerage fees usually run from 1 to 2 percent; commissions from 1 to 15 percent of the selling price. The commission merchant, receiving the goods on consignment, does a certain amount of physical handling. The broker usually has no handling of the goods, but finds buyers by means of interviews, letters or wire. As commodities become better graded and standardized the number of brokers increases, while that of commission merchants decreases. Livestock, wool and wheat are still sold almost entirely by commission merchants, for personal inspection before purchase is here necessary to determine actual values.

One of the more important of the new agencies which are introducing economies into the distribution of agricultural products is cooperative marketing. It has achieved substantial success in grain, dairy products, livestock, fruits and vegetables, and nuts. In grain the five thousand farmers' elevators were and are successful in overcoming certain trade abuses. In the dairy industry the local creameries or cheese factories have now in many sections improved the quality of their products, standardized them and moved them in large quantities, so that savings have been made, consumer demand increased and prices thereby strengthened. The Minnesota creameries by cooperating and shipping butter in car lots, rather than in less than car lots, were able to save ten thousand dollars a week in freight alone.

Auctions provide a means of distribution for some products. They are used extensively in most of the large cities for the sale of citrus fruits, grapes and certain deciduous fruits. This affords a much cheaper method than the old

fashioned commission merchant. In New York attempts have been made to use the auction in the sale of eggs, and the method is slowly growing in favor. The farmers of Kern County, California, have for many years made successful use of the auction in marketing hogs, competing buyers coming from San Francisco and Los Angeles. The cost of this service is very low.

Chain stores have entered the field of selling fresh fruits and vegetables, with notable changes in our marketing system. Their policy is to purchase in large volume and to demand standardized products of relatively high quality. Such purchases are more and more made through cooperative organizations of producers.

Roadside markets are the simplest form of direct marketing used by the farmer. With the coming of good roads and the automobile the farmers near large cities and the smaller mill towns find customers at their door for their fresh fruits and vegetables, eggs, flowers and various other products. With unpaid family labor and long hours the farmer can move a large volume of produce in this way with negligible expense. An increasing amount of produce is also distributed by means of parcel post.

The general pattern of agricultural marketing is set by these agencies and methods. In addition special mechanisms have been developed for marketing each farm commodity. The better standardized commodities are now bought and sold on organized commodity exchanges. This is true of grains, cotton, butter and eggs, and certain pork products (mess pork, ribs, lard). In these products there is future trading and hence continuous price quotations. At the other extreme are found the perishable fruits and vegetables such as peaches, strawberries and tomatoes, which have no organized markets and no official price quotations. Between these two extremes come the semi-perishable commodities such as potatoes and apples, which can be stored but not beyond one season. There is no organized market for such commodities, but a large number of central markets.

Grain and cotton may be taken as types of the standard commodities moving freely in the channels of world commerce. Wheat, grown on two million farms in forty-four states, moves first to the nearest railroad station or flour mill. Here it is sold for cash, usually to the country elevator. Such elevators are of four types: independent (owned by local business man); farmers'; line (owned by corporation at central markets); mill. If the grain goes to a farmers' elevator (and 56 percent of all grain reaching Chicago comes from farmers' elevators), the routine is as follows: the farmer is paid with money borrowed from the bank or advanced by the commission merchant at the central market. Grain paper, so-called, is standard liquid security for bank loans at the lowest current rates. Bills of lading or warehouse receipts constitute the usual collateral for such credit. The grain in the country elevator is either consigned, or is sold by wire "to arrive," that is, for deferred shipment, the price and the time of shipment being stipulated in the bid. Arrived at the terminal market, the grain is sold to a terminal elevator owner, an exporter, a miller or some of the grain industries. The buyer hedges himself against loss from price decline by selling a future on the grain exchange, speculators being the chief buyers of futures. The effect of this hedging or price insurance is to enable the market in the fall to absorb without a price depression millions of bushels of grain dumped day after day.

Cotton may be compared with wheat: both are liquid commodities; both move away from the farms into the channels of world commerce; both are financed at low cost because of the standard trade documents involved; both are subject to federal grading and may be stored for long periods with little deterioration; both are subject to future trading on the organized exchanges of Europe and America; both have continuous market quotations. In contrast to cotton or wheat is corn. For while corn is a staple commodity, 80 percent of that produced in the United States is consumed on the farm. Indeed it is estimated that farmers use 40 percent of all agricultural products as raw material for further production.

Livestock is marketed in an entirely different manner from that used in connection with cotton and wheat. While a certain amount is prepared on the farm or by local butchers, about 60 percent of all the meat slaughtering is done in the large central markets which are served by public stockyards. Farmers may sell to a local livestock buyer who consigns to a commission merchant at the stockyards, or the farmer may consign his own car to the same agency. At the stockyards the commission merchant faces five types of buyers: the packers; city butchers; order buyers (who buy to ship to another market); speculators (who buy to sell again on the same market); buyers of stockers and feeders (who buy stock not yet "fin-

ished," but which must be shipped back to feeders in the country). Two significant changes in recent years have broken into this routine of marketing. Cooperative marketing, through local livestock shipping associations, assembles and ships in car lots for the farmer at a minimum of cost for the service; at all the big packing centers there are now cooperative agencies to sell in competition with the regular commission merchants. The second change is the so-called direct packer buying, a new method whereby packers send buyers to the country and buy from farmers. In either case the price quotations established at the stockyards are the only price barometer the farmer has.

Milk is by far the most valuable product of American agriculture. Whole milk for city consumption is now largely handled by farmers' cooperative dairy associations doing collective bargaining with the city distributors. The two milk by-products, butter and cheese, account for about 50 percent of the milk produced. These two things are handled quite generally by local cooperative concerns, federated for purposes of inspection, grading, standardizing and better merchandising.

The marketing of fruits and vegetables is especially confused, except in those specialized areas where cooperative organizations have standardized the product and put it on the market under their own brand. The markets suffer from alternation between oversupply and dearth, and there is no adequate price barometer to serve as a guide to production.

In recent years federal regulation of marketing has been introduced to cure trade abuses and to promote the interests of the producer. The federal government has established grades and standards for about one hundred commodities, and also provides for optional shipping point and terminal inspection where made necessary by the volume of business. In addition to the regular research studies and administrative activities of the United States Department of Agriculture and its Bureau of Agricultural Economics in the field of marketing, there have been four outstanding regulative acts in recent years: the United States Warehouse Act of 1916, aiming to improve storage and to provide cheaper credit by means of the warehouse receipt; the Grain Standards Act of 1916, a law providing uniform federal grades for grain and also federal supervision of all state and local grain inspection systems; the Packers and Stockyards Act of 1921, giving the secretary of agriculture power to supervise and regulate the packers and the stockyard companies; the Grain Futures Act of 1922, giving the secretary of agriculture authority and power to supervise and regulate grain futures markets and to prevent manipulation and corners. In comparison with the past, however, the freedom of internal trade is the distinguishing feature of our agricultural marketing system.

JAMES E. BOYLE

EUROPE. The great industrial development of the early nineteenth century in Europe was confined to certain clearly defined regions and, while agriculture in the surrounding countries was quick to react to the stimulus of the new markets, national boundaries and inadequate transport facilities caused the more distant peasant communities to be left undisturbed for a long time by the new circumstances. No intricate system of marketing of produce within the countries themselves was necessary. Organization of an export trade in food from the rural countries to the industrialized countries was of slow growth. By the end of the century, however, marketing systems had been evolved to draw upon the surplus supplies of even the more backward agricultural communities.

More progressive marketing methods have since been adopted, but century old practises continue to exist side by side with modern developments; even the upheaval in the marketing of foodstuffs caused by the war of 1914–18 did not completely abolish traditional methods. In the last two or three decades in the export trade the marketing of dairy products has been the most progressive. With regard to products sold in home markets, the organization of the marketing of liquid milk has undergone the greatest changes. The latter has been rendered necessary, first, by the increasing demands for fresh milk in urban areas and, second, by the continually rising hygienic standards which are being set for the production and handling of the milk. Progress in the marketing of exported dairy produce may be very largely due to the example and high standard set on the British market by the Danish butter producers.

Factors which influence marketing organization over a whole continent of more than twenty independent nations are so numerous as almost to defy analysis. In general, systems of disposal of produce by farmers may be said to differ, first, according to the nature of the

commodity; second, according to the nature of the trade, whether for local consumption, for distant consumption within the national boundaries or for export; and third, according to the importance of the commodity in the farm economy. Close attention is often given to the method of disposal of the major produce of the farm, but the minor produce may be "dumped" upon the readiest market.

The direct retailing of produce by the individual farmer to the consumer, presumably the most elementary method of disposal, continues to some extent for most commodities which do not require elaborate preparation, e.g. milk, butter, eggs and fresh vegetables. A rapidly decreasing proportion of farm production finds its outlet in this way. Street markets, operating under increasingly stringent regulations; hawking from door to door; and, to a much less extent, parcel post are the means by which produce is brought direct to the consumer.

So far as can be estimated, the largest proportion of all produce is sold by farmers in the wholesale market. Neglecting for the moment the farmers' cooperative associations, produce is disposed of by farmers to the wholesale and retail traders in three main ways: sale outright in local markets either by private bargain or by auction; sale in distant markets by agents acting for the farmer and paid by commission; and sale on a period contract to one firm. Sales of cattle and sheep by farmers take place mainly in local auction markets, owned and regulated either by municipalities or by auctioneers. Grain is sold by private bargain to merchants. Direct selling to millers has declined owing to the concentration of the milling industry. The larger proportion of fresh vegetables is consigned to distant markets and sold there on commission, but the method of sale varies according to the distance of the farms from a large consuming center. The method of sale on contract to wholesale and retail firms and to factories is increasing with certain kinds of produce. Sugar beet is universally sold on contract to factories; fresh fruit for preserves, milk either for the liquid trade or for manufacture, and eggs show a marked tendency toward this method.

The more recent developments of agricultural marketing center around the growth of the farmers' cooperative movement and the interest of governments in the prosperity of agriculture. Farmers' cooperative societies in some forms have existed for a very long time in European countries. Generally speaking, cooperation among farmers for the sale of their produce is more recent than credit and purchase associations. In most of the European countries there has, however, been considerable development in selling societies. In some countries, in almost all kinds of produce from milk products, pig products, eggs and wine to livestock and cereals, progress has been very marked. Cooperative selling by farmers of liquid milk, fresh fruit and vegetables appears to have made less general advance, but abundant examples of successful efforts exist. Among the raw materials for industry, sale and export of flax from the eastern Baltic states are on a cooperative basis, and the organization of wool growers in England and Scotland has shown recent development.

The cooperative movement has the active support, in greater or less degree, of the governments of the various countries. In Soviet Russia and Finland universal cooperative selling in agriculture is the definite policy of the existing governments. Apart from these countries Denmark appears to have the most highly developed cooperative organization in Europe. It has been estimated that nearly 90 percent of the Danish farmers are members of cooperative dairies, while 70 percent disposed of pigs through cooperative abattoirs (1925).

An important development has been the federation of cooperative societies for the export of produce. Denmark furnished the best example of consistent success in this direction for many years, but other European countries are similarly organized. Approximately 40 percent of the butter leaving Denmark is exported by fourteen large export associations serving 580 affiliated local societies (1925). Cooperative societies for export of butter are also important in Russia, Netherlands, Finland, Esthonia and Latvia. The federations of Swiss milk producers very largely control the export of all cheese from Switzerland, while one of their federations is directly engaged in export trade. A very large part of the export of eggs from Denmark is in the hands of a cooperative egg export association with which about 550 local egg collecting stations are affiliated (1925). Other countries from which eggs are exported cooperatively on a large scale are the Netherlands, Russia and Poland. Other commodities in the export of which farmers' cooperative associations exercise considerable influence are bacon from Denmark, flax from the eastern Baltic coun-

tries and currants and raisins from Greece.

A feature of the cooperative marketing of agricultural products to which considerable attention is being directed is the growth of direct trading relations between the agricultural cooperative organizations and the consumers' cooperative societies. As far back as 1896 the Congress of the International Cooperative Alliance endeavored to foster trade relations. More recently encouragement has been given to this movement at the World Economic Conference (1927) by a clause in the general resolution on agriculture, and by a special resolution expanding the views of the conference on this question.

The war time restrictions of governments upon the sale of agricultural produce have almost entirely disappeared, but the active interest of governments in the trade in agricultural produce is manifested in many ways. Government monopolies in tobacco exist in several countries, and flax is a government monopoly in Latvia. There are other countries in which the governments have had a direct participation in the trade in agricultural produce, as for example in the case of grain in Norway and of the recently abolished wheat monopoly in Switzerland; but how far any of this is of a reasonably permanent character it is impossible to say.

Apart from direct state trading all governments are giving increased attention to the problems of the marketing of produce. The encouragement of cooperative effort has already been referred to. Official grading of farm produce for export has been in operation in certain European countries for many years, but since the war of 1914–18 more care has been exercised in this direction, together with the establishment of "official marks," especially in countries exporting dairy produce and eggs. Official grading and marking of produce by a "national mark" for the home market has recently been made the object of schemes developed by the Ministry of Agriculture for England and Wales and the Department of Agriculture for Scotland.

Farmers also obtain increased benefits in marketing from other state activities such as the prevention of fraudulent dealing, the control of freight charges, the issue of market intelligence concerning supplies and prices, and the expansion of facilities for economic research in marketing.

JOHN P. MAXTON

See: AGRICULTURAL COOPERATION; MARKETING; STORAGE; GRADING; REFRIGERATION; WAREHOUSING; MARKET INFORMATION; AUCTIONS; FAIRS; MARKETS, MUNICIPAL; COMMODITY EXCHANGES; GRAIN ELEVATORS; MIDDLEMAN; VALORIZATION; FOOD SUPPLY; FOOD AND DRUG REGULATION; AGRICULTURE, GOVERNMENT SERVICES FOR; FOOD GRAINS; DAIRY INDUSTRY; COTTON; WOOL; TOBACCO; FRUIT INDUSTRY; MARKET GARDENING; CANNING INDUSTRY; COFFEE; RUBBER; LIVESTOCK INDUSTRY; MEAT PACKING AND SLAUGHTERING; AGRICULTURE; AGRICULTURAL POLICIES; AGRARIAN MOVEMENTS.

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AGRICULTURAL POLICY. From ancient times to the present the policies of government toward agriculture have necessarily occupied a large place in the attention of statesmen, since agricultural products furnish not only the subsistence of the people but also a considerable part of the raw materials of industry and are a major item of commerce. In a broad way such policies may be grouped under three heads. First is the extreme position that agriculture should be fostered as a prime source of national strength. Second, and at the opposite extreme, is the policy of complete or virtual disregard of agriculture and dependence on imported food and raw materials of industry. Between these two extremes we find a third policy which looks in a general way toward self-sufficiency. The

country which follows this policy aims to supply in the main its own agricultural needs but does not seek to derive any considerable part of its national income from the export of agricultural surpluses.

A highly developed agricultural or industrial policy is more likely to be established at the present time when adequate transportation facilities or great scientific and technical knowledge have made extreme types of economic specialization feasible. It is also evident that small countries will probably find themselves forced into rather intensive development of a single line of production, or at best a narrow range of specialization, whereas countries of broad geographic extent and considerable diversity of natural resources find a high degree of self-sufficiency both natural and profitable. The British Isles probably present the best illustration of highly developed industrial growth and comparative indifference to agriculture. Economic resources and the momentum of early development create so great a comparative advantage in the fields of mining, manufacture and trade as to make any thoroughgoing policy of agricultural stimulation impracticable. Great Britain typifies the most extreme development of an industrialized country content to be dependent upon overseas producers for the bulk of her agricultural supplies, feeling secure in the possession of a powerful navy, ample merchant marine, a highly developed trade organization and a dominant financial position. The World War so shook the bases of this confidence as to start an almost hysterical agitation for the rehabilitation of agriculture even to the extent, as some of the extremists demanded, of self-sufficiency in the staples of subsistence. The practical result has been some liberalization in land policy, a stimulus to agricultural education, protective legislation for the agricultural laborer and a somewhat more generous encouragement of husbandry in general. But even post-war Britain, with the vivid memory of threatened famine under conditions of submarine warfare, has found it impracticable to do much toward reviving an agricultural industry which had been waning since the coming of the industrial revolution. To a certain extent Great Britain seeks to effect a favorable exchange situation between her own industrial and commercial enterprise and the agricultural predisposition of the scattered members of the empire. Actually, however, England follows the current of economic rather than political affiliation and finds that Argentinian beef and Danish butter fit into this system quite as well as Canadian wheat and New Zealand lamb.

In Germany industrial development was intensive in the western provinces in the late decades of the nineteenth century, but the east embraced a large agricultural domain whose representatives attained a potentially dominant position under the empire. The agrarianism of the Prussian *Junker* was that of one who was both militarist and landlord, and he was working for his own personal interests at the same time that he was providing his country with an internal supply of bread grain in case of war.

It is somewhat paradoxical that, although the dominance of the *Junker* has now been superseded by the dominance of the western industrialist, even post-war German policy favors agricultural development. This is a result of the post-war industrial and commercial position, which has been unfavorable to the securing of imports of food and agricultural raw materials on advantageous terms. Hence it has appeared necessary to resort to agricultural tariffs and other devices to stimulate domestic supplies. This line of action, however, must be regarded as a temporary expedient rather than a permanent adjustment. Germany's agricultural resources, none too ample in the days of the empire, were seriously curtailed in the fixing of national boundaries under the Treaty of Versailles, and it seems inevitable that the ultimate realization of the country's maximum economic potentialities must be dependent chiefly on her industrial and commercial development. This means the reestablishment of advantageous reciprocal relations with countries more favorably circumstanced for agricultural specialization. In terms of geographic proximity and natural resources Russia is capable of playing such a role. But Russia's sluggish general economic recovery and the disparity between an increase in agricultural productivity and the growth of population, with the accompanying elevation of the standard of living, makes this solution improbable at present.

It seems self-evident that Russia's resources foreordain her to an agricultural future which will overshadow her industrial achievement, considerable though that may be. Imperial Russia manifested considerable concern in providing transportation facilities and in furthering manufacturing and commercial development during the closing years of the nineteenth century and in the twentieth century before the

outbreak of the World War. Although the Revolution of 1905 forced the czarist government to recognize that something had to be done to relieve the peasants, little was done to facilitate in any real sense the development of Russia's agricultural potentialities. The policy inaugurated by Stolypin contemplated an improvement of agricultural technique and a development of agricultural resources through colonization of Siberia. The prosecution of this policy was interrupted first by the World War and then by the Revolution of 1917, which brought in its wake expropriation of land belonging to large estates and its distribution, with insignificant exceptions, among the peasants.

After the stormy period of 1918–21 the Soviet regime set itself definitely to rebuilding the economic life of Russia out of its own resources. This has meant a liberal policy toward the peasant in order to expand agricultural production as fully as possible. The principal result has been to strengthen the rich peasants, the *kulaks*, to a point which has embarrassed the Communist party. Hence in 1928 it felt constrained to put more emphasis on the policy of "agrarian socialization." An important feature of this program is the development of large scale collectivist farms designed to increase the agricultural product at the disposal of the government, to demonstrate the technical superiority of this mode of farming and to provide profitable employment for the poor peasants. On the whole the Soviet government is committed to a policy of fostering the development of manufacturing industries which would make Russia economically self-sufficient. However, the immediate need for an agricultural export surplus and the fact that the majority of the population is still engaged in farming makes inevitable for the near future a policy of continuous stimulation of agricultural production.

Italy has recently entered upon a program intended to increase agricultural productivity. Agricultural education, in comparison with popular education, is quite impressive, and considerable effort has also been made to set up a system of rural finance and cooperative organizations. Since the war a vigorous attempt has been made to increase the home supply of bread grains in order to strengthen her position in international trade. Although the movement has thus far been disappointing, an even more ambitious program for the future is now being pushed forward. It contemplates large outlays of public funds and an aggressive, almost coercive, stimulation of private enterprise to reclaim several million acres of additional lands as well as the more intensive cultivation of those already in use. The purpose of this policy is to assure Italy's independence of wheat imports even though it is admitted that wheat from Canada or one of the other newer countries would be far less costly. The program is defended on the ground that the dense population of the country provides a surplus of labor which cannot be applied to the production of export commodities sufficient to give the nation the purchasing power necessary for the importation of the requisite supply of wheat. Fascist policy emphasizes agricultural self-sufficiency chiefly because of the pressure of population and an unwillingness to accept the alternatives of emigration or of birth control. This suggests that the present policy of agricultural stimulation will be continued.

As compared with the rest of western Europe, Denmark stands out as distinctly agrarian. During the last seventy-five years, while industrialism has been growing in the neighboring countries, Denmark, admitting her poverty in industrial resources, has applied herself with the utmost skill and diligence to the intensive development of her agriculture. This policy, both democratic and practical, has built up a remarkable system of agricultural education and fitted commercial, banking and transportation services to the needs of the agricultural population. Recently there has been a considerable increase in the number of the urban population engaged in those branches of manufacture which represent a more intensive utilization of agricultural produce. Because land resources are already so fully employed that any increase in population cannot be used effectively in primary production, it has become a concern of the government to carry the processing of these farm products as far as possible and to provide the services incidental to this basic agricultural industry as fully as possible within the country itself. The agrarianism of Denmark thus has a distinctly different character from that of a younger sparsely settled country following an intensive line of agriculture and exporting the product in its raw state or with a minimum of processing.

Other countries which have definite, though less developed, agricultural policies may be found in Europe, particularly those that are in the Baltic (Latvia, Esthonia) and in the

Danube regions. Countries in the latter group were swept by a wave of land reform immediately following the World War which contemplated a supplanting of the old aristocratic estate system by one of small peasant proprietorship. In this the purpose was primarily social and political rather than economic, and led to a falling off in cereal exports, owing to a decline in efficiency of production and to more liberal consumption by the peasants. These countries have found that the decrease in wheat exports has resulted in an unfavorable trade balance and they are now taking steps to increase the efficiency of agriculture.

Rumania and Czechoslovakia have carried out the program of the division of large estates most consistently and effectively, and they have done much to organize the farmers and to educate them in the modern methods of agriculture. Bulgaria and Jugoslavia had less of a problem of land reform, but have both been active in the program of agricultural education and technical improvement. In several of these countries, notably Czechoslovakia and Hungary where industrial development is roughly equivalent to interest in agriculture, close attention is being given to agriculture in a balanced national policy.

Outside of Europe we find emphasis on agricultural production most pronounced in the lands of comparatively recent settlement whose sparse population, limited capital and meager industrial raw materials predispose them toward the business of supplying agricultural raw materials to the great industrial centers. Argentina presents an interesting illustration of a country in which the present development and future outlook seem definitely to be cast in agricultural terms and yet in which no very vigorous or daring program of assistance to the farmer and stimulus to the agricultural industry has been worked out. Several of the British dominions, on the other hand, have shown a tendency, particularly during and after the World War, to build up agricultural efficiency and accelerate the rate of agricultural exploitation through liberal land systems, transportation aids, effective credit institutions and practical systems of popular education. Such schemes of government aid of export marketing experiments designed to increase the efficiency of the handling process and improve the commercial position of the producers as a group are still being developed in Canada, Australia, New Zealand and South Africa. In several cases these countries have espoused even more radical measures to strengthen the position of their agricultural producers in the world market. These include, in addition to the fostering of wheat pools and other centralized cooperative organizations, experimental legislation in the field of compulsory cooperation and the establishment of supervisory boards exercising considerable regulatory power over given branches of agricultural industry. The prairie provinces of Canada, for instance, have perfected a voluntary cooperative wheat pool possessed of the chief advantages of the war time government grain monopoly but at the same time working out experimentally the possibilities of a large scale effective organization of private agriculture. Canada is an outstanding example of a country with provincial governments not only distinctly agrarian in origin and outlook, but so organized and with such a party alignment as to make the weight of the agrarian interest felt in the field of Dominion government.

Agricultural policy in the United States has varied considerably in emphasis. Throughout the first hundred years of our national history we were so dominantly an agricultural country that any effort toward national progress almost of necessity included a policy of support and stimulation for agrarian interests. In the pre-Civil War period the farming industry was helped by a liberal land policy, rather aggressive governmental aid to transportation development and freedom of immigration. There were also some bits of tariff protection and a moderate effort along educational lines. All this tended simply to hasten the country's natural growth in the rich soil of its agricultural resources. Our economic system was based on maximum freedom of enterprise, and farmers were left, broadly speaking, to work out their own destinies in a land of pioneer opportunity.

After the Civil War the Homestead Act and subsequent land distributing measures, along with the liberal aid to railroad building, accelerated the growth of our agricultural domain. At the same time the establishment and expansion of departments of agriculture, agricultural colleges and agricultural experiment stations added to previous educational efforts to increase the nation's agricultural production. Obviously all this did not constitute a policy of encouragement of agriculture as against or superior to a desire for the nation's industrial growth. The improvement of transportation facilities ministered to the growth of industry as well as

of agriculture, and the flood of cheap food and raw materials resulting from the growth of our farming industry did much to facilitate the establishment and progress of manufacturers. The first point at which any major clash of interests was settled by action definitely favorable to the farmer came with the passing of the Granger railroad laws and the establishment of the Interstate Commerce Commission in 1887.

The severe agricultural depression of the middle nineties brought out sharply the fiscal aspect of the farmer's problem. With an almost universal desire for individual ownership, farmers in America have been habitually in the debtor class. As such they would have been inevitably opposed to any financial policy which would lower the general price level and they have insisted on liberal credit extension and low interest rates. Their attitude has been strikingly expressed in the greenback movement following the Civil War, in the free-silver controversy of the nineties and in the bitter opposition to such deflationist practises as have followed the World War. In all three of these struggles agrarianism has been upon the losing side, and the financial policies which have triumphed have been those of "sound money" as against inflation for the purpose of lightening the debtor's load. With reference to credit, however, the national policy has tended toward continual liberalization and the building up of credit machinery adapted to the farmer's special needs. The high interest rates which farmers have had to pay, and against which they have protested continually since the days of early pioneer settlement, have been due in part to the natural handicap of sections remote from the centers of capital supply, and of unorganized borrowers whose risk factor was high. These disadvantages have been lessened with the growth of the country and the perfecting of general credit machinery. At the same time, the farmer has made his needs better known. A change in policy emerged gradually in the discussion of money and banking reform that followed the free silver agitation and led up to the passage of the Federal Reserve Act. With the passage of the Federal Farm Loan Act in 1915, and of the Intermediate Credit Act in 1923, the policy of adaptation of the credit machinery to the farmers' needs received definite expression.

A further development of American agricultural policy represents a response to the long reiterated complaints against marketing conditions for agricultural produce. Numerous acts passed by state and federal governments during the last four or five decades, but especially since about 1913, have provided for grading, standardization, inspection and price reporting in great variety. Since the agricultural depression of 1920 there has been renewed demand for governmental intervention in the price system to eliminate the risks of price fluctuation due to manipulation of the market, seasonal inequalities of supply or even the longer secular movements. This program has been stubbornly opposed thus far, but the legislation of the special session of Congress convened in April, 1929, seems to recognize the propriety of government action looking to the stabilization of markets against manipulative influences and against the results of peculiar climatic conditions. It remains to be seen whether the practical interpretation of this latter doctrine will give a maximum or minimum of governmental assistance, but it seems clear that our policy still excludes the idea of the stabilization of any agricultural industry over a period of years in a position which it could not maintain under such conditions of competition as accompany our system of protective tariff.

E. G. NOURSE

See: AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURE; AGRARIAN MOVEMENTS; NATURAL RESOURCES; FOOD SUPPLY; PROTECTION; COMMERCIAL POLICY; ECONOMIC ORGANIZATION.

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AGRICULTURAL SOCIETIES for mutual aid and for study of technical problems existed in the Roman Empire and could be found here and there in Europe during the Middle Ages. The agricultural revolution, which changed farm practises, and the development of a philosophy glorifying agriculture and rural life constituted, however, the twofold foundation on which modern technical or scientific agricultural societies were first built. The latter basis was most conspicuous in France, the former in Great Britain. In the middle eighteenth century agricultural societies were formed in Paris, Tours and other cities under the influence of the physiocratic philosophy. In Scotland an agricultural society was established as early as 1723, followed by one in Ireland in 1731, one in the west of England in 1777, and one in London in 1793. The Royal Agricultural Society of Denmark, composed of large estate owners, was founded in 1769, while the first of the Danish educational agricultural societies came into being in 1810. All these organizations, with the exception of the last, were composed of extensive landholders or urban professional men rather than tillers of the soil. Emphasis on practical farming and the everyday problems of rural life developed early in Denmark because of the division of the land into farms suitable for family occupancy and cultivation at the close of the eighteenth century.

The American agricultural societies were founded largely upon the English models. The first such organization—which was not, however, confined to agricultural interests—appears to have been founded on Long Island in 1763, but nothing is known of its activities. The earliest society to make a definite impression was the Philadelphia Society for Promoting Agriculture, formed in 1785. George Washington, Benjamin Franklin and Timothy Pickering were members. In the same year the South Carolina State Agricultural Society was founded. Within the next few years societies were established in various places in the Atlantic coast states, both north and south. The Columbian Agricultural Society, which had national aspirations, was founded at Georgetown, D. C., in 1809. It never achieved its high ambitions. The first Canadian agricultural society was founded in 1798. Inspiration for these societies came both from the desire to improve agriculture by crop rotation, as had been done in England and on the continent, and from the view that rural life made for private virtue and national greatness. The membership of the societies was made up chiefly of lawyers, merchants, physicians, clergymen and politicians, with a mixture of large landholders and a very few practical farmers. The organizations published scientific papers on agriculture, held meetings at which scientific topics were discussed, and offered prizes for agricultural discoveries. These societies were generally unsuccessful in reaching the working farmers. An exception among these organizations was the Kennebec Society, founded in Maine in 1787 by actual farmers. Its activities, however, were confined chiefly to meetings at which papers were read and discussed.

In 1810 Elkanah Watson, a wealthy retired business man, who had seen the ineffectiveness of the older societies, enlisted the cooperation of his rural neighbors in holding a livestock fair in Pittsfield, Massachusetts. As a result of this the Berkshire Agricultural Society was founded. This, while not strictly the first county society in the United States, really inaugurated the county agricultural society movement. Watson himself was an indefatigable propagandist, and societies were established in practically all the counties of New York and New England, as far south as North Carolina, and as far west as Illinois. State aid had been extended to some of the older state societies and it was inaugurated by New Hampshire in 1817 for the county organizations. Several other states followed suit. The principal achievements of the early county societies, aside from establishing a measure of community interest among farmers, were the cattle shows and fairs with their educational exhibits, their competitions and their social features. The societies increased rapidly until 1825, then declined up to 1835, following which there was somewhat of a revival of interest in them. The state societies continued to exist, gradually adding an increasing proportion of practical farmers. These societies promoted the establishment of boards of agriculture and agricultural schools, and in some cases urged, and succeeded in restoring, the old system of bounties for certain crops. The bounty scheme was unsuccessful. The present state boards and departments of agriculture owe their existence, however, largely to the agricultural societies. These organizations also were in part responsible for the increased interest in agriculture in the middle of the nineteenth century, which eventually led to the

establishment of the Land Grant colleges and the agricultural experiment stations.

In 1852 twelve state agricultural societies formed the United States Agricultural Society, which it was intended should coordinate the work of county as well as state organizations. Its membership included not only farmers but men prominent in politics. It met annually and held national exhibitions and field trials. It exerted powerful influence in behalf of the establishment of the Department of Agriculture (1862). The United States Agricultural Society existed until 1881.

Later the economic problems which had been created by the Civil War and not emphasized by the older societies were dominant in the minds of farmers, who turned in great numbers to the Grange and similar organizations. Subsequently, with the increase in scientific knowledge and the growth of specialized farming, there occurred a differentiation in technical agricultural societies on the basis of the crops grown or livestock raised. Horticulture had always been regarded as somewhat distinct from agriculture in general, and horticultural societies had existed since 1829. In some states they had succeeded in establishing boards of horticulture comparable to the boards of agriculture. In the last quarter of the nineteenth century growing interest in pure bred livestock led to the organization of numerous breed associations, to promote the improvement of the respective breeds and public interest in them. Registries of pure bred stock were started by these societies. The breed organizations now number about two hundred, representing every important breed of dairy cattle, beef cattle, horses, sheep, goats, swine and poultry raised in the United States. Societies were started for specialists in various field crops, vegetables, fruits, nuts and other products. There are also various technical organizations, such as the American Society of Agronomy, composed chiefly of college professors and scientists. Different from any of the societies heretofore mentioned and resembling some of the agricultural clubs in European cities is the Saddle and Sirloin Club, with headquarters in Chicago. Membership, which is by invitation, is intended for leaders in all branches of the livestock industry. It has held contests and employed other methods of stimulating the interest of students in agricultural colleges.

State agricultural societies still exist, but are less influential than in early days. County agricultural societies have largely disappeared, their places having been taken by county farm bureaus and by local branches of the Grange, the Farmers Union and similar organizations. Local farmers' clubs have come into existence in considerable numbers in the last quarter of a century. Some of them discuss scientific problems, but for the most part their emphasis is upon community improvement.

In most countries, including the United States, the technical or scientific agricultural societies have maintained a traditional isolation, neither joining with other societies of the same type nor federating with economic, political or other organizations of farmers. Close and workable union is found only in Denmark. There all the farmers' societies, of whatever nature, center in the Agricultural Council of Denmark (Landbrugraadet). This is made up of representatives of the Royal Agricultural Society, composed principally of owners of large estates; the educational or technical agricultural societies, numbering one hundred and thirty-seven, which are local and comprise about 90 percent of the farmers; and the federated commodity cooperative associations, to which approximately 85 percent of the farmers belong. This system has worked with marked success in correlating all the agricultural and rural interests of the country. In most European countries the cooperative associations, through which farmers both buy and sell, have outstripped the technical societies in influence.

NELSON ANTRIM CRAWFORD

See: PHYSIOCRATS; AGRICULTURAL FAIRS; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURE, GOVERNMENT SERVICES FOR; STOCK BREEDING.

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AGRICULTURE

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India.....D. H. Buchanan
VII. General Problems.....J. Russell Smith

I. Primitive Agriculture. Just how and where mankind fell into the custom of planting and cultivating may always remain a matter for speculation. Among the proposed theories of its origin are those which assume that agriculture began in tropical areas, where it is supposed plants can be grown with minimum effort, and reached its full development when tribes accustomed to this mode of life migrated to drier lands, where greater difficulties were encountered. Another set of theories reverses the process, assuming that agriculture began in arid places where life was hard and vegetation sparse and developed in the effort to protect and to conserve the wild plants. Yet none of these theories need be taken seriously until the data essential to such conclusions are available. However, it appears that the most ancient cultures known to have practised agriculture tended to center in semi-arid areas. This is conspicuous not only in the Old World, as in Egypt and the valley of the Euphrates, but also in the Americas where the most intense development of agriculture occurred in dry sections of Mexico and the South American Andes. While these observed tendencies have been cited as corroborative evidence for the arid land origin theories, the general opinion at present is that the location of these old civilizations in such dry areas was due not to environment alone but to a complex of causes, and that the advanced state of agriculture therein was a result rather than a cause. It may turn out that agriculture is even less arduous in semi-arid lands, since there are many factors in the complex procedure of food production; yet even could we prove that agriculture first became effective in semi-arid lands, it would not necessarily follow that the initial step was in such an environment. We may, however, approach the problem in another way.

A survey of primitive life shows that everywhere man makes use of vegetable food. Except in arctic and near arctic areas, there are relatively few environmental restrictions on the quantity of such food used, although the kind chosen may be so governed. The cultivated food plants of primitive man fall into two main classes, tubers and grains. The great domestic grains of the world are wheat, rye, barley, oats, maize, rice and millet. Of these wheat, maize and rice stand in the foreground. History and archaeology have so far brought to light no great civilization not largely dependent upon one of these three grains. Non-agricultural peoples make more or less use of cereal substitutes, usually wild grains. These may be the seeds of various grasses, for example wild rice in the Great Lakes region of North America. The extended use of the acorn, especially in aboriginal California, where acorn meal was a staple, may be set down as another example of a cereal substitute, as also is the manioc of South America, which is made into a kind of bread. Returning to the question of origins, the natural assumption is that agriculture came as a shift from wild species to domesticated forms; these transitions may have occurred quite independently of each other. However, since the transition must have been from wild to domestic plants, the place of origin for such domestication may be approximated by locating the parental wild species and its habitat. Such lines of inquiry are both historical and botanical, first to locate the wild species and then to trace the diffusion of the domesticated forms. However, the botanical problem has proved more difficult than might be supposed, because the domestication process produces so many modifications in structure that the identification of the wild plant is uncertain. In the case of maize, for example, there is still some doubt as to the wild ancestral form, but the prevailing opinion is that it was derived from teosinte, a wild grain growing in parts of Mexico. Wheat has been traced to certain wild grains in western Asia and its domestication is

now believed to have occurred in Anatolia under primitive conditions.

Once a plant is domesticated, its cultivation may readily spread from people to people, in so far as climatic conditions permit. In recent discussions of the subject diffusion of agricultural practises and migrations of agricultural peoples are looked upon as the important factors in the spread of domesticated food plants. Should a tribe shift from a region where wild grain abounds, it is conceivable that effort might be made to transplant the grain to the new habitat and thus initiate an agricultural practise. From what is known of culture in general, it seems more than likely that agriculture would develop out of group contact and changing situations.

Furthermore there is good reason to believe that the practise of agriculture increases population and that an expanding tribe or village would from time to time throw off a colony seeking new lands. This would spread plants and their cultivation over large areas. But migration is not necessary to the spread of cultivated plants; one tribe may learn from another. Moreover in a large agricultural area a new and better food plant could spread with great rapidity. The geographical distribution of maize in the New World, and of wheat and rice in the Old, suggests such diffusion.

It should be noted, however, that the cultivation of food plants does not stand alone in the culture of a tribe, but is connected with many other culture traits. For example, the mechanization of agriculture is an integral part of primitive mechanics. Among other devices the digging stick, the hoe, the wheel and the plow are the most conspicuous. The substitution of animal for man power in the culture of a people has also a direct influence upon agriculture. It was of course this substitution that made plow culture what it is. A plow drawn by oxen appears in Egypt at an early date and seems to have been even then widely diffused in the Old World. The contrasting type of agriculture which did not use draft animals and the plow is best seen in the New World, where the digging stick and the hoe were the only tools. It is also observable that maize and manioc are adapted to hoe culture, whereas the great cereals of the Old World are still grasses, to be sown rather than hoed. Maize in the wild state seems to have been a grass also, but its cultivation was by the hoe; or, to put the matter differently, the modification of the wild plant was in the direction of adaptation to hoe culture. The other parts of the world where hoe culture prevailed at the period of modern discovery were central and south Africa and the islands of the Pacific. It is significant that in the Old World the diffusion of plow culture and the cereals, wheat, rice, etc., carried along the ox and possibly the horse. In some parts of Africa although cattle were known the plow was not used. Moreover the use of the cart seems chiefly associated with plow culture. It has been said that the greatness of Old World civilization was due to wheat, and while there is much to be said in support of this, the importance of other associated facts should be noted; it is rather in the combination of wheat, plow, cart and ox that the basis of these old civilizations is to be sought. Whether all these inventions originated contemporaneously and among the same people is not known, but they appear together in early Egyptian and Babylonian cultures and from that time on function in the culture of every Old World power.

That the wheel and plow are early inventions is clear, because their origins can be traced far back into prehistoric time. Most writers follow Tylor in suspecting the plow to have been derived from the hoe and the wheel from a rolling log, but again there are few relevant archaeological and historical facts. Nor can more be said respecting irrigation, a method known to be archaeologically ancient and possibly the first important step in the development of agriculture in semi-arid lands. The effectiveness of agriculture everywhere depends upon human control and adjustment to the factors involved, and given a semi-tropic climate and dry lands as constants and a water supply easily controlled by man, effective agriculture is easy. Finally even the most backward agricultural tribes knew that selection of seed is necessary to improve and conserve domesticated plants, and understood the value of fertilizers. The most that we can say, then, is that agriculture, domestication of draft animals, food plants, the hoe, the plow and the art of irrigation, all emerged on an ancient primitive horizon.

An important social aspect of early agriculture is the concerted effort needed to protect the crop. A small plot of growing plants in a forest clearing or even in a reclaimed semi-arid locality would stand as a constant lure to the wild life of the region. So the growing crop must be guarded not only by day but also by night. This can best be accomplished by arranging the individual plots cultivated in series near the

camp or village, and organizing a system of watchers in relays.

Another important social implication of primitive agriculture lies in the need for instruction in technique. Among the important procedures are the selection of the seed and the choosing of the time for planting and for harvesting. This function may be served in part by the planting and harvest ceremonies so characteristic of all but ultra-modern agriculturists. Naturally these are complex procedures involving the religious life of the tribe, but often formulae for planting, etc., are interwoven with these rituals. The keepers of these rituals usually select the seed and announce the time for planting. In other words the community is led by experts. Primitive agriculture as it has been observed is a cooperative effort in which the community as a whole participates. Thus the essential part which agriculture has played in the growth of culture is attributable not merely to the fact that food is thereby provided but also to the fact that humanity itself has been more closely knit and disciplined by the procedures involved.

CLARK WISSLER

See: IRRIGATION; MIGRATION; NOMADS; CULTURE; ANTHROPOLOGY.

II. AGRICULTURE IN ANTIQUITY AND THE MIDDLE AGES. The earliest historical information, as distinct from anthropological evidence, that we have on the subject of agriculture comes from Egypt and Babylonia. These two countries were areas of civilization along the banks of rivers. It was the Nile that made agriculture possible and this in turn was the foundation of Egyptian civilization. Wild barley grew in the district, and the periodic flood of the river invited its cultivation. Wheat (or spelt) was probably almost as important. Once a year the Nile overflowed its banks, covering the land for about six weeks and depositing a fine fertilizing silt. Then the waters flowed back again in October, leaving the land moist throughout the winter with but little evaporation. With this one dose of water, grain could be cultivated with great success. Only near the mouth of the Nile was water stored for further use or for second crops. Out of this crop situation came an agricultural state with a presiding agricultural deity, an agricultural calendar and a technique of cultivation that was relatively high. Nature had laid the foundations so successfully that in mediaeval and early modern times even misrule, mismanagement, warfare and general disorganization did not wholly destroy the system.

The Babylonian civilization was also built upon irrigated agriculture. The Tigris and the Euphrates, however, were not like the gentle, dependable Nile. Their waters came with a rush and had to be pent up for future use, since the flood occurred in May. Out of the elaborately constructed basins the water was then allowed to flow by degrees to satisfy the land otherwise baked by the midsummer sun. Unfortunately the deposits of the flood were neither so fine in quality nor so wholesome in chemical composition as those of the Nile. But parts of the land were of tremendous fertility and needed only water. Here, as in Egypt, a crude plow drawn by oxen was used and the same kinds of grains were planted. Although there are fewer sources for a study of Babylonian agriculture than of Egyptian, still there are pictorial representations and inscriptions of great value. The Code of Hammurabi shows the dominance of land cultivation, while an Akkadian tablet of precepts provides us with details of the technique of agriculture. The land not only had to be irrigated but also manured.

Among the Greek states a non-irrigated system of agriculture prevailed. Of this we get glimpses from Homer and more detailed information from Hesiod, Theophrastus (*Plants*, bk. viii) and Xenophon. It would seem that a fallow system of extensive agriculture was followed in favorable locations by a somewhat intensive system of cultivation, in which grapes, olives and figs played a dominant part. Greek methods spread to third century Egypt, probably to Carthage and certainly to Italy.

We know not a few details about the methods of carrying on agriculture in the village of Philadelphia, in the Fayum, Egypt, settled largely by Greeks in the third century B.C. (see Rostovtzeff's *Large Estate in Egypt*). Originally a sandy stretch, it was reclaimed by irrigation until it could produce two crops a year—one by the flood of the Nile, the other by artificial elevation of the water. We know that some of the land was left fallow, possibly to eliminate weeds. Oil plants, hay and wheat were the chief field crops. Grapes were grown and wine manufactured. Beer and honey were produced for sale. Melons, pumpkins, onions and garlic were the chief vegetables. Cattle, horses, donkeys, sheep, goats and fowl were raised. A surplus of cheese and wool was available for sale.

In general it may be said that with the cessation of nomadic agriculture, that is, when men

settled down in permanent villages, field work was combined with animal husbandry and the plow was hitched to some beast of burden. The land was kept clean, and moisture was conserved by fallowing a large part of the tilled area. At a later stage a leguminous plant was used in rotation with fallow and a cereal crop. Such a plant adds to the nitrogen content of the soil and, when plowed into the soil, improves the tilth. In all probability Greece, many parts of North Africa and much of Italy at least approached or entered this last stage.

The early Roman state was built upon agriculture, as was the Egyptian state. But whereas in Egypt the agriculture was based on irrigation, in the Roman lands irrigation was either not used or but slightly relied upon. Until about 200 B.C. the estates were typically small and the cultivators were freemen. In parts, notably in Latium, there was soil exhaustion. Everywhere there was the drainage of man power for the numerous wars. From about 200 B.C. to the time of Christ large slave plantations became the typical agricultural unit. This new development occurred as Roman conquests brought in more and more slaves. Some of the plantations grew wheat as in Sicily and North Africa; others, for example, in the eastern part of Italy, were devoted to animal husbandry; and still others, smaller in size, specialized in olives and grapes. The third period, from the time of Christ to about 200 A.D., saw the large estate with free tenants take the place of the slave plantation. It seems to have arisen through the diminution in the supply of slaves and the recognition of the inefficiency of slave labor. Apparently there was but little change in technical processes. From about 200 to 400 A.D. the free tenants lost their free status, and from about 400 to 800 A.D. these unfree tenants were forced to work on the lord's home farm. This was the manor which arose as a relatively self-sufficing organization at the very time the Roman empire was disintegrating.

For a study of the technique of Roman agriculture we are possessed of invaluable contemporary treatises. And it is a significant fact that almost the first literary efforts of the Romans went into the composition of such treatises. The earliest was written by Cato (234–149 B.C.). What he owed to the Greeks and to Mago, the Carthaginian, we shall probably never know. But most of all he derived his knowledge from experience. He urged the sale of the greatest amount of produce and the purchase of the smallest amount of goods. Olive oil, wine, cattle, sheep and worthless or outworn slaves were to be sold at the highest price. Varro (116–27 B.C.) wrote a much fuller and a better organized treatise. Tillage, animal husbandry and the raising of fowl, rabbits, bees and fish are all considered. To him it appeared that Italian agriculture was a success but not an unqualified success. Columella, Palladius and other writers followed, but they are of less importance.

The Romans grew barley and wheat but probably neither rye nor oats until late in their history. They used milk but not butter, cheese or beef, at least not to any great extent. Fowl and rabbits were delicacies. Grapes and olives were of increasing importance in the republican era.

The poor results which were obtained by Roman agriculture are probably to be assigned to the use of slaves, negligence in applying manure, clumsy tools, neglect of seed selection and bad rotations. All three forms of agriculture were practised, that is, natural husbandry (in spots), the fallow system and legume rotation. The emphasis which is put upon legumes by Varro, Pliny and Columella is significant. Virgil in his *Georgics* describes a legume rotation made up of legume, grain and fallow. He advocated the burning of the stubble on barren soils, cross plowing and seed selection.

When the Roman Empire disintegrated, barbarian peoples rose upon the ruins. The Celts of southern Gaul had an advanced system of agriculture, while their fellows in Britain were more primitive. In Britain cattle raising seemed to have predominated in Caesar's time, and by about 360 A.D. grain growing was sufficiently developed to provide a surplus which was occasionally sent to the Rhine district. It is difficult to determine the nature of the purely Celtic plow. There is much uncertain conjecture as to the practises of the Celts in plowing or digging their fields. It is reasonably clear that their cultivated plots were rather small and tolerably square. For the study of this subject Captain O. G. S. Crawford has recently opened up a new method through aerial photography. He began his work in the chalk downs of Hampshire after the Great War. The villages of the Celts were so often elongated, strung out along a street, that Meitzen and others have considered this a racial or national characteristic.

Whether the village of the barbarian peoples, the Celts, Teutons and Slavs, was originally free or servile, public or private, has long been

a matter of dispute. The issue came to be bound up with that general conflict between the Teutonists and the Romanists which in modified form still continues. But we have now reached a somewhat middle position that seems to be in keeping with the evidence. This position is that, while the normal development was from a public village of free men owning a share in the land and rights of pasture and cutting wood, there was also a very different development out of the large private estate of slaves possessed by military leaders. These two radically different institutions, the former abundantly illustrated in Teutonic lands, the latter in Roman provinces, both resulted in the manor. While the free village had only to add a home farm, the private state, starting with the home farm, had only to add tenants cultivating lands of their own.

Under the leadership of Meitzen it has been thought that agricultural communities took form according to racial or nationalistic tendencies—that the Celtic village was a street settlement, the Teutonic a central irregular cluster of buildings with lands on all sides, and the Slavic a more regular and somewhat roundish array of buildings, access to which was through a single road that ran into the village as a blind lane. There is evidence for these views, but the tendency of recent scholarship is to emphasize local physical characteristics.

Just as the manor developed in the period up to 800 A.D. in Italy and the Roman provinces, so following that date it arose in the northern and western part of Europe. By the thirteenth century it was at its height, and by 1350–1500 it was declining rapidly in such parts as England and northern France. In Germany and Russia decline came much later.

In a general way the technical agricultural development was pretty much the same in northern and western Europe as it had been in Mediterranean lands. After natural husbandry came a fallow system which in places rose to the height of a legume rotation. The technique which was found most commonly in the period 800–1300 was the fallow system. The village area was divided into arable, pasture, meadow, woodland and waste. The arable was cultivated with a twofold or threefold rotation called the two-field and three-field systems. Of this latter system we have most information, partly because it was apparently most prevalent and partly because it lasted in many lands down to the nineteenth century.

In the three-field system there was one field left fallow, one devoted to a winter grain (such as wheat or winter barley) and one to a spring grain (such as barley or oats). Small amounts of beans, peas and vetches were also planted with the spring grain. And there were combinations of cereals such as mancorn or mistlin (wheat and rye, or wheat and winter barley), drage (barley and oats), and brotcorn (sometimes barley, pean and vetches). Since the different grains did not ripen at the same time, there were objections to such combinations.

Weeding was practised, as was manuring. In the thirteenth and fourteenth centuries about two bushels of wheat were sown to the acre and the net yield was about six to eight bushels on average soil. Plowing was not deep nor was the furrow turned right over. Seed was not selected, although it was often brought, at least by manorial lords, from other manors. The field operations were subject to the control of the manorial tenants under the guidance of the lord's officials, meeting together in the manorial court.

The two or three fields were big open stretches; hence the term open field system which is applied to the cultivation. Each field was divided into small sections called shots or furlongs which were in turn made up of small ribbon-like strips of one quarter or one half acre in size. Commonly these strips were not straight but like an "s" somewhat drawn out, a condition said to be due to the necessities of turning a plow team. The shots or furlongs probably represented a section which had been brought under cultivation at one time, each of the tenants, and sometimes the lord, having one or two strips in it. Indeed the shots were often the most important units of the land, since they bore an individuality and had a name.

The lord had a home farm of varying size, part of it in open fields and part of it often set aside, sometimes by enclosures. To him belonged special control over the pastures, which ordinarily were common, and over the woodland, which supplied timber, firewood and mast for pigs. To some scholars the distinguishing feature of the system of cultivation is the permanent separation of arable, pasture and meadow. A piece of land once set aside for one purpose was likely to be kept to one use. However, after the crops had been harvested, the livestock were allowed to feed on the stubble, either watched or fenced in by improvised hurdles. And after the hay had been cut the

meadow was turned over to pasture—until the next year.

In animal husbandry there was little selection of sires and no segregation. Promiscuity and community of diseases resulted. The murrain (a general term) and pox were terrible scourges; copperas, verdigris, quicksilver and oil were used to counteract them, and also pitch or tar. Sheep's milk and cow's milk were made into cheese. Butter was less used in the Middle Ages than now. Pork was more highly prized than mutton or beef. Sheep were raised for wool, and cattle for draft purposes and for milking.

Agricultural equipment was very restricted in the Middle Ages. There were the spade and mattock, the plow and the flail. The well made plow had a wooden beam, iron share, iron colter, handles, wheels or foot irons and a yoke. It was drawn ordinarily by oxen, from two to eight in number. The cart was a wooden affair equipped with harness and a ladder, all of purely local manufacture.

Labor on the manor was normally unfree and ineffective. The laborers, that is, tenants of the manor, often had to be amerced for bad work and were always watched to keep them from stealing. For their labor they received allowances of grain, meal, pigs, lambs, cheese and ale. These helped to eke out a livelihood, which was none too good, from their own holdings of from five to thirty acres. Without their pasture rights they would have been pretty close to the line of mere subsistence. As it was, if they added some home manufacturing of cloth or wooden utensils for sale, they were in a fair position.

Improvements were attempted here and there by manorial lords. Walter of Henley's *Husbandry* is clear evidence of intelligent management. But the dead weight of an unintelligent peasantry made improvement difficult. The probable shift from a two to a three-field system was an improvement. With less plowing there was more land for grain. There is some local evidence of a slight increase in yield per acre. The addition of a legume to the round of fallow, winter grain and spring grain was an improvement which, however, was neither common nor persisted in. Some exhaustion occurred locally, but there seems to be no general evidence of soil depletion or fouling.

The advent of a manorial system imposed upon free villages may have forced the villagers to make better use of their time, since they had to work for the lord as well as for themselves. In some instances it set up a better example of cultivation, and it also led to restraint in use of both pastures and woodland. The monasteries, priors and bishops were probably the most enlightened lords, but after about 1350 in western Europe they probably contributed much less than formerly, and they are thought by some to have become more conservative than lay lords. Towns took their places as the dominant influence of the day. Peasants escaped to the towns to become free and engage in varied occupations. Those who remained could the better bargain with their lords, at least for a period.

N. S. B. GRAS

See: IRRIGATION; SLAVERY; SERFDOM; LATIFUNDIA; COLONATE; VILLAGE COMMUNITY; MANORIAL SYSTEM.

III. THE AGRICULTURAL REVOLUTION IN ENGLAND. Village farms are peculiarly adapted to groups of settlers living in a thinly populated country, hemmed in by forests and constantly exposed to attack. In England, as in the rest of Europe, the characteristic form of agricultural organization was that of the manorial system, essentially groups of village farms. Isolated from one another, each community was necessarily self-sufficing, and for mutual protection gathered in clusters of houses, surrounded by meadows, tillage and pasture. Common arable cultivation safeguarded them against extremes of bad farming and secured continuity of practise. Common grazing rights maintained the livestock, which provided plow teams, manure, meat, milk and clothing. Common rights in adjacent woodlands supplied timber for building, fencing, implements, utensils and firing. Farming was for subsistence, not for profit. The system flourished in the conditions which gave it birth. As England became populous and industrial, changes were inevitable. Markets arose; means of communication improved. Cultivation for local consumption ceased to be the necessary basis of agriculture. Differentiation of employment and specialization of production developed. Individual tenancies multiplied. Continuous grain growing on the area occupied by each community, however unsuitable the climate or soil, was necessitated by farming for subsistence. But agriculture gained when the uniformity and rigidity of the old system were supplemented by the greater diversity and elasticity of the new.

The movement toward individual use of land began long before improved methods and resources demanded the removal of village farms

as obstacles to productivity. Many causes hastened its advance. Under Edward I manorial organizations reached their highest administrative efficiency and the servile status of villeins its most precise legal definition. Yet both were changing their character. Land became a source of profit rather than of power, and money was more necessary than retainers. Hired labor was supplanting forced labor on the lord's demesne and rents or wages in cash were displacing personal services as the nexus of new relations between landlord and tenant or employer and employed. Feudalism retained the splendor of its superstructure, but its foundations were decaying

Individual tenancies were created by enclosures, which began when manorial lords withdrew their demesnes from village farms, fenced them in compact blocks and cultivated them by the services of their tenants or, when these services were commuted into cash, by hired wage labor. Fresh land, brought into cultivation from woodlands, wastes and commons, was generally added to demesnes or let in separate holdings to individuals. By common and statute law such lands belonged to manorial lords, in whose grant or sufferance, in legal theory, originated all commonable rights enjoyed by tenants of arable holdings. If these obligations were satisfied, they could enclose the surplus. Nor did enclosures of this type necessarily cripple village farms. Sometimes they even helped to meet new needs. Agrarian partners agreed to enclose closes from tillage, convert them into pasture and regulate their use. Such treatment only palliated widespread difficulties. Continuously cropped for grain, insufficiently manured, inadequately relieved by weed infested fallows, their arable was wearing out. The only remedy was to lay exhausted tillage to grass and plow corresponding areas of pasture. That cure was unattainable by village partners. Small holdings of fifteen arable acres ceased to yield livings; but the services attached to their tenure remained. This decreasing fertility aggravated the effects of the Black Death and other disturbances of the fourteenth and fifteenth centuries.

Traveling eastward over Europe the Black Death reached England in August, 1348, and destroyed nearly half the population. Wide tracts of land lay uncultivated without tenants or laborers. Although the government endeavored to compel all who practised husbandry to work on the land at the wages of 1346, relations of supply and demand proved stronger than legislation. The Statute of Labourers (1350-51), frequently reenacted, failed to prevent the natural consequences of the Black Death. As an agricultural organization the manor was shattered. Individual holdings were multiplied and enlarged; the emancipation of serfs proceeded rapidly. Unable from scarcity or cost of labor to farm their demesnes, landowners leased them in separate tenancies. On village farms substantial partners took up holdings vacated by occupants who had died, fled or purchased licenses to be exempted from occupying lands. Many bondsmen escaped; many were manumitted as offerings to avert God's anger; many made their occupation of land conditional on personal freedom. Even the statute assisted emancipation. By recognizing the prior claim, but not the exclusive title, of manorial lords to the services of bondsmen, it conceded some liberty of movement. So long as the law sanctioned personal servitude, it menaced a mass of the rural population. In the Peasant Revolt of 1381 they demanded the abolition of villeinage and attempted to destroy manorial court rolls, because they registered their status as well as their titles. Though the law still threatened their liberties, the servile tenure was fast losing its practical meaning, mainly because feudal landlords abandoned patriarchal farming for rent receiving.

Village farms stood outside modern developments. Relics of primitive society, their framework remained for centuries unaltered. But their subsistence farming was becoming obsolete. From the Tudors onward commercialism permeated national life. It invaded agriculture, which reorganized itself on a money basis. Land passed to new landlords who required profits. An ominous growth of land speculators appeared. Separate tenancies, large enough to encourage enterprise, had proved their value. Occupying owners and capitalist farmers increased their holdings by absorbing those of smaller men. A general movement, following commercial lines, threatened village farms and small independent occupiers. Cloth manufacturers created a demand for wool and made sheep farming more profitable than corn growing; hence large tracts of fenced pasture were needed. Small occupiers were the easiest and chief victims. Tenants at will were evicted; leaseholders or copyholders were bought out or compelled by exorbitant rents or fines to surrender tenancies.

Village farmers, however, were better protected. Mutual rights of common rendered it difficult to dissolve partnerships without agreement. But if coercion or persuasion secured consent, arable fields were laid to grass and thrown into sheep runs. Consolidations of small separate tenancies assisted enclosures for pastoral farming to depopulate rural districts and replace hamlets by solitary shepherds. Alarmed by the "decay of people" and fearing scarcity of bread, Tudor governments passed numerous acts forbidding conversion of tillage to pasture, ordering newly laid grass to be plowed, directing removal of enclosures and rebuilding of decayed houses, limiting the farms or flocks which one man could hold, imposing penalties for disobedience. Legislation was comparatively ineffective, partly through evasion or lax administration, partly from the futility of forcing men to grow grain on exhausted arable. By 1560 the enclosing and engrossing movement had spent its revolutionary violence.

A transitional period, the sixteenth century depressed the lower and raised the middle classes. It severed small occupiers from the soil, leaving them dependent on wages. But yeomen prospered on enlarged holdings and leaseholders and copyholders secured tenures for life or lives. Agriculture progressed slowly. Enclosures of separate tenancies in compact blocks prepared for advance; except as restoratives, conversions of tillage to pasture were retrogressive. Yet throughout the sixteenth and seventeenth centuries writers advocated changes which, under George III, revolutionized British farming. The first original work on agriculture printed in English was *The Boke of Husbandrye* (1523) by John Fitzherbert. Writing from forty years' experience Fitzherbert urged the advantages of farms in individual occupation divided into separate enclosures, and advocated mixed husbandry in which stock and corn assisted each other. Thomas Tusser followed with *Hundreth goode pointes of Husbandrie* (1557), expanded into *Five hundreth Points of Good Husbandry* (1573). Like Fitzherbert he suggested no new resources, and neither had traveled outside England. Barnabe Googe was both translator and traveler. His *Foure Bookes of Husbandrie* (1577), mainly translated from Heresbach's Latin work, urged the introduction from the Low Countries of turnips and artificial grasses. Other writers followed Googe, notably Sir Richard Weston, whose *Discours of Husbandrie used in Brabant and Flanders* (1645), pirated by Hartlib, was printed in 1651 as *Samuel Hartlib his Legacie*. The book contains the "Large Letter" of Robert Child. Book farmers suggested many improvements besides turnips and clover. Thus John Forster (1664) urged potatoes as field crops. Sir Hugh Plat, in his *Jewell House of Art and Nature* (1594), Walter Blith and Child collected imposing lists of manurial substances. Plat recommended putrifying pilchards and Child mentions that New England farmers used on the land a fresh-water fish called "the Ale-wife because of its great belly." Drainage was sensibly discussed by Walter Blith (*The English Improver*, 1649), who enforced his arguments by references to the Scripture, and between 1630 and 1649 a large area of the fens was reclaimed. Drilling of grain, instead of broadcast sowing, was advocated by Plat and Gabriel Plattes, "the Corn-Setter," and both Maxey (1601) and Worlidge (1669) invented machines for the process. Livestock was neglected. Thus Worlidge, whose *Systema agriculturae* (1669) was popular, devoted three pages out of 217 to "beasts." In every other direction useful suggestions for agricultural improvement were made. Despising book farmers and distrusting promises, successive generations of agriculturists waited for ocular demonstration.

By 1700 turnips were cultivated in Norfolk and Essex, and Andrew Yarranton (*Improvement by Clover*, 1663) induced Worcestershire to use clover on "ryelands" exhausted by long tillage. But their cultivation was local. Even the genius of Jethro Tull failed to convert Oxfordshire and Berkshire to turnips, clover or sainfoin. French vine culture taught him to sow crops in rows and to keep his land clean and stirred. He perfected a drill, drilled corn and turnips, kept hoes going and grew heavier crops more cheaply than his neighbors. His *Horse-hoeing Husbandry* (1731), to which Queen Caroline subscribed, embodies his researches into plant life and the essential principles of scientific agriculture. Farming on his system became a fashionable pursuit among great landlords like Charles, Viscount Townshend, who retired from public life in 1730 and set himself to improve his Norfolk estates, revived the obsolete practise of marling, introduced turnips and clover into field cultivation, initiated the four-course rotation of cereals, roots and artificial grasses, drilled wheat and turnips, kept more stock and verified the maxim that "a full bullock yard and a full fold make a full granary." His zeal for roots gained him the

name of "Turnip Townshend," although outside Norfolk turnips were still classed with rats as Hanoverian importations. To make the movement general some stronger impulse was needed than example. It came from the growth of population.

With the reign of George III began the industrial revolution which transformed the distribution of population and wealth, as well as the face and life of the country. In 1760 agriculturists numbered two thirds of the total population, and their income exceeded half the national revenue. In 1928 landowners, tenants and laborers had dwindled to a tenth of the population and their income to a tiny fraction of the whole. Population shifted from the south to the northern coal and iron fields. While implements of production remained simple, agriculturist and manufacturer shared many businesses; machinery applied to production sharply differentiated them and made them mutually dependent. Large factories absorbed domestic industries and small manufacturing centers concentrated their workers in towns and created huge markets for food. Meanwhile the standard of living rose. In 1760 the mass of the people consumed rye or oats and rarely tasted fresh meat; the new population demanded white wheat bread and fresh beef or mutton.

Roots and artificial grasses increased the yield of grain crops; they also supplied the winter keep which facilitated improvements in livestock. Hitherto cattle were valued for milk or draft and sheep for wool; neither was studied as meat producers. Robert Bakewell, of Dishley, Leicestershire, revolutionized the science and art of stock breeding. He succeeded best with New Leicestershire sheep. But according to his principles and methods other breeds of sheep and cattle were rapidly improved for specialized purposes. In average weight beef cattle rose from 370 pounds in 1710 to 800 pounds in 1795, and sheep from 28 pounds to 80 pounds.

Large scale production cheapened manufactured produce. Arthur Young applied the principle to agriculture. He contended that factories for food needed capitalist landowners and large farmers on long leases. Young's doctrine met with instant success. Landowners like "Coke of Norfolk" spent millions on equipping farms with houses, buildings, roads and fences. Their estates proved their best investment. Tenants, possessed of capital, adopted recent improvements, carried more stock, employed more manure, grew heavier crops and with rising prices profited by long leases. Davy's lectures embodied in his *Elements of Agricultural Chemistry* (1813) marked the union of "Practice with Science." But population pressed hard on production. Under corn laws which encouraged exports or prohibited imports when prices were above or below fixed levels, exports of home grown grain (1697–1801) exceeded imports by 11,000,000 quarters. After 1792 England ceased to export grain. Throughout the French wars (1793–1815) the corn laws were continuously suspended and foreign imports encouraged. But the quantities obtainable were infinitesimal. Stimulated by famine prices, every available acre was cultivated for bread, and the system of landlord, tenant and worker was almost universally established. Accordingly, in 1841, 16,500,000 people were fed from home grown food and England set Europe an example in farming.

In this industrial transformation village farms perished. When the Tudor revolution exhausted itself, enclosures proceeded slowly until under George III they again advanced with revolutionary rapidity. Behind both movements the driving force was industrial progress. Tudor governments opposed enclosures for wool because they threatened depopulation and bread scarcity. Hanoverian legislators encouraged enclosures for grain growing and stock feeding because they increased employment and averted famine. Demands for food necessitated maximum productivity. But village farmers could not introduce roots and grasses on open fields which after harvest were grazed in common, rest their exhausted arable, vary its cropping or grow fodder for their half starved stock whose scanty manure was wastefully distributed. The mediaeval system hindered food production. From the north, west, southwest and southeast it had almost disappeared. But it still predominated in Yorkshire and the midland, eastern and southern counties. Between 1760 and 1820 at least 4,000,000 acres of common meadow, arable and pasture were enclosed by acts of Parliament and redistributed as farms in individual occupation, owners being awarded compact freehold blocks equivalent in value to their scattered strips and common rights. Leaseholders for life, copyholders by inheritance, squatters with twenty years' occupation, were treated as owners. Rent paying occupiers and settlers near common pastures or wastes received nothing for the loss of cow

keeps, poultry runs or firing. When factories absorbed domestic industries, thousands thus became exclusively dependent on agricultural wages. The same loss of supplementary earnings forced small holders to sell their awarded freeholds and share their fate. Landless laborers, pauperized by high prices, low wages, ill judged poor laws and the financial collapse which followed the peace of 1815 sank during 1815–36 into a dependence from which allotments, cottage gardens, small holdings, the franchise, free education, old age pensions, health insurance and wage boards are slowly raising them.

ERNLE

See: VILLAGE COMMUNITY; MANORIAL SYSTEM; ENCLOSURES; BLACK DEATH; AGRICULTURAL SOCIETIES; CORN LAWS; AGRICULTURAL MACHINERY; ALLOTMENTS; SMALL HOLDINGS; WORLD WAR; AGRICULTURAL POLICY.

IV. AGRICULTURE ON THE CONTINENT IN MODERN TIMES. The opening of the modern era about the turn of the fifteenth century, with its inauguration of thoroughgoing changes in many spheres of economic activity, influenced agriculture in a relatively slight degree. To be sure, signs were not lacking that agriculture was seeking new paths, but they were confined to areas distinguished by special fertility and located in the neighborhood of flourishing cities. Districts thus favored existed in northern Italy, in the Rhine country, in Flanders and Brabant and adjoining northeastern France; in other words, wherever the presence of economic and natural prerequisites made agriculture indistinguishable from horticulture. As early as the sixteenth and seventeenth centuries these districts seem to have practised some form of crop rotation, meadow cultivation, proper fertilization and working of the ground. Apparently the country households of a city aristocracy were active there in promoting progressive agriculture. We know, for example, that the first great lowland dikes of the sixteenth and seventeenth centuries were traceable to city initiative. The agricultural writers of the time—Joh. Baptista Porta, Agostino Gallo, Tatti, Tanara, Tarello, Bussato in Italy, Olivier Serres in France, Fitzherbert in England, Joh. Colerus in Germany—addressed themselves especially to this circle of agronomic amateurs. In Germany works of these early writers are known as the *Hausväter-Literatur*, in England as "books of husbandry," a title by which they are pertinently characterized. They are encyclopaedias of household management, practical handbooks for the master or the mistress of an aristocratic household. Domestic accomplishments such as cooking, baking and preserving are treated with the same thoroughness as agriculture proper, horticulture or the care of animals. Recipes and household remedies against disease are recommended. Considerable space is given to moral and religious observations.

But the large mass of the rural population was untouched by this growing body of knowledge. Most farms were still in the traditional two-field, three-field and field grass stages. Cultivation was extensive, and although the soil was fertilized the supply of animals was as a rule inadequate both in quantity and in quality. The lack of a ready market for agricultural products checked for a time all further development. The masses of the people still lived in the country and produced on a small scale what was necessary for their sustenance. The few cities then existing were small, and their inhabitants likewise produced most of their food in their own households; the type of townsman of that day, even in the larger towns, was the agricultural townsman, *der Ackerbürger*. To be sure, weekly markets were held in the towns, to which the country people of the neighborhood sent their goods; and, following the cumulative development of international trade, a constant stream of easily transportable agricultural produce, such as wheat, wool, cheese and dyestuffs, passed through the seaports. However, only relatively small quantities found an outlet in this way; the possibilities of sale offered no stimulus toward making the industries capable of increased marketable yield through improved agricultural technique. When in the Rhine country, in northern Italy, in France and other regions of early commercial development the old manorial organization had become obsolete, its dissolution took place gradually, not as a result of the substitution of capitalistic agricultural enterprises for the servile peasant family farm, but because money payments supplanted payments in kind. It has been repeatedly stated that the noble and other manorial estates in the Slavic colonial regions, opened up by Germany (east Germany, the Baltic Provinces, Poland, etc.), early exhibited capitalistic enterprise on a large scale. The statement is based on the fact that, in view of the standards of the times, there was a not inconsiderable wheat export from that region and the inference is sound to the extent that these eastern estates

did indeed represent the germ of a later development into large scale economic enterprises. But originally and for several centuries they too were a part of the system of small scale economy for supplying immediate needs. The fact that because outlets were lacking in these thinly populated districts a certain residue was made available for export, did little to change the situation. Even when an outside wheat trade was organized, production itself with its small scale technique was hardly affected by it. Operations on a large scale in early times are found only in itinerant sheep raising, which was developed in Spain (Mesta, *q.v.*), in Italy and in Greece (Mandra, Dogana, Transhumanz). But this is not to be regarded as an evidence of agricultural progress. On the contrary, it represented a backward step to a capitalistically disguised nomad economy, which hampered more than it furthered the agricultural development of the countries concerned.

The transition in agriculture from the production for immediate needs to production for sale was accomplished with lasting effect only in the second half of the eighteenth century. The strongest impulse in this direction obviously came from an expansion of the market for agricultural products. Mercantilism (*q.v.*) brought with it the development of industry and growth of cities, which led in their turn to an increase in population. The demand for, and the price of, agricultural products rose. Traditional agriculture was not equal to the claims made upon it. The system, employed for a thousand years, was felt to be obsolete, and it was widely believed that agriculture had reached its lowest ebb. This view was valid in so far as the increased demand for agricultural products had led to robbing and exploitation of the soil.

With intense unparalleled energy all the world, led by its rulers, became absorbed in agrarian questions. A wealth of literature was produced, different from the old husbandry books and specifically agricultural and economic in character. Learned societies were formed in the universities with a view to promoting agrarian progress. The problem to be solved presented itself then in the following terms: How could agriculture be freed from traditional and outworn methods of grain growing (based on the primitive field system) and be made more profitable by improvements in stock farming and by the introduction of new plants for cultivation? The start had to be made by increasing and improving the cattle, for this would supply the chief instruments of production for the new agriculture. The countless difficulties which any such reform would encounter at this stage of agricultural organization are clear. For the most part the fields lay indiscriminately scattered over the village common without being individually accessible. An essential part of this system was the *Flurzwang*, which compelled all cultivators to sow and reap simultaneously, on the day and week decided upon by the community. To cultivate new plants, with varying periods for sowing and reaping, was as impossible for the individual peasant as to cultivate fallow land. But in order to increase the working capacity of cattle and their manure production it was absolutely indispensable to cultivate new fodder plants for the better nourishment of the animals. For in regions other than those naturally provided with grass their nutrition was in a wretched state. Any planned fodder management was still lacking. For nourishment the cattle were in the main restricted to pasturage on the far side of arable land. This pasturage, being communal property, was in the worst conceivable condition.

Hence all progress depended upon success in freeing agriculture from the fetters of collectivism. Only if the farmer became free to make his own decisions was a rational high yield economy feasible. This was the objective held in view. Soon it appeared that the nearer the farm approached the optimum size dictated by economic considerations, the more feasible was progress on the technical side.

England at this time enjoyed certain advantages, as compared with the continent. In connection with the enclosures there had developed a system of large scale leaseholding based on tenant entrepreneurs and divorced from any mixture of patriarchal elements. By the eighteenth century agricultural technique here had developed to such a degree that it was regarded as a shining example by continental contemporaries who sought to emulate it. In France they were filled with enthusiasm for replacing the manorial, small tenant economy by large leaseholds according to the English pattern. In this way, on the basis of *grande culture*, they hoped to win a place in the sun of rising capitalism for the landed aristocracy, which had become entirely estranged from any agricultural activity of its own as a result of substitution of payments in money for feudal dues. This agrarian program found its economic philosophy in the physio-

cratic doctrine which sees the source of all wealth in the *produit net* of agriculturally exploited territory and hence looks upon large holdings, administered by wealthy entrepreneurs, as the desirable unit of cultivation. Development in this direction, however, was almost completely blocked by the radical way in which the revolution disposed of feudalism. That France remains a country of preponderantly small peasant holdings is due to the revolution itself and to the Code Napoléon, which provided for the distribution of the commons and permitted the division of real property.

When in eastern Europe feudalism disappeared in the early and middle years of the nineteenth century, the economic foundations of agriculture were at first left undisturbed. But afterwards, as before, the small peasant holdings were worked almost exclusively to meet individual needs and to support the landed aristocracy which, generally speaking, was itself not agriculturally active. No attempt was made either to abolish collective controls or to interfere with the age old, minute division of land to which the Slavic peasants were accustomed. Even when in the seventies Russia and Rumania developed into grain exporting countries there was little change in that respect. The agrarian reform had left the peasant's acute craving for land unsatisfied. To still that hunger he was compelled to resort to additional leasing and was ready to raise export grain for the large landowner under the form of share tenancy; either he gave up half his harvest as compensation for the leasehold or he worked an area equal to his own for the landowner during the whole agricultural year. In this situation no compelling incentive was offered to improve and intensify production. Notwithstanding a constantly increasing grain export quota before the war, east European agriculture remained extensive in character. In Russia the retention of the common village field contributed likewise toward checking agricultural development—the *obshchina* was a truly communal institution with periodically recurring distribution of arable land. Stolypin's agrarian reform of 1906, which sought to effect a change in this, could not be completely worked out before the World War.

Germany had a different development. Here, as in neighboring Denmark, the dissolution of the manorial system was planned in advance and effected with a view to uncovering new opportunities for agricultural development. The landed proprietors had begun as early as the eighteenth century to dispense with certain restrictions on agriculture. But full opportunity for development was given only at the beginning of the nineteenth century by the so-called emancipation of the peasants, which abolished the various forms of dependence on an overlord, along with the remnants of the former collectivism. Of course there was little change in the situation then existing in localities like the Rhine country, where already in the Middle Ages manorial rights had been commuted into a conglomerate of rent charges, and where consequently there had developed an economically independent, small peasant agriculture which resembled the regime in neighboring France. The similarity was further strengthened by the fact that the region retained the French inheritance law introduced during the short lived Napoleonic regime. Yet the disadvantageous consequences which may otherwise occur in small scale agriculture were absent here as well as in the adjacent countries, Belgium and the Netherlands. Small scale agriculture is not in every instance obsolete. It is adequate to certain claims made upon it—as, for example, in the valleys of the Rhine and its tributaries, where the trade situation is favorable and where specialized intensive cultivation of wine, flowers and vegetables, as well as intensive stock farming, can be carried on.

Thanks to the way in which the dissolution of the manorial system was connected with the consolidation of intermixed strips into compact plots and with the distribution of communal property, the rest of Germany and Denmark succeeded in establishing peasant holdings and independent farms that were efficient even as to size and shape. The existence of such farms led to the appearance of efficient agriculturists, genuine entrepreneurs capable of organizing mass production in agriculture. For Thaer, whose name is indissolubly associated with the history of German agriculture in the first half of the nineteenth century, agriculture was an art of obtaining the highest possible net yield by procedures based on calculation and observation. He founded the first higher agricultural school in Germany and, stimulated by study of English agriculture, succeeded in introducing annual rotation of straw and leaf crops. Apart from the favorable consequences for plant growth this rotation led to an increasing emancipation of agriculture from the one sided predominance of grain cultivation. The earlier

agriculturist, bound hand and foot by tradition and communal regulations, might farm well or ill according to his ability or industry, but the measure of his own initiative was narrowly limited. On the other hand the landlord of Thaer's assumptions was expected to farm "right" or, in modern idiom, "rationally." The progress that started with Thaer was furthered by Liebig. His teaching disposed of all the mistaken ideas on plant nutrition which survived down to his time. Liebig proved that certain mineral substances were indispensable for plant nutrition, and that if the soil was not to become gradually exhausted it had to be replenished by the direct introduction of the withdrawn mineral substances. The absolute quantity of raw materials was not of importance; what mattered was the presence of *all* the raw materials necessary for the plants. While the introduction of crop rotation and of field cultivation of fodder plants by Thaer gave the agriculturist greater freedom with respect to stock farming, Liebig's mineral theory made him more independent in the production and use of fertilizer. For even though animal fertilizer did not prove to be superfluous to the extent that Liebig had believed, still the farmer was no longer restricted to the fertilizer produced on his own farm. Farms heavily stocked with cattle and with a large fodder output were no more practical than lightly stocked farms, which might through purchases in the market make themselves independent of their own fertilizer production. The farmer was now able to specialize in those branches of agriculture to which his farm was peculiarly adapted by natural and economic conditions. He was also in a position to manipulate his productive activities in such a way as to take advantage of important market fluctuations. This affected most favorably the productive efficiency of the individual farms and of agriculture as a whole.

The history of Germany and of the territories bordering it on the north and west indicates the main line of progress followed by continental agriculture during the nineteenth century. Here lie the regions of most intensive exploitation with the highest expenditure of capital and labor per unit of area. The indices of a high degree of intensive cultivation are especially clear in this region: high consumption of artificial fertilizer and (in connection with it) a high average of gross output; intensive cultivation of hoe crops; and a reduction of sheep in favor of cattle and pig raising.

After the beginning of the nineteenth century continental agriculture was considerably stimulated by the increase in demand for its products due to the growing industrialization of the various countries and concentration of population in the cities. These favorable marketing conditions seemed to be seriously endangered, however, when in the late seventies the development and cheapening of transportation made it possible to bring to the markets of the old civilizations the transportable agricultural mass products—grain and fodder above all—of the countries with the most favorable conditions of production. To shut the door against all foreign imports was impossible, since it would have involved such a serious rise in the agricultural price level that industrial development would then have suffered. Internal production might be subsidized by protective tariffs, but this could not completely eliminate the danger. The farmer of industrial Europe responded to the change in the situation by a decisive reorientation of production in the direction of increased output of animal products. Competition with the products of foreign tillage might be hopeless but need not be so in the case of animal products, which are more difficult to transport. This shift in agricultural production was further stimulated by an increase in demand for animal products, since with growing urbanization meat has come to occupy a larger place in the diet of the mass of the people and meat consumption has grown in greater proportion than bread consumption.

The production of grain, therefore, was completely displaced from its leading position and intensive grazing succeeded it wherever the quality of the soil permitted. But even where mixed agriculture was retained the production of livestock was increased; this was facilitated by foreign importation of certain varieties of fodder. In the last years before the war the value of German animal products was almost twice as high as that of vegetable products. The small countries bordering on the industrial center of Europe—Denmark, Holland, Switzerland—were most strongly influenced by this development. They used their favorable proximity to this center to develop an agricultural export economy with high priced products, mostly animal, for the provisioning of neighboring industrial territories, especially of England. The German farmer also profited, except for a few years of excessively low prices. If we can speak of an agricultural depression, it affected

primarily the east German grain and potato growers. Even they, however, could remain above water because of protective duties on grain and the possibility of using part of their potatoes for the production of alcohol. To be sure, their condition remained unfavorable as compared with that of the farmers of western and central Germany. For the latter not only enjoyed better marketing opportunity—they also had in sugar beet culture a branch of production that fitted precisely into the new economic situation. With the help of migratory labor from eastern Europe these favored farmers produced the raw material for an export industry and utilized the waste products as fodder in animal husbandry.

In summing up, we may repeat that the development of agriculture on the continent shows striking contrasts as regards both periods and regions. The reasons for these must be sought in the general economic development of individual districts and in the manner in which the transition from feudal and collective controls to a free agriculture was effected. The strongest motive force in agricultural progress has always been improved market conditions. This generalization is amply supported by our examination of the early periods in regions of active business and commercial life and is suggested still more forcibly by the nineteenth century developments in central Europe. Although the agricultural production of the industrialized continent was insufficient to meet its own needs in food and fodder, still it succeeded in fitting itself into the international pattern of the agricultural market in a way that furthered its own agricultural development.

AUGUST SKALWEIT

See: MANORIAL SYSTEM; SERFDOM; PEASANTRY; LANDED ESTATES; PHYSIOCRATS; AGRICULTURAL SOCIETIES; AGRICULTURAL MARKETING; AGRICULTURAL MACHINERY; AGRICULTURAL LABOR; PROTECTION; WORLD WAR; AGRICULTURAL POLICY.

V. AGRICULTURE IN THE UNITED STATES. The history of American agriculture from the beginning of the first permanent settlements to the present time has been to a large degree the history of the colonization of a great imperial domain of virgin land and the transformation of farming from a simple, practically self-sufficient, pioneer occupation into a modern business organized on a scientific, capitalistic and commercial basis. As a constituent part of American history closely interwoven with other phases of the life of the American people, it may be conveniently divided into three periods: first, colonial foundations (1607–1776); second, frontier and plantation (1776–1860); and third, the agrarian revolution and the settlement of the Far West (1860–1930).

The need for land was the impetus for the early colonial foundations; it was " . . . the master passion which brought the men of the seventeenth and eighteenth centuries across the sea and lured them on to the frontier. Where hundreds fought for freedom of worship and release from political oppression, thousands saw in the great unoccupied lands of the New World a chance to make a living and to escape from their landlords at home." Thus the acquisition of a freehold was the ruling purpose in the settlement of America. Agriculture became the predominant interest of the colonial period. Even those who by occupation were fur traders, fishermen, sailors or merchants generally devoted part of their time to farming.

Land in England during the seventeenth century was held under a modified feudal tenure. Attempts were made in the proprietary grants to transplant some of these survivals to America. The quit rent system met with opposition and resulted in failure. The first settlements were made on the communal basis; but this plan was soon abandoned and individual holdings in fee simple were adopted as the only feasible method of attracting immigrants to the land. Practically every one could acquire land. In New England each settler was granted a certain number of acres as his share in the colony. In Virginia there were three methods of acquiring land: bills of adventure, head right and meritorious service. Land was easy to get and whatever the method of acquisition the grants in all instances amounted substantially to a free gift. In New England the small farm was the rule. The same may be said of the middle colonies, except in the case of the large manorial grants in the Hudson River valley which, however, remained uncultivated until they were broken up into small holdings. In the South large plantations were the rule, the average size of the Virginia estate being about 5000 acres.

The colonial period was necessarily a time of experimentation and adaptation. European plants and animals were acclimatized; and European systems of land tenure and methods of cultivation were adjusted to the conditions of a frontier environment. This was a period of marked improvements in English agriculture.

Turnips, root crops, clovers and cultivated grasses were being introduced. Scientific crop rotation was superseding the wasteful two-field and three-field systems of farming in Europe. The colonists brought with them a knowledge of this experience.

In addition they took their first lessons in American farming from the Indians, from whom they learned the best methods of raising the indigenous crops as well as the most economical method of clearing and preparing the land for cultivation. The colonists were therefore the beneficiaries of a knowledge of plants and animals and of the methods of agriculture acquired by centuries of costly experience both in the Old World and in the New.

Notwithstanding this rich inheritance of agricultural knowledge and practises it was geography after all that constituted the determining factor in shaping the economic development of the colonies, with the result that distinct types of agriculture based on environmental rather than human differences developed. Topography, resources and climate explain the courses of development in New England, the middle colonies and the South. New England was broken by small mountain chains and the arable portions of land were small. This region was adapted to a diversified rather than a specialized system of farming, supplemented by the fur trade, lumbering, ship building and the fisheries. The broad Atlantic coastal plains in the South, on the other hand, with their bays and navigable rivers serving as highways of commerce into the interior and with the illimitable supply of arable land stretching from river to river, and the genial climate, encouraged the dispersion of population and the development of an agricultural civilization based on a high degree of specialization in the production of a few great commercial staples.

Agriculture throughout the colonial period was in a primitive and backward condition. It was fettered by tradition and superstition. Little attention was given to the rotation of crops and to the preservation of soil fertility by fertilization. Since land was plentiful and labor scarce, the colonists economized labor rather than land. Their work was to take possession of the virgin land, to prepare it for cultivation and to select the plants and animals best adapted to the new environment.

The westward movement of pioneer and planter into the Mississippi valley is the dominant fact in the history of American agriculture from the revolution to the Civil War. The occupation of the old Southwest before the revolution and the conquest of the old Northwest by the southern backwoodsmen during the continuance of the struggle marked the beginning of this advance. The Louisiana purchase and the acquisition of Florida followed, thus giving the United States an agricultural empire of vast proportions with a magnificent system of waterways which furnished outlets to the sea. Land hunger attracted the settlers to Texas and "manifest destiny" lured them on into New Mexico, California and Oregon, which were formally annexed to the national domain by the middle of the nineteenth century, while the rapid advance of settlers into this great imperial domain was made possible by the federal policy of land disposal.

The settlement of the Mississippi valley, already begun before the revolution, received a great impetus after the establishment of independence and, although retarded somewhat during the Napoleonic wars, was greatly accelerated after the War of 1812 when westward migration from the older sections of the country and from Europe began to take place on the most unprecedented scale in modern history. By 1860 the eastern half of the Mississippi valley had been added to the settled area, and the frontier had been pushed westward across the Mississippi River to the great plains.

American agriculture during the early part of the national period was a continuation of the types of farming practised in the colonial period. Colonial plants and animals and methods of agriculture were adapted to the new areas reached in the course of westward migration. Grain raising, stock raising and plantation agriculture became the established systems of farming, supplemented by truck gardening and fruit growing. Several types of farming may be distinguished: the frontier industrial unit, the farm and the plantation. The frontier industrial unit consisted of a small allotment of land. This was occupied in many cases by only a single person or a family whose attention to farming was limited to supplying the necessities of life which supplemented the proceeds of hunting and trading, the primary concern of the individual or group being the protection of life rather than the accumulation of property. The farm consisted of a larger unit of land which required the attention of the farmer and his family. The routine was more regular.

Commodities were produced not only for family use but also for the market. Additional help might be required; but such assistance was only intermittent. There was no sharp distinction between the farm owner and his workmen. In the South the farmer might have recourse to hired labor or he might buy a few slaves. The plantation was a comparatively large unit of land the management of which was entrusted by the owner to overseers who directed a labor force of considerable size. There was a high degree of specialization, attention being given largely to the production of one or two staples for the market. Slave labor was the rule; but free wage earners might be employed. There was a sharp distinction between the owner and his workers. These three types of farming might exist side by side; one type might succeed the other in the same locality; or one type might exist independently of the others.

The United States had by 1830 become differentiated into three great economic sections, each section devoting itself more and more exclusively to the production of those commodities for which it was best adapted by nature. New England was becoming a manufacturing-commercial section. Some abandoned farming altogether and migrated to the rising industrial centers, while others were induced to follow Horace Greeley's injunction to "go west." The remainder stayed on the farms. Western competition compelled the New England farmer to abandon grain farming; and the growth of the home market enabled him to turn, in well defined areas, to specialized commercial agriculture such as beef and wool production, dairying, market gardening, fruit raising and, in the Connecticut valley, tobacco growing. Agricultural societies were formed and improved implements and methods of farming were introduced. Agriculture was being transformed from the self-sufficient to the commercial state.

The Northwest, on the other hand, with its extensive areas of woodland and prairie country entered upon a period of rapid expansion and the production of surplus products for the market. A number of new factors contributed to this development, among which may be mentioned: the policy of the federal government which enabled a settler after 1820 to purchase a farm at $1.25 an acre; the migration of settlers from the East and the Old South and the rapid growth of European immigration in the forties and fifties; the extension and development of water and rail transportation; the invention and introduction of improved farm implements and machines which were destined later to revolutionize the methods of farming; the growth of markets in the East and South, and also in England following the repeal of the corn laws in 1846; the improved methods of communication, such as weekly and daily newspapers and the telegraph; the rapid growth of the merchant marine; and, finally, the establishment of agricultural societies. The Northwest was becoming the surplus grain and livestock section of the country.

Although the South presented a variety of agricultural types and conditions, the plantation system clearly predominated there. Cotton superseded tobacco as the leading commercial staple. By 1830 cotton had become "king"; no nation has ever possessed such a great monopoly of an essential raw material of industry as the South now came to possess in the case of this staple. Cotton and slavery became the basis of the rural economy of the South. There were variations of course within the plantation system, dependent upon the character of the soil and the labor requirements in the several areas. There were plantations devoted to the raising of cotton, tobacco, sugar cane, rice and indigo. Negro slave labor was well adapted to the production of these staples. There were also many small farms in the several plantation districts of the South; but they were located in the regions of inferior lands which were not so well suited to the plantation system.

There were thus created and established two rival systems of agriculture, the origins of which date back to the beginning of the colonial period: the one democratic with small holdings, diversified farming and free labor; the other aristocratic with large plantations, specialized farming and slave labor. These two systems, based on physiographic and racial differences, though mutually complementary, became engaged in a long sectional contest for the control of the West and for supremacy in the national government.

The Civil War marks the beginning of an economic revolution in the United States which is characterized by two related lines of development, industrial and agricultural. The industrial revolution was the change from hand labor in the home to machine production in the factory; while the revolution in agriculture was the transformation of farming from a type of pioneer self-sufficiency into the scientific capitalistic commercial type.

The factors contributing to the agricultural

revolution were the existence of a vast empire of virgin land and the liberal policy of the federal government beginning with the enactment of the Homestead Law of 1862 in transferring this great heritage from public to private ownership; the rapid increase of population and immigration which supplied the labor force for nearly four and a half million farms carved out of the public domain during this period; the invention and popularization of labor saving implements and machinery and the consequent transformation in the methods of farming; the extension and development of transportation and communication which connected the local markets with the world market; the expansion of home and foreign markets which absorbed the rapidly growing surplus products of the farm; and the establishment and development of various agencies for the promotion of scientific knowledge relating to agriculture, among which may be mentioned the federal and state departments of agriculture, agricultural colleges and experiment stations, farmers' organizations with their economic, political, social and educational functions, and the farm press. By 1914 the transition of farming from the pioneer into the commercial stage was completed. Agriculture became interwoven with the fabric of national economy, giving rise to complex problems of production, distribution and exchange, which were demanding solution as the nation entered upon a period of reorganization and readjustment.

The population of the United States continued throughout this period to be predominantly rural. The census of 1920, however, showed the majority of the American people living in towns and cities, only 48.6 percent of the population being classified as rural. In 1920 the number of persons over ten years of age employed in farming declined to 26.3 percent; while the number engaged in manufacturing and mechanical industries was increased to 30.8 percent. This is a fact of considerable importance in marking the emergence of the United States into an agrarian-industrial state. The number of farms was increased from over two millions in 1860 to over four and a half millions in 1890 and to about six and a half millions in 1920. The average number of acres in farms and the average number of acres of improved land in farms remained fairly constant throughout the period. Meanwhile increased land values were reflected in the growth of tenancy. The number of farms operated by tenants increased from 25.6 percent of the total number of farms in 1880 to 35.3 percent in 1900 and to 38.1 percent in 1920. These figures tend to show that the proportion of farms operated by tenants had become somewhat stabilized during the first two decades of the twentieth century.

The areas described by the familiar terms "corn belt," "wheat belt," "dairy belt" and "cotton belt" became practically determined during this period. In an area lying northeast of a line drawn approximately from the mouth of Chesapeake Bay to the northwest corner of Iowa, the agricultural population had rather definitely devoted its energies to the production of dairy products, truck, potatoes and fruit on the basis of domestic market demands. To the southwest of this line the area including most of the states of Ohio, Indiana, Illinois, Iowa, Missouri and portions of a number of bordering states was devoted to the raising of corn and the production of meat animals, depending for the most part on a domestic market but disposing of some 15 percent of its pork products on the foreign market. To the west and north of the corn belt was the wheat belt, one fifth of whose product was dependent upon a foreign market, while the remaining four fifths were used to supply domestic demands. In the South, where cotton farming had occupied an important position for a long time, about one half of the production was shipped abroad to the industrial centers of Europe, while the other half was consumed in domestic markets.

The passing of the public lands was accompanied by significant changes, which characterize American agriculture in the twentieth century. Among these changes may be mentioned: the rapid rise in land values and the consequent transition from extensive to intensive farming; the decline of agricultural exports due to the tariff policies of European countries, the development of other sources of supply and the growth of the home market; the utilization of inferior lands by irrigation and drainage; and the reorganization of rural life which broadened the farmer's outlook, brought him into contact with the business world and awakened in him a realization of his educational needs and opportunities.

These changes are all of a permanent nature. The principal agricultural problem of the present is therefore one which calls for a fundamental and thoroughgoing readjustment of the farmer to his changed economic environment. It appears that the foreign demand can no longer

be relied upon to absorb the exportable surplus at prices generally remunerative to the farmer; and that consequently the prosperity of the farmer depends very largely upon the growth of the domestic non-agricultural population for the creation of a market which will absorb at profitable prices practically the entire domestic supply of agricultural products. This means that the farmer must henceforth plan his agricultural production to meet cash home market demands. The time has come, in short, when less dependence is to be placed on the great world staples such as wheat, cotton and pork, upon which the major agricultural activities of the United States have hitherto been based, and more attention must be given to the production of perishable and semi-perishable commodities such as dairy products, vegetables and fruits.

LOUIS BERNARD SCHMIDT

See: AGRICULTURAL SOCIETIES; PLANTATION; NEGRO PROBLEM; FRONTIER; PUBLIC DOMAIN; HOMESTEAD; IRRIGATION; LAND SETTLEMENT; FARM TENANCY; SMALL HOLDINGS; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURAL MACHINERY; AGRICULTURAL MARKETING; WORLD WAR; AGRICULTURAL POLICY.

VI. AGRICULTURE IN THE ORIENT. *China.* In China perhaps more than in any other country of the Far East the dominant factor in the agricultural situation, as in every other, is the extraordinarily dense population. On the other hand the population is itself affected by the unusually intensive agriculture. For in this country cultivation of the soil has probably reached its absolute maximum of intensiveness. The extent to which intensive cultivation has been carried can best be judged by a comparison of the number of settlers per square mile of cultivated land in China and in the United States.

According to the best authorities a square mile of cultivated land in Chihli has from 550 to 2000 settlers, while in Shantung the number is about 4200 and in the rice lands of Chekiang may run from 2270 to 6860. Other estimates indicate an average for all China of 1783 people per square mile, most of whom live on agriculture alone, with no subsidiary industry of importance. This is indeed a striking contrast to conditions in the United States, where in the year 1900 there were 61 persons per square mile of arable land.

In China as in Japan rice is the chief product of cultivation, especially south of the Yangtse valleys, where wet rice cultivation is the rule. The other important products of southern China are sugar cane, cotton, tea, bamboo and the mulberry tree for breeding silkworms. The distinctive features of the agriculture of northern China are the loess soil and the adequate and timely annual rainfall, which not only makes artificial irrigation unnecessary but results in the production of a remarkably large crop. The north cultivates primarily wheat, barley, millet, buckwheat, maize and extremely large quantities of dry land rice, cultivated without inundation of the fields. Latterly the soy bean has become very important as an article of export even to Europe, and in the provinces of Shensi and Shantung the cultivation of cotton is considerable.

While China thus cultivates a large variety of products, rice nevertheless remains the most important both as the national food and as the basis for the largest financial enterprise. It is in its cultivation that Chinese skill in producing the largest returns per unit of soil has been most evident. The soil is most intensively cultivated on the very smallest farms, for in wet rice cultivation the young plants attain their first growth in a very small area. They are not transplanted for nine or ten weeks, a sufficient time in which to mature another crop, wheat for example, in the rice fields, and thus put the soil to every available use. Nor is anything ever lost to the soil. All natural fertilizers, especially human excrement and the accumulations of the cities, are applied to it. The fertilizer is often mixed with earth before it is used in the fields, and a humus in which young plants quickly take root and develop is thus artificially generated. These methods are all very simple and to the point; they are practised with minutest care, excessive work and the most primitive tools. In many regions even the plow is still made of wood with iron mountings, and other tools are extremely primitive.

The feudal system prevailed in China down to the second century before Christ. It was destroyed in a series of struggles of which the causes remain obscure even today. We are equally at a loss to know the sources of power upon which China's remarkable political system was built. The state in China is particularly important for agriculture, especially in the rice area, because ultimately it is in charge of the water supply. The distribution of water, its conveyance to even the smallest parcels of land, careful consideration of all interests, especially preservation of the cultivation itself, are of the very greatest importance. Successful and con-

tinuous administration is of value not only to the farmer, however, but to the state as well, for its regular tax revenues are dependent on potential agricultural yield, which in turn rests on the water supply. Irrigation thus forms a foundation for the development of an extensive administration, a connection which Max Weber has shown to have existed also in the history of Egypt. With the decay of political power the water supply in China was administered locally but on the whole, it would appear, adequately. Today China's 200,000 miles of canals are the foundation of a major part of her agricultural system.

Throughout the country the agricultural yield does little more than support the farmers themselves, and more than half the crop is probably consumed at home. Many villages are compelled to remain self-sufficient economic units solely because of the difficulties of transportation. Much freight is transported by human beings. On the primitive cart roads only the clumsy, heavy, two-wheeled wagon can be used, and overland export, except by canal or river, is almost impossible. Consequently hundreds of thousands of farms are practically unaffected by national or international division of labor, and returns are very meager. The farmer's income is more than modest even if we express it in terms of the means of subsistence. The poor household never knows a luxury, and existence must be eked out with less nutritive foods, millet especially. Meat is practically unknown except on the greatest holidays, and the poultry raised is quite inadequate. King estimates that nine times as much poultry is raised in the United States as in China, and 180 times as many cattle. Buddhism is partially responsible for this situation, but there is also the necessity of using all that the soil can yield for direct human consumption.

The houses in the villages are constructed miserably, built only of clay, for the most part, and consisting of a single room in which only the raised sleeping place is heated from below. Grass, roots and dry twigs must serve as the scanty fuel, because the forests have been denuded. It is only very recently that systematic forestry has been undertaken in a few places, as for example in the neighborhood of Nanking. The wretched clothing of the people in the villages is frequently made at home or, when possible, acquired second hand. These conditions are aggravated where, as in some parts of southern China, a system of tenancy prevails and a large part of the crop must be delivered to the landowner. In such regions, therefore, a radical peasant movement is widespread.

In spite of this poverty Chinese agriculture forms the basis for one of the most stable of economic systems. During the recent years of profound national and municipal changes and of extensive industrial developments, it has scarcely altered. For this the primitive condition of the roads is largely responsible. The construction of modern highways or the spread of a network of railways would soon produce a different situation. Even today it is petroleum, as a means of illumination, and tobacco that induce the peasant to sell his products and to strive for increased production. Whether a more inclusive marketing system could appreciably increase Chinese agricultural production is by no means certain. It is questionable whether anything more can possibly be extracted from the soil by new means, for instance artificial fertilizers. However, the unused time of the winter months constitutes a potential source of considerable income for the peasants, particularly for those in the north, and home industry or seasonal work in factories could very greatly increase their productivity.

Yet even if certain possibilities of development are conceded, under present circumstances they would fail to yield a larger income per family. The tendency of the population to increase is still very strong in China, and increased production would assuredly soon result in correspondingly increased population. The Chinese family system which values highly a large number of children, in combination with the Chinese inheritance law which results in division of property among the sons, has led to minute subdivisions of territory. No falling off of this tendency has hitherto been observable, not even, as in Europe, in well-to-do circles. So long as the ideal of birth control fails to make itself felt in a practical way in China, no decided improvement in living conditions is to be expected.

EMIL LEDERER

See: FOOD SUPPLY; FOOD GRAINS; FAMINE; IRRIGATION.

Japan. Technically Japanese agriculture very strongly resembles that of China. Both are conditioned by an extraordinarily dense population and by similar products of cultivation, chiefly rice and silk. Where the average number of people per square mile for the United States

was 61 in 1900, and for China has been estimated at 1783, in Japan the average number is 2350 per square mile. Conditions and methods of production are therefore very similar in the latter two countries. But in its legal system and its position in the state, agriculture in Japan is distinctive

The feudal system which was in force in Japan from remote antiquity until 1868 was most consistently and successfully developed in the reign of the Tokugawas, from 1600 onward. By that period the whole country was centrally organized and regulated, with the landed nobility, the daimios, subject to the central authority. About the courts of the daimios, who enjoyed different degrees of rank and influence and varying extents of territory, were grouped the samurai, the retainers or knights. The important thing about this warrior class was that it stood outside the cycle of production and depended for support on a rice revenue which was transmitted by the overlord. The position of the daimios is thus in contrast with that of the European nobility who administered their own lands in organic economic connection with peasant farms. In Japan all the ground was worked by the peasants, who had to give to the overlords a very large part of the gross yield, from one third to two thirds, usually about a half. As early as the eighteenth century the European feudal system was an obstacle to intensive development of agricultural resources, not only because it made impossible the support of a dense population but also by reason of the constant political catastrophes which it brought in its wake. The Japanese feudal system, on the other hand, made possible a stable, intensive agricultural system. As early as 1721 the population of the Japanese islands was estimated at twenty-six million, although Hokkaido, the most northerly of the islands, had not been settled at that time. This corresponds roughly to the present density of population in Poland or France. The figure was consistently maintained into the nineteenth century. It could not increase very materially since there was no agricultural margin, but throughout the reign of the Tokugawas it did not decrease. European history offers nothing parallel to this situation.

With the transition to the new empire the revenues derived by the nobility from the peasants disappeared. They had indeed previously suffered numerous contractions, as the overlords had sought to broaden the foundations of their own existence at the expense of their retainers, the samurai. But the collapse of the feudal system did not produce an unburdened, economically independent peasantry, for more or less extensive estates took the place of political overlordship. Today such large estates comprise approximately half the rice fields, which are administered under a system of tenancy.

Japanese economic life rests on a very narrow agricultural foundation, as only between sixteen and twenty percent of the total land can be used for agricultural purposes. Altogether there are thirteen million acres under cultivation, and actual cultivation is very intensive. On an average one family lives on a *le* (two and one half acres); and since the agricultural population constitutes half the total, two families have to extract their means of subsistence from this area. This is possible only by reason of a high yield per unit of area and very meager nutrition. The rapidly increasing agricultural population has no agricultural outlet. Korea, with the same area as Japan, has sixteen million inhabitants, but the Korean climate does not appeal to the Japanese peasant. Neither does the climate of Manchuria or of Hokkaido. Consequently the agricultural population grows more and more dense or overflows into the cities.

Japanese agriculture is not, as such, comparable to Chinese. The differences consist primarily in a much more modern exploitation of the soil, in the use of better tools and in more intensive intercourse with the city. The Japanese village is not a self-sufficient unit; the rural like the municipal population can read and write, its needs are supplied largely by modern industry. Consequently the peasant is a dynamic element in Japanese economics, he zealously strives to increase his income, he is exposed to all the temptations of his age. From time immemorial the Japanese has had many more wants than the Chinese peasant; he also participates in the finer enjoyments of Japanese culture and consequently finds the narrow limits of possible production doubly oppressive. The attempts to increase production are therefore quite as intensive as the political endeavors which aim to increase the peasant's income by lowering his rent. Indeed the agricultural situation in terms of the development from tenancy to independent ownership is today one of the most difficult social problems that Japan has to solve. Moreover, here as in China the inherently strong tendency of the family to increase pre-

sents one of the greatest obstacles to the adjustment of consumption to possible production.

EMIL LEDERER

See: FOOD SUPPLY; FEUDALISM; FARM TENANCY.

India. Agriculture remains, as it always has been, the chief support of the Indian people. Nine tenths of the population live under distinctly rural conditions, a proportion which, in spite of industrial development, has remained practically unchanged. Three fourths of the people are actually dependent upon agriculture, forestry and stock raising for their livelihood. This proportion rose from two thirds twenty years before the last census (1921). Moreover the business and professional classes often own rural land, and most of the new industrial laborers retain a home connection in the village.

India is a sub-continent and possesses a great variety of climates and soils, yet there are striking similarities as to the appearance of the villages, the farm tools and methods used, the crops produced and the standards of living. The most divergent types of cultivation are in Bengal and Burmah, where there is a heavier and more reliable rainfall than in other parts of the country. At the opposite extreme are semi-desert regions like Sind. But most nearly characteristic of India are the dry areas, sometimes upland, sometimes alluvial, of the Punjab, the United Provinces, the Central Provinces, Hyderabad, Mysore and the Madras and Bombay presidencies. It is the agriculture of these regions which either prevails in, or furnishes the main features of, nearly all Indian rural economy.

India as a whole supports 177 persons per square mile, but in Bengal this figure rises to 578, in the United Provinces to 414, and in some almost purely agricultural districts there and in Bengal to as high as 700. Only about 40 percent of the total area is under cultivation, and about 25 percent is classed as "culturable waste," most of which is not economically cultivable. A considerable part of the land under cultivation is very poor. Part of it lies fallow, often for years at a time; usually something like one third of the total area is actually sown. Since 15 percent of the cultivated area produces two crops, there is about one crop-acre per person dependent on agriculture per year.

The land in India is subject to a great variety of rights. A large estate (*zemindari*) may belong to a single landlord (*zemindar*) or to a village community jointly. Such estates were settled by the East India Company on tax collectors and others who had claim to them at the end of the eighteenth century, the government of the company at the same time renouncing the right ever to increase the tax assessments. Eighteen percent of the land is under this "permanent settlement," 30 percent is in large estates "temporarily settled" and 52 percent is held by peasant proprietors of various grades. Some of these hold with special rights, while still others hold with special limitations. Likewise there is a variety of types of tenancy. There are tenancy for life and tenancy from year to year. Some tenancies are permanent with fixed payments; some are transferable, some heritable. Beneath the tenants are the village menials and field laborers, who belong to low caste or non-caste groups. Some of these are *de facto* serfs. But the proportion of hired laborers is small; in many sections there is only one hired laborer to four and one half independent cultivators, and in places like eastern Bengal this figure sinks to one hired laborer to eight independent cultivators.

Ownership is widely but unevenly distributed. In the Punjab, which ranks second in amount of land per cultivator, over 43 percent of the owners' holdings are less than three acres in extent. In irrigated areas the holdings are still smaller, one third of the owners often having less than one acre. Most holdings lie scattered in several fragments over the village. A large proportion of the land is tenanted, but generally the tenant has a high degree of security. Rentals are usually paid in cash. The two (united) provinces of Agra and Oudh had in 1924 and 1925, respectively, 76 and 81 percent of their total cultivated areas tenanted; yet only 20 and 15 percent, respectively, were annual tenancies from year to year.

Village houses in India are usually small, built of mud or thatch with almost no furniture to beautify or make them comfortable. However, caste rules require them to be kept clean according to old standards, and they are suited to the hot climate. Food is mainly the coarser grains and vegetables, milk, oil and chillies. A very large minority of the people are always underfed. Clothing is simple and for the great majority inadequate. Often the same untailored cotton cloth is clothing by day and covering by night.

Typical Indian agriculture is a kind of "dry-farming," since, although some areas have abundant moisture, most regions depend upon a monsoon which is seldom too heavy and often too light. In the poorer areas cultivation is decidedly extensive but in well watered regions

of rich soil it is exceedingly intensive. One fifth of the area sown is irrigated. Half of the water used comes from canals, mostly government owned, one fourth from wells and one eighth from "tanks" or ponds. In order to retain moisture there is little deep plowing but considerable working and smoothing of the surface mulch. Methods and tools are old fashioned but not so ineffective as they at first appear to an occidental. They are suited to a hot, dry climate and are fairly adapted to the whole situation. Bullocks furnish the necessary power, while the light, cheap implements which are used are made to go over the ground several times. The most striking deficiencies in this agriculture are the starving of cattle and of soil. Many non-milking cows are kept because they are marks of wealth and of piety. In dry seasons these animals devour every blade of grass and shrubbery so that in many places only thorn bushes survive. The soil receives almost no humus, and with the lack of wood and coal the cow dung is taken for fuel. Artificial fertilizers have been neglected and night soil wasted. More fertilizers and more intensive working in rows and hills are needed. The government has spent much on agricultural schools, experiment stations, demonstrations, etc., but it has had marked success mainly in the selection and production of better varieties of cattle.

Facilities for marketing and finance are little developed and unfavorable to the farmer. They are furnished mainly by local men who belong to merchandising and money lending castes. The small, ignorant cultivator in a land of uncertain crops is often forced to borrow, and he usually borrows or buys on credit from the person to whom he must later sell his produce. His only security is his crop and his land. At best he disposes of his crop under a handicap and at worst he loses his land. Terms of lending and purchasing are commonly secret; the farmer is a bad risk, and with his ignorance and timidity is always at a disadvantage. Rates of interest range from 10 to 75 percent per annum. Repudiation is often the only possible settlement.

Eighty-five percent of the cultivated area of India is used to produce food crops, and seven eighths of these are consumed in the country, the larger part in the villages where produced. Rice ranks first, occupying over one third of the total area sown. Then come wheat, *jowar*, *bajra* and other crops suited to a dry climate. Pulses provide protein for a vegetarian diet. India is the second producer of both cotton and tobacco and has a monoply of jute. Yields are generally light, cotton, for instance, averaging under half the amount per acre which is produced even in the United States. Modern transportation and communication have induced a tendency toward growing money crops, but since there are only 2.2 miles of railway per 100 square miles, as compared to 8.42 miles per 100 square miles in the United States (which has only one eighth the average population density), this applies only to a small proportion of the country. With increasing industrialization tendencies to change will undoubtedly be strengthened, but at present throughout the greater part of India it is the centuries old systems and methods of agriculture which prevail.

D. H. BUCHANAN

See: LAND TENURE; VILLAGE COMMUNITY; IRRIGATION; FOOD GRAINS; FAMINE; DRY FARMING.

VII. GENERAL PROBLEMS. *Agricultural Resources*. The agriculture of the tilled field does not and cannot occupy so large a proportion of the earth's surface as may be supposed. Much land is too dry for the cultivated crop, some of it is too wet and some is too steep or stony. Much land is too cold and some is too hot and unhealthy. As a result of these handicaps less than five millions of the fifty millions of square miles of land upon the earth are cultivated fields. The application of present knowledge can scarcely double the area even after generations of peaceful labor.

New discoveries in the science of the soil tend to diminish rather than to increase our estimate of soil resources. After a long period of floundering with unclassified soil facts it has recently been discovered by Russian students that the development of earth or rock material into soil goes through a cycle—young, mature, old. The startling thing is that climate dominates the character of the *mature* soil almost without regard to its geologic origin. For example, the mature soils of the rainy tropics are of very low fertility because the elements of fertility, usually present in mature soil, have been leached out by rain. Java, which might seem to afford contradictory evidence, is probably populous because its volcanic soil was recently blown out from the interior of the earth and therefore is new or young soil. The Central American banana plantations are on the recent outwash of alluvial fans at the foot of the mountains and are therefore also on young soils. As a result of too

much leaching, rainy western Europe has mature soils of low fertility that have been worked into suitable conditions for good agriculture by great labor and can be maintained only by great care. The early abandonment of newly cleared land in the western part of the state of Washington in the United States, where the climate is almost identical with that of England and western France, also dovetails with the newly discovered theory of climatic causation of soils. Good agricultural lands in that type of climate are made and maintained only by hard work and intelligence.

The black prairie soils of the middle western regions of the United States furnish an illustration of the theory of climatic causation of soils. Between the wet forest of eastern Texas and the subhumid and treeless northwestern Texas, and also between the humid forests of Indiana and the semi-arid sagebrush lands of western Nebraska, there is a transition in rainfall and in natural vegetation. Between each of these two regions of rainfall contrasts and their resulting vegetative contrasts is a wide belt of grassland. Grassland makes black soil—"black-waxy," as it is called in Texas. Of similar origin are the black wheat lands of central Kansas, eastern Nebraska, eastern Dakota, Manitoba, Saskatchewan and Alberta. These black soils are a transition belt between the eastern and northern forest (humid) and the sagebrush plains (dry). Similar zones of transition in rainfall, in vegetation and in soil are found in the black land grain fields of other continents. The limited black land area in Argentina has made that country a grain exporter. In Eurasia the Black Belt sweeps from the Black Sea through Russia and far into Siberia. Australia has a little strip, as has the Sudan.

This black soil is the prime grain land of the world. Trains and reapers reached it in the last third of the nineteenth century. The resulting deluge of cheap grain demoralized the agriculture of eastern North America in the last quarter of the last century and caused western Europe to shift from grain farming to livestock and dairy farming. Produce derived from these black soil belts is one of the principal factors in the recent growth of cities. The human race is now in the golden age of urban food supply, because we are skimming the cream from this rich accumulation of past ages by the soil robbing process (agricultural mining) that everywhere has characterized frontier agriculture. Of course science and commerce may enable us to maintain this advantage in part by substituting soil conservation (a process involving a greater investment of labor) for mining. Unfortunately this problem is scarcely realized as yet in the United States, although substantial areas are already ruined in most of the states.

Types of Agriculture. The variety of soils, of climates and of cultivations has given us many types of agriculture, most of which are still in existence in some form. The patch agriculture of the tropic forest without draft animals which provides the sustenance of millions in Africa, in the East Indies, in the Philippines and in tropical America can be seen in typical form in the Congo forest. Here at the beginning of the dry season the villager cuts the undergrowth in order to make a small clearing in the forest. He then kills the larger trees by burning or girdling them. Near the end of the dry season he burns the trash and with the aid of sharp stick or hoe plants shoots of cassava, banana and plantain, the seeds of sorghum, corn (secured from white men), rice, beans, peanuts, pumpkins and other vegetables. These the women cultivate by hand and hoe. In two or three harvests the fertility of the leached tropical soil is exhausted. The African gardeners must abandon the garden and make another. When they have tilled all the good garden spots near the village, they move the village. Thus migratory or patch agriculture is explained. This type of agriculture is followed promptly by the returning jungle.

In the West Indies, immediately beside the small, self-sufficient little farms (*conucos*) are the wide expanses of the silver-green fields of the great commercial sugar cane plantations. These must be large in order to support the great mill necessary for the extraction of the sugar. Here also are the banana plantations, which must be large in order to supply bananas enough to furnish cargo for the steamships. In similar tropic expanses the modified jungle becomes a plantation of cacao trees or rubber trees. On the higher tropic lands both east and west other large areas are covered with tea and coffee trees. The workers all get wages and buy supplies at the store as does the farm laborer of Denmark or Illinois.

Plantations are an old institution on the West Indian Islands but are just starting in Africa with the slightly modified forest of oil palms and the new cacao plantations. These plantations rarely have any system of soil preservation or

crop rotation. They have escaped impoverishment by moving as the patch agriculture moves. Cuba, the greatest sugar grower, has the blessing of a wide, nearly level limestone plain, therefore an area of rich land; and Java, the next largest sugar grower, has its volcanic soils. So has Hawaii.

The resemblance of the cotton plantation system of southern United States of America to the roving patch agriculture of the tropics is striking. It has a rainy climate, leached soil, the forest and the Negro. In slave days the cotton plantation migrated to a fresh clearing in the forests, thus abandoning the old fields. Its chief difference is the greater destruction of soil in America through erosion caused by plowing. In recent decades this destruction has been increased by the introduction of chemical fertilizers which have improverished soils to produce more cotton when they would otherwise have been abandoned to the healing mercies of the briar patch.

Irrigation agriculture is probably second or possibly first in the order of origins. It now supports approximately a third of the human race. Its great early developments were in Egypt, Babylonia, the Indus valley and China. Babylonia and India depend upon large canals. Therefore they require a stable society which means strong government. Hence agriculture here tends to fall with empire. Egypt is more fortunate. Her irrigation depends upon an orderly overflow of the river. Therefore she has had a persistent minimum of agriculture and a continuous occupation by millions of people. Just now with a strong government engaged in water storage enterprises Egyptian agriculture is extending its area through canal building.

Irrigation agriculture has several elements of permanence. The more important are the natural fertility of the unleached, arid land, the irrigation water which nearly always carries fertilizing elements, and the flatness of the land which prevents soil erosion. Its defects are the tendency to seepage, involving great drainage costs, and to the collecting of alkali, which makes desert spots that can only be cleared up by costly arrangements for drainage and washing.

The permanent aspect of irrigation agriculture is particularly evident in the oriental paddy field so extensively developed in China, Japan, India, Ceylon and Java. It has even been developed to an astonishing perfection of technique on mountain slopes by the Igarots of the hill country of Luzon. Their terraces laboriously constructed for conducting water have made upon mountain slopes one of the world's most spectacular and permanent forms of agriculture. The successful rice field may be called a permanent agriculture because it does not wash away, and the fertilization with human excreta has caused it to endure for millennia. It is interesting to observe the capture of most of its essential elements (except the preservation of fertility) by the machine agriculture of America in the rice plantations of Louisiana, Texas, Arkansas and California. The irrigated agriculture of the United States has, however, added no other new features of importance, representing a transfer both of crops and of technique from the Mediterranean area.

The Mediterranean countries having an open winter with some rain, and a dry summer, have two kinds of agriculture: the irrigated orchard and garden spots, mostly small peasant holdings; and the upland in wheat or barley, sometimes alternating with legumes (pottage). By this process of growing grain by the use of the plow, the uplands of Greece, Italy, Syria and other Mediterranean countries have been in large measure destroyed despite the saving of small scattered areas by terracing. The Old World non-irrigated terrace is spectacular but surprisingly small in area, and it saves only a small percentage of the hill lands. An exception to this record of soil destruction in Mediterranean lands is to be noted in the few plains not irrigable but flat enough to allow plow agriculture for long periods. California is like the Mediterranean countries in almost all respects save the absence of any large upland area suitable for grain, and the great development of the fruit industry resulting from the vast American market and the large export trade that has followed standardized output.

The agriculture of northwestern Europe is on a much more permanent basis than that of southern Europe or eastern United States because of the small proportion of hill land, the gentle rainfall and the summer rain which makes turf and permanent covering. The fallow field system followed by crop rotation, including legumes, has produced the great agriculture that has been perfected there in the last half century with the aid of commercial fertilization and the partial application of science to agriculture. Carefully worked out crop rotations result in grain farms, dairy farms, meat pro-

duced on fattening farms and in shipments of potatoes, beet sugar, fruits and vegetables.

The European type of agriculture has been transferred to eastern Canada (except the Ontario plain), to New England and parts of New York with no change in crop or technique worthy of mention save a lesser intensity and a greater use of pasture. Farther inland and farther south the European crop list was enlarged by corn, tobacco and cotton. These three crops furnish a new element to the European agricultural technique, requiring as they do wide areas of cultivation throughout the growing period of the crop. They all require a climate of summer rain, which happens to fall in torrents that carry away the soil loosened by tillage. This is destroying American soil resources at a rate never before equaled in human history, a rate that makes agriculture impossible for millennia over wide areas.

Pasturage, the lowest form of land utilization, is a kind of residuary legatee inheriting those large areas of land that will grow a little grass or edible browse but not a plowed crop. The nomads following their flocks in Mongolia, central Asia, Arabia and the Sudan have developed well adjusted cultures. Similar grasslands in Australia, South Africa, Argentina, Brazil and western North America have been taken by the commercial cowboy and sheep herder. In a few decades they have greatly reduced the productivity of these pastures in nearly all these regions by excess grazing and the introduction of weeds.

Commercial Agriculture, its Tendencies and Problems. The industrial revolution with its machines in the factory, its railroads and steamships, and lastly its machines on the farms, has given us the modern phenomena of cities and commercial agriculture. In 1800 a good locality for agriculture and manufacturing in the home and village was one that produced grain, fruit, wood and grass for milk, meat and wool. A dependable climate was needed to maintain this completeness of local self-sufficiency without serious crop failure. By 1900 manufacturing had been removed to the cities, and a good location for agriculture was one that produced a few crops, or possibly only one if in quantity sufficient to enable the family to sell the surplus and buy needed articles. It takes more stuff to sell and buy than it does to make and use. Therefore the little factory farms of the era of Julius Caesar and John Adams, by which Latium and New England throve, could not meet the needs of 1900 and had been abandoned by the thousands in the course of the three preceding decades. By the year 1930 the necessity of still larger sales has become keenly manifest. In addition to his 1900 needs the farmer must now pay for automobiles, gasoline, radios, phonographs, daily papers and many other new things—perhaps even cosmetics. Therefore he needs to produce a much greater quantity of produce to sell than he did in 1900. Many farms which sufficed in 1900 have failed and have been abandoned in widely scattered regions in the decade 1920–30.

Commercial agriculture is depressed. One cause of this depression is that production has increased faster than consumption, and, as the farmer is nearly always without any bargaining power save supply and demand, farm produce has a lower relative price than it had before the World War. The German and English farmers are in a position strangely like that of their American colleagues. We now see that when applied to farm produce one of the staunch theories of the economists is found to be inoperative. For a century we have been told that machine production, which increased the output, would make more wealth for everyone. The farmer has not found this to be the case in recent years. There is a fundamental difference in this respect between food and other classes of goods. Wealth enables a man to buy almost indefinite quantities of factory goods, but wealth does not increase man's appetite for food. Yet more, this, the richest of all generations, eats less than any other. We ride in the automobile, push buttons, pull levers, save energy, and therefore need less food. To make matters worse for the farmer, the American diet appears to be shifting rapidly from a meat basis to one of cereal, fruit and leaf greens, all of which require in their production much less land than meat requires. The use of gasoline for motors has released millions of acres of land that were once required to produce oats and hay for the horse. The chief thing government has done is to stimulate production and produce a glut. The county demonstration agent has helped to break the market by finally teaching the farmer how to increase production. O. E. Baker (U. S. Department of Agriculture) has shown that since 1920 we have decreased the number of cows and increased the amount of milk; decreased our cattle and increased our beef; decreased our sheep and increased our mutton. The increased efficiencies of agricultural production by way of new and

improved machines, animal breeding and plant breeding are appalling in the number of readjustments that they are forcing upon us. Apparently the process has but begun. Doubtless we can increase agricultural production in the next two decades even more strikingly than we have done in the last two. Knowledge is advancing; machinery is still being improved and its scope widened, as by refrigeration and power on the farm. Business organization in both production and distribution of farm produce will also make great contributions to available supply.

The following are some of the more conspicuous agricultural changes which may be said to be impending because they have already begun in a small way:

(1) The Large Corporate Farm. Montana furnishes us suggestive examples of this kind of development. In 1917 that state had about 35,000 farms where wheat was grown. Eleven years later there were but 14,000 farms, but they were growing more wheat. This resulted from the introduction of the tractor which enabled two, three or even four plows to be used at a time. To harvest the enlarged acreage the combined harvester and thresher came into use. Experiments are now being tried whereby a dozen or even two dozen plows are used as a single unit. This may make the farm of twenty to fifty thousand acres as much the unit in its field as the cotton mill with its long rows of spindles is the normal successor of great-grandmother's spinning wheel.

The hay drier is a subject of experiment in several countries. This machine promises to the farmer a considerable degree of emancipation from the vagaries of the weather in humid lands. The successful experiments with a hay drier operating on minimum units of 640 acres almost rival the Montana wheat experience in indicating the economy of large productive units. This change to large scale production may come very soon. It may even be that the one-family farm is doomed to disappear as the effective unit on the world's level agricultural lands.

(2) Corporate Chain Farms. The business complexities of the farm unit with its problems of nutrition of animals, nutrition of plants, soil management, maintenance of machinery, maintenance of plant purchases, sales, accounting and labor management show how ready is the farm for the application of those principles of division of function that have made the chain stores and the chain factories so effective economically and so appalling socially. This process is under way in the Middle West. It began by bankers striving to save themselves from loss. It is impossible to predict how far this form of production management may go. Like cooperation in marketing and purchase it relieves the farmer of tasks which by their inherent difficulty are almost impossible for him to do well along with his other labors. Like the large scale farm, this too promises an increase of production per man.

(3) Tree Crops. A large fraction of the world's good agricultural climate and fair agricultural soil is on space taken by hilly land. Therefore it is either unused for agricultural purposes or more commonly it is being ruined by the plow. A whole new series of tree crops might be developed for hilly land—crops that can produce without destroying the land on which they stand. They also have great possibilities for semi-arid lands. Tree crops offer a means of nearly doubling the world's supply of food and of some raw materials during the ensuing century if creative imagination can be applied to the problem.

Millions will probably continue to starve in China, but it is also perhaps true that one of the greatest economic problems of the western world of mechanized industry in the next decades will be the widespread glut both of factory goods and farm products. This is not a problem to be solved in the field, at the work bench or in the laboratory but in the realm of social arrangements.

Economic and Social Position of Agriculture. A big crop meant prosperity in the domestic era in America in 1800 as it does in China today A big crop in the age of commercial agriculture is often a calamity to him who grows it. In 1926 two or three million bales of cotton went unpicked in the United States, and the rest sold at the price of picking. In the same season some twenty or thirty million bushels of apples went unpicked and the other one hundred and twenty million bushels sold at picking price or less. There is a glut of truck crops in the American city markets almost every month in the year.

Apparently the prices in gluttable markets can only be kept at a profitable point by the aid of legislation or some similar form of group action. The farmer, especially in America, has shown himself peculiarly weak at group action. Hence he is becoming the prey of the groups that are more effectively organized. The manufacturer gets tariffs. The public utilities are guaran-

teed dividends, and many of them are still in a position to water the stock and thus increase the prices that farmers and others must pay. The railroads are guaranteed good wages for their workers and are almost guaranteed dividends. The banks have a secured position favored by law, and many of them regularly make the borrower pay more than the legal rate of interest.

The causes of this helplessness are easy to see. The farmers are divided into regional groups and into crop groups. The social aspect of their business is too complex for most of them to understand. They are scattered over a vast area. Compare them with manufacturers: the manufacturer can reward those who make his legislation, the farmer cannot; the manufacturer knows what he wants in legislation, the American farmer does not. He displays an unbelievable lack of understanding. Thus, for example, there is in Iowa no large city element in the population of the state. The state has a uniformity of soil and climate and surface not equaled in any other of our forty-eight states. The state has uniformity of interests in the produce of corn, oats, hay, wheat and meat. These crops have been sold, since the days of first settlement, in export markets at a free trade price. For sixty years the people of that state have voted for the protective tariff, which increased the price of almost everything they bought and gave them no aid in selling. They did this apparently in the belief that they were promoting their own self-interest. At the same time they sought protective duties on their own products, the effects of which were bound to be illusory, since these were products of which the nation had a surplus for export. It appears obvious that any program for placing agricultural prices on a parity with industrial must rest upon some form of control of price or of production.

Even in the United States there are a few examples of agricultural price control. Cranberry growers living in restricted areas seem to have an effective price control. Milk producers for certain limited markets have achieved the same result and show a moderate prosperity in the midst of an American farm situation characterized in general by long working hours, very low actual wages and usually no dividends on the investment. Many observers can see in this situation definite evidence of a trend toward serfdom.

Yet there is Denmark, an agriculturally organized nation. In the United States the farmer is the legislative prey of other classes. In Denmark he controls legislation. The American farmer is a producer for the middleman. The Danish farmer is his own middleman. Indeed Denmark is a most interesting study for the student of social affairs. How is it that they can so far eclipse the Americans? Russia too offers a field for interesting study. There the farmer with his crop and the city man with his fancy stuff are openly struggling to get the better of the trade bargain by means of favorable legislation. China and Japan furnish another very interesting agricultural situation. The industrial revolution which is beginning in the factories probably cannot be extended to agriculture, for in both China and Japan the small farm worked by hand methods and largely by man power is made to produce double crops by processes that machines cannot duplicate. Since commercialization would mean decreased production, the present agricultural system is likely to continue indefinitely. But the condition of the oriental peasant might be considerably improved by the establishment of village industries; and village factories within walking distance of oriental farmers could find millions of workers for a part of the year. A similar labor supply is available in Europe and America. Regional planning is one of the important social reconstructions required by the coming era. Among many other things we may need to restore the conditions of employment that prevailed before the industrial revolution. In those days of household economy the population worked in the fields in summer and at indoor handicrafts in winter. It appears possible that it may now be both economically and socially profitable to let factory machinery stand idle in summer while the farm worker attends to crops; agricultural machinery has long stood idle all winter while its user did little or nothing.

J. Russell Smith

See: Soils; Irrigation; Reclamation; Dry Farming; Dairy Industry; Livestock Industry; Fruit Industry; Market Gardening; Cotton; Tobacco; Coffee; Sugar; Tea; Food Grains; Nomads; Plantation; Landed Estates; Farm; Small Holdings; Land Tenure; Rural Society; Economic Organization; Agricultural Policy; Food Supply; Agrarian Movements; Agricultural Machinery; Agricultural Experiment Stations; Agriculture, Government Services for; Agriculture, International Institute of.

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AGRICULTURE, GOVERNMENT SERVICES FOR. As early as 367 B.C. the Roman Republic recognized the importance of agriculture and the rural population by adopting a measure limiting the size of private estates acquired from the public lands. Numerous other laws relating to agriculture followed, practically all of them dealing only with land ownership. European legislation in the Middle Ages and the Renaissance was concerned chiefly with permitting enclosures of common land and with prohibiting increased wages for farm labor.

It was not until the eighteenth century that the agricultural revolution in Flanders, later moving to England, and the notable decline in the population of France, caused serious governmental consideration of effective scientific and economic aid to agriculture. The first steps were informal and tentative, such as the importation of a few pure bred cattle and the extension of some measure of state aid to agricultural societies.

In the following century government services for agriculture developed chiefly along two important lines: first, the formation of organizations for research and education; second, the extension of special credit privileges to farmers, the development of reclamation projects, the protection of agricultural labor, and the development of regulatory activities as to foods, feed stuffs and the like.

Practically all nations of agricultural importance now have government departments of agriculture, primarily for research and the dissemination of its results. Most of these departments were founded in the nineteenth century, either separately or as divisions of other departments. In some countries the experiment stations are under direct control of the Department of Agriculture. In practically all countries, however, most of the stations are governmental institutions, as are the colleges of agriculture and the agricultural secondary schools. Notable experimental work has been done under governmental auspices in Great Britain, Germany, France and, particularly as to soils, in Russia. In practically all European countries excellent college and university courses in agriculture are offered, these institutions being almost invariably state supported. Secondary education in agriculture has been developed to probably the highest degree in Denmark.

Governmental services to agriculture have been developed most extensively in the United States, except as regards certain advanced forms of social legislation affecting agriculture. In colonial days subsidies and bounties were offered by both the British and colonial governments to stimulate various lines of agricultural production. The raising of silkworms especially intrigued the fancy of the politicians, and financial encouragement was extended to this industry in Virginia, Georgia and South Carolina. Hops, indigo, hemp, lumber, pitch, tar and sheep were also subjects of governmental assistance. The aid extended consisted variously of premiums, land grants, instruction, the repeal of duties, and the payment of bounties on the products when shipped to England.

Subsequently, when the United States attained its independence, its most influential citizens expressed special interest in agriculture. Either they had had personal experience in farming, as had George Washington and Thomas Jefferson, or they recognized its importance in the development of the young nation. Their thinking was influenced by knowledge of what Arthur Young and other proponents of the agricultural revolution had done in England (Young corresponded extensively with Washington), and by the agricultural theories of the French physiocrats, which are plainly evident in Jefferson's eulogies of the farmer. In his last message to Congress in 1796 President Washington advocated government support for agricultural institutions in these words:

"It will not be doubted that, with reference to either individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity this truth becomes more apparent, and renders the cultivation of soil more and more an object of public patronage. Institutions for promoting it grow up supported by the public purse, and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of boards composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aids, to encourage and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase

of improvements by stimulating to enterprise and experiment, and by drawing to a common center the results, everywhere, of individual skill and observation, and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."

The proposal was lost in Congress, however. The early governmental support given to agriculture was not federal, but state. State aid was extended by Massachusetts to the Society for Promoting Agriculture as early as 1792. New Hampshire extended aid to county societies in 1817. Similar aid was extended by various other states. The money received by these societies was employed largely in publishing articles on agriculture, and in giving premiums either for exhibits of crops and livestock or for new discoveries in agricultural practise.

Aid was first extended by the United States government in 1839, when Congress appropriated $1000 for collection of agricultural statistics for agricultural investigations, and for the procurement of cuttings and seeds for free distribution among the farmers. The work was placed in charge of the Patent Office because Henry L. Ellsworth, then commissioner of patents, had already begun volunteer distribution of seeds and plants from abroad and had shown special interest in governmental aid for agriculture. Appropriations continued to be made to the Patent Office for agricultural purposes for more than twenty years, the high mark being reached in 1855, with $50,000. In 1862 agriculture was placed in a separate department with a commissioner at its head. In 1889 the commissioner of agriculture became secretary of agriculture with a place in the president's cabinet.

The Department of Agriculture has shown steady development, being now by far the largest organization in the world devoted to agricultural research and the dissemination of agricultural information. The total number of employees is approximately 22,000, and the annual expenditures are more than $150,000,000, two thirds of which is for road construction, subsidies to states for research and extension work, and conservation purposes.

The other work of the Department of Agriculture includes the following types of activity:

(1) Research, such as experiments in animal and plant breeding, investigations in pure science underlying agriculture, horticulture, forestry and similar subjects; experiments in methods of controlling animal and plant diseases and pests; in soils; in the economic problems of agriculture, such as farm management, individual and cooperative marketing, and the discovery of new uses for farm products. The actual practises of farmers on farms and in cooperative and other organizations are studied. Extensive statistical data are gathered.

(2) Extension work, the dissemination of facts discovered through research, carried on in the Office of Extension, in the Office of Information and in individual bureaus. Each year the Department distributes approximately 30,000,000 copies of its publications. It presents authentic agricultural information through more than 100 radio stations. It exhibits educational motion pictures before many gatherings of farmers. It supplies agricultural copy to newspapers and agricultural journals. It prepares numerous exhibits for large fairs. Largely in cooperation with the states, it carries on extension work through county agricultural agents, home demonstration agents and boys' and girls' club agents. Demonstration has proved especially effective.

(3) Eradication or control of plant and animal diseases and pests through organized campaigns, independently or in cooperation with state agencies. It is interesting to note that since the passage of the Plant Quarantine Act in 1912 only one major agricultural pest, the pink bollworm, is known to have become established in the United States.

(4) Service work, such as administration of the national forests, the weather service, crop and livestock estimating, the market news service, and inspection service on farm products at shipping points and terminal markets.

(5) Regulatory duties, comprising administration of approximately forty laws, including the Food and Drugs Act, the Meat Inspection Law, Plant and Animal Quarantine Acts, the Migratory Bird Treaty Act, the Cotton Futures and Cotton Standards Acts, the Grain Standards Act, the Warehouse Act and the Packers and Stockyards Act.

The Department of Agriculture is headed by the Secretary of Agriculture and the Assistant Secretary. There are five directors, covering respectively the fields of scientific work, regulatory work, extension, information, and personnel and business administration. Legal matters are handled by a solicitor and his staff. Bureaus and offices, organized on the basis of

subject matter, comprise experiment stations, weather, animal industry, plant industry, forestry, chemistry and soils, entomology, biological survey, public roads, agricultural economics, home economics, plant quarantine and control, and foods, drugs and insecticides. The last two offices are organized for the enforcement of laws, while the others are engaged mainly in research. The library, containing 205,000 volumes, is the largest agricultural library in the world. Its facilities are employed by scientists outside, as well as within, the Department of Agriculture.

In the same year that the Department of Agriculture was established Congress also passed the Land Grant Education Act, which offered public lands to each state for the establishment of colleges of agriculture and mechanical arts. Such colleges now exist in every state in the union, and in Alaska, Hawaii and Porto Rico. In some cases the Land Grant college is a separate institution, while in other instances it is connected with the state university. A number of southern states have separate Land Grant colleges for Negroes. State experiment stations were subsidized by an act of Congress in 1889, and most of the existing state stations owe their founding to this act, although several had been established earlier. Later legislation (1925) has furnished still more extensive federal funds to these stations, giving them special opportunity to develop investigations in agricultural economics and in home economics. The federal government itself maintains stations in Alaska, Guam, Hawaii, Porto Rico and the Virgin Islands. Extension activities, aside from the publishing of agricultural information, began with lectures before farmers, which gradually developed into farmers' institutes. The institutes began in the sixties and reached their maximum influence between 1900 and 1915. In 1914, 8861 institutes were held, with an aggregate attendance of 3,050,150. Most of the institutes lasted one or two days, a few extending over three or more days. From 1916 on, the institutes declined. Their place has been taken largely by the system of county agricultural agents and county home demonstration agents, involving actual demonstrations under local farm and home conditions. During the same period boys' and girls' clubs have developed extensively, their members undertaking practical farm and home projects and also endeavoring to interest their communities in higher standards of agriculture and rural life. All of the modern extension activities are increasing group thought and action as a habit in country neighborhood life, and are stimulating individual ambitions for more satisfying homes and communities. The federal government gives aid to high schools offering instruction in agriculture and home economics.

Large sums are expended by the states for agricultural education, research and extension. Certain of the federal appropriations are conditional upon equal expenditures by the states. Many states also pay the expenses of boards or departments of agriculture engaged chiefly in gathering and supplying information of use to agriculture, although other government services are also furnished. For example, seeds and plants, either imported or developed in the United States, are at times distributed by the United States Department of Agriculture or by state agricultural colleges to farmers qualified to make use of them in practical field tests. For many years a vast quantity of seeds was distributed by the Department of Agriculture through members of Congress, but this practise came to be recognized as undesirable and was abolished June 30, 1923. Rural free delivery of mail, which has brought the farmer into close touch with the thought of the nation generally, was begun in 1896. It now reaches approximately 24,282,000 people. The good roads movement, on which vast sums have been expended by national and state governments, has also been a potent means of communication for farmers. The weather service was recognized as especially useful to agriculture as early as 1890, when Congress transferred it from the army to the Department of Agriculture. Its forecasts have been of incalculable value to agriculture, especially since they have been disseminated by radio.

Extensive projects have been undertaken for land reclamation. Swamp lands have been reclaimed only under state laws, inasmuch as the federal government by legislation in 1849, 1850 and 1860 granted all the federal swamp lands to the states in which they were situated. Practically all of the drainage enterprises under state laws consist of corporate districts or county drains, the cost in both cases being met by assessment against the land benefited. Projects for reclamation of dry land by irrigation have been undertaken under both state and federal auspices. State aid has generally been undertaken in much the same way as in the case of swamp lands—through irrigation district

laws, making the lands liable for the cost of their own reclamation. The first state or territorial law for irrigation was passed by Utah in 1865. In 1894 Congress passed the Carey Act providing for patenting large areas of desert lands to several states on condition that the land be reclaimed by irrigation and sold to actual settlers. Eight years later the federal government actually entered into reclamation projects. The work has been administered by the Department of the Interior. Early projects proved largely disappointing because of failure to consider the actual needs of settlers aside from the provision of sufficient water. Beginning in 1923 more adequate methods have been undertaken with the purpose of determining, before construction is authorized, the feasibility of a project and its dependability for actual settlement of farm homes. While in some cases reclamation projects have proved successful, in others they have resulted in dissatisfaction to the settlers and in losses to the federal government. In view of the overproduction of various cash crops in the United States in recent years, there is a strong feeling against the reclamation of further land for the present.

Closely related to land reclamation is the California land settlement plan, the only example of its kind in the United States. Under this plan the state buys land, provides irrigation and drainage works so far as necessary, subdivides the land into farms, farm laborers' allotments and town lots, and sells the land on easy payments to actual settlers. Two colonies have been established under the law, but the time since their establishment has been too short to predict the extent of their ultimate success. Similar projects have been proposed for adoption by the federal government.

All these government projects possess the advantage of being backed by the public treasury and consequently of being able to carry settlers through periods of depression such as are almost universally characteristic of agriculture, and for the elimination of which no government has yet found adequate means. They possess such disadvantages as may be associated with contemporary political control.

Cooperative marketing, doubtless the most important project on the business side of agriculture in this century, has received both federal and state aid. This has consisted in the furnishing of information and in the passage of legislation enabling these organizations to function effectively. Delaware is the only state having no law governing cooperative associations. The Capper-Volstead Act, passed by Congress in 1922, places upon the secretary of agriculture responsibility, upon the one hand, for protecting the public against unwarranted use of power by cooperatives and, on the other hand, for protecting the associations from unwarranted prosecution. The federal government has also established a division of cooperative marketing in the Department of Agriculture for the purpose not only of studying effective practises in cooperation but also of supplying useful information as to market conditions to the cooperative organizations. Until very recently the United States, in contrast to some European countries, has not extended financial aid to cooperatives. However, through the Federal Farm Board established by the Agricultural Marketing Act of 1929, the federal government intends to encourage the organization of cooperatives and to aid in financing their operations in the hope of promoting orderly marketing of agricultural products.

Considerable service has been rendered to farmers by means of extension of credit. The Federal Reserve Act of 1913 permits five-year loans on land to farmers to the extent of 25 percent of the capital and surplus of the bank. This is only an incidental feature of the law, however. Much more extensive facilities are offered by the Federal Farm Loan Act passed in 1916, following a study of European practises. The establishment of the Federal Reserve System added a certain flexibility in the handling of short term agricultural paper. The Agricultural Credits Act of 1923 set up federal intermediate credit banks which may loan directly to cooperative associations, may rediscount for other banks, and in turn may rediscount with the Federal Reserve Banks. It also set up agricultural credit corporations to deal in agricultural, including livestock, paper.

Long term credit to farmers is also provided by a number of states. Minnesota, Oregon, North Dakota and South Dakota have special systems for the purpose of supplying farm credit. The most elaborate system is provided by the Bank of North Dakota. Arizona, Colorado, Idaho, Maine, Montana, North Dakota, Oklahoma, Oregon, Utah and Wyoming offer a small amount of rural credit through the administration of the school land or other public land funds. Some states also have legislation providing for credit unions or cooperative credit associations.

Various special services to farmers have been offered by certain states. North Dakota, through the efforts of the Nonpartisan League, offers the most conspicuous example. In 1919 the state established, in addition to the Bank of North Dakota, a mill and terminal elevator, a home building association, and hail, fire and tornado insurance. The home building association proved unsuccessful and disbanded. The other agencies still exist; after weathering the agricultural depression, they have achieved a fair measure of success, in spite of the prevalence of opposition to the Nonpartisan League. Several other states maintain insurance departments which carry certain risks, most important of which, from the specific standpoint of the farmer, is hail insurance. For the most part, however, hail insurance, like fire insurance, is in the hands of joint-stock or mutual companies.

On the whole, government assistance to agriculture in the United States has been limited to the provision of information and advice. This is manifestly due to the high degree of individualism among American farmers, which in turn is attributable, in considerable measure, to the great territorial area, and the fact that farmers, for the most part, live on their separated farms and not in villages, as in certain European countries.

In many other countries conditions are quite different. For example, in Austria, between 1890 and 1900 cooperative organizations were provided with an elaborate system of subsidies for the export of agricultural products, the employment of specialists, the construction of necessary buildings, and the purchase of machinery. In time, however, this aroused a certain opposition, and some cooperatives were formed with the policy of accepting no government aid. In Belgium, the *comices agricoles*, the technical agricultural societies, are semi-official. In a number of countries agricultural insurance receives special state support. France subsidizes cooperative livestock and some other forms of insurance. The province of Alberta in Canada operates hail insurance on the basis of a tax. Special credit facilities are offered to farmers, especially through cooperative associations, by practically all European countries, while agricultural credit is also available in countries in South and Central America, Africa, Asia and Australasia.

Agricultural labor is protected in many countries. For example, Ecuador, Esthonia and Spain regulate the hours of labor directly, while in Austria, Czechoslovakia, England, Germany and Poland the hours of labor are fixed by agreement or regulation legally enforceable. In the United States, in which the number of farm laborers is only about half the number of farms, regulation of hours of agricultural labor has always been successfully opposed by owning and tenant farmers.

There are state employment services in many countries. In the United States, however, the service provides largely seasonal labor. Italy is the only country which has compulsory unemployment insurance for agricultural workers. In Denmark and in the Netherlands there is voluntary unemployment insurance under state supervision.

Special aid to agriculture has been given by various governments through land settlement plans. The Australian system is of special significance in that it provides for either individual or colony form of settlement, for the grouping of lands to provide town sites, farm laborers' allotments and regular farm areas, for the organized construction of agricultural improvements, for the selection of settlers on the basis of their fitness, for long-term credit, for the prevention of speculation so far as possible, for the establishment of demonstration farms for advice and instruction, and for cooperative community organization. Denmark supplies state funds to rural and urban laborers of small means for the purchase of small holdings, the purpose being to support the small holdings system, which has been successful in that country for more than a century. Finland has a state land settlement fund for loans to communal societies for settlement on the land. These societies in turn supply credit to the various land settlement undertakings. There is also a state land fund for cooperative societies to supply floating capital to small landowners. In England the colony form of settlement has been put into effect under the Board of Agriculture and Fisheries, the state guaranteeing against financial loss. Each colony is managed by a director, the settler being employed at the current rate of wages, but receiving also a share of the profit from the farming operations. In New Zealand loans have been made by the state to settlers on land since 1894. In Italy the state gives aid to the purchase of land by cooperative societies for agricultural purposes. Various dues and taxes are remitted, and credit up to 80 percent of the value of the land is extended.

Practically all civilized countries have adopted systems for the diffusion of agricultural information. For a long time the colleges and universities were the only source of instruction, and they reached only persons of exceptional ability, training or opportunities. Chiefly since 1900 the movement to reach working farmers and their families with practical information has gained impetus in practically all countries, while greater and greater emphasis has been laid on the study of agriculture in the rural schools and, in some agricultural countries and regions, in city schools also.

The kind of service given to farmers in this field differs in various countries. For example, the several states of Australia maintain more than fifty experimental farms, in addition to approximately twenty times this number of experimental plots on private farms. Thus the double purpose of experimentation and demonstration is served. In addition each state lays great emphasis on personal visits by the experts of its department of agriculture to individual farms. Lectures and demonstrations are given under the auspices of the agricultural bureaus, which are local organizations of farmers for the promotion of agriculture. The Dominion of Canada maintains some twenty-five experimental farms and stations, in addition to demonstration farms and plots operated by the provincial departments of agriculture. It has also a system of agricultural representatives comparable to county agricultural agents in the United States, but responsible wholly to the respective provincial governments. The Farm Women's Institute, which has spread throughout the world since 1899, is a Canadian contribution, as are also rural school fairs. In Chile every elementary school maintains a class in agriculture and a field for agricultural experiment. The teachers are trained by annual courses offered by professors in the Higher Institute of Agriculture. The government gives special short courses in the various branches of agriculture, and also sends special demonstration trains throughout the country to promote better methods of cultivation. Denmark has made one of its chief contributions to agricultural services for farmers in an indirect way through the establishment of the people's high schools. It is due not only to the instruction but also to the spirit developed in these institutions that agricultural cooperation has proved so successful in that country. Denmark also has an elaborate system of lectures by experts paid wholly or in part by the government for the assistance of practical farmers. There are special schools for small allotment holders, as well as other agricultural institutions. Agricultural education in Denmark dates from 1845. In France each department has a director of agricultural services, assisted by one or more professors of agriculture. Instruction farms, schools of agriculture, schools of home economics and women's institutes are likewise maintained. A system of chambers of agriculture is also provided for by law. In Great Britain research has been carried on very effectively. Most of the counties employ a paid official called an agricultural organizer, who advises farmers and arranges lectures. Belgium employs about thirty agricultural experts, the same number of deputies and a smaller number of horticultural advisers. These men reach the farmers by lecture, demonstration and personal visits. In particular the government requires them to instruct farmers in the advantages of organization. In Germany agricultural experiment and instruction are heavily subsidized by state governments, and much work of high quality has been done. The chambers of agriculture, which are not government bodies, have done much in local agricultural organization and instruction. In Spain there is a law permitting demonstration fields to be maintained cooperatively by villages and district farm schools, the villages furnishing the land, and the schools the technical direction, machines, seed and fertilizer. Comparatively few villages, however, have adopted the plan. The schools are required by law to give short farm courses. Experimental and demonstration work, similar to that maintained in European and American countries, is carried on in China, although on a smaller scale. In Japan there are more than fifty agricultural experiment stations, short courses are offered in both agriculture and home economics, and the lectures are frequently illustrated by lantern slides or motion pictures. Agricultural courses are regularly given in the army to soldiers from rural districts. The government has also distributed large quantities of improved seeds and plants.

The technical agricultural services offered by the government of Soviet Russia are of special interest as representing the point of view of a political system very different from the systems of other nations. The government offers much material assistance to small farmers who will unite into agricultural coop-

eratives, while it prohibits any effort to coerce the peasants into cooperation. The purpose is a great socialized agricultural industry. In addition the government has organized the *Sovkhozy*, or grain producing enterprises. These are large, highly mechanized farms, following largely the practises that are used in modern wheat ranches in the United States. On January 1, 1928, 2,722,000 hectares (approximately 7,100,000 acres) were embraced in the system, each *Sovkhoz* having an average size of 500 hectares. In 1928 the government began a program of more than doubling the extent of the *Sovkhozy*, wherever possible, by adding new farms. By 1933 the government expects to have replaced all primitive Russian plows with modern mold-board plows, of which it is estimated that 7,000,000 will be needed. In the same period it is planned to put 100,000 tractors into the farming industry.

The government has adopted a ten-year colonization plan to settle more than four million people on fertile border lands. Irrigation and other reclamation projects are provided for. Considerable emphasis is laid not only on improving agriculture but on strengthening the border regions economically and politically.

The experimental, educational and extension work in Russia is similar to that in other European countries. In 1927 there were seventy-one agricultural experiment stations and several other laboratories supported by the government.

The International Institute of Agriculture (*see* AGRICULTURE, INTERNATIONAL INSTITUTE OF), founded in 1908 through the efforts of David Lubin, is the most potent means for international collaboration and cooperation in technical matters connected with agriculture. The League of Nations, through its Economic Consultative Committee, deals with some agricultural problems. Its relation to technical services rendered by governments to agriculture has not as yet, however, become well defined.

NELSON ANTRIM CRAWFORD

See: AGRICULTURE; AGRICULTURAL POLICY; AGRICULTURAL MARKETING; AGRICULTURAL CREDIT; AGRICULTURAL INSURANCE; AGRICULTURAL COOPERATION; AGRICULTURAL LABOR; AGRICULTURAL SOCIETIES; AGRICULTURAL EXPERIMENT STATIONS; COUNTY AGENT; CROP REPORTING; FOOD AND DRUG REGULATION; RECLAMATION; IRRIGATION; LAND SETTLEMENT; SMALL HOLDINGS; ALLOTMENTS; FARM LOAN SYSTEM, FEDERAL; AGRICULTURAL EDUCATION.

Consult: Gras, N. S. B., *A History of Agriculture in Europe and America* (New York 1925); Heitland, W. E., *Agricola* (Cambridge, Eng. 1921); Ernle, Lord (Prothero, R. E.), *English Farming, Past and Present* (4th ed. London 1927); Augé-Laribé, Michel, *L'Evolution de la France agricole* (Paris 1912); Herrick, M. T., and Ingalls, R., *Rural Credits, Land and Cooperative* (New York 1914); International Labour Office, *Technical Survey of Agricultural Questions* (Geneva 1921); Bidwell, P. W., and Falconer, J. I., *History of Agriculture in the Northern United States* (Washington 1925); Wiest, E., *Agricultural Organization in the United States* (Lexington, Ky. 1923); True, A. C., "Education and Research in Agriculture in the United States" in U. S. Department of Agriculture, *Yearbook 1894* (Washington 1895) p. 81–116, and "A History of Agricultural Extension Work in the United States 1785–1923" in U. S. Department of Agriculture, *Miscellaneous Publication no. 15* (Washington 1928), and "History of Agricultural Education in the United States" in U. S. Department of Agriculture, *Miscellaneous Publication No. 36* (Washington 1929); Eliot, Clara, *The Farmer's Campaign for Credit* (New York 1927); yearbooks and reports of departments of agriculture of all countries.

AGRICULTURE, INTERNATIONAL INSTITUTE OF. Around 1900 David Lubin, a California merchant, became convinced that agriculture urgently needed an international clearing house for timely information on the extent and condition of crops, and the number and kinds of livestock. He argued that the wise adjustment of agriculture in any country depended upon an accurate knowledge of the industry in other countries. In addition he held that crop areas and conditions were important price making forces which should be a matter of public knowledge. Lubin attempted to interest various governments in the promotion of such an organization. These efforts brought him in touch with the king of Italy, who was impressed with the logic of this enthusiastic American and commended the plan to the favorable consideration of his government. As a result the Italian government sponsored an international diplomatic conference which culminated in the formulation of a treaty signed on June 7, 1905, by the representatives of forty nations. This treaty created the International Institute of Agriculture, with its center of operations in Rome.

The institute is an official organization, supported by governments. Voting powers are regulated in accordance with the financial obligation voluntarily undertaken by each nation. Colonies and dependencies are admitted on the same conditions as are independent nations. The legislative body is the General Assembly, which meets, as a rule, once every two years. Executive responsibility rests

with a permanent committee. Each adhering state has the right to appoint one representative on this committee. The institute has as organs of consultation and collaboration the Agricultural Advisory Committee, the International Scientific Agricultural Council, the International Permanent Commission of Agricultural Associations, the International Commission for Coordination in Agriculture and the International Agricultural Economic Council. The International Scientific Agricultural Council has a membership of more than six hundred experts, representing fifty-three countries and grouped in twenty-three technical commissions which are concerned with special studies and activities.

The institute is empowered by Article 9 of the treaty to deal with the entire range of problems affecting the welfare of agriculture. The one general limitation on its activities is that "all questions relating to the economic interests, the legislation and administration of any particular state must be excluded from the sphere of the Institute." Its most important work is the collecting, compiling and disseminating of agricultural statistical data. It maintains an extensive cable service for keeping in touch with the areas sown, crop conditions and harvest yields of the more important staples. It is at all times cooperating with governments with a view to increasing the accuracy and extending the scope of their agricultural statistics. To this end the institute is attempting to promote a universal agricultural census in 1930.

Such matters as world prices of agricultural produce, agricultural legislation, agricultural cooperation and trade in agricultural produce are being studied by the institute. It hopes to stimulate movements for international plant protection, protection of animals useful to agriculture, standardization of meat inspection, regulation of cheese descriptions, unification of cheese analysis methods, and similar projects. The plans will be worked out at international conferences.

The institute publishes monthly in five languages the *International Review of the Science and Practice of Agriculture* and the *International Review of Agricultural Economics;* it publishes also the *International Year Book of Agricultural Statistics* and the *International Yearbook of Agricultural Legislation.* In addition it issues numerous monographic studies. The number of signatory powers has increased from forty in 1905 to seventy-four in 1929. The estimated expenditure for 1928 was approximately 5,000,000 lire—$265,000.

ASHER HOBSON

See: AGRICULTURE, GOVERNMENT SERVICES FOR.

Consult: *International Institute of Agriculture; General Policy and Activities*, Statement presented to the General Assembly of 1926 by G. de Michelis, President (Rome 1926); Wieth-Kundsen, K. A., "Entwicklungsgeschichte des internationalen Landwirtschaftsinstituts in Rom" in *Festschrift fur Lujo Brentano zum siebzigsten Geburtstag* (Munich 1916) 439-60; International Institute of Agriculture, *Procès-verbaux* (Rome 1912–).

AGUESSEAU, HENRI FRANCOIS D'. *See* DAGUESSEAU, HENRI FRANCOIS.

AGUSTIN, ANTONIO (1517-86), Spanish juristic philosopher. He was born in Saragossa, studied philosophy and law in the universities of Alcala and Salamanca, and went to Italy in 1535 to study in Bologna and Padua. In Bologna the great Alciati initiated him into the methods of the new jurisprudence. Agustín broke away from scholastic tradition and went directly to the study of the sources. In 1541 he moved to Florence to study the celebrated manuscript of the Pandects; the result of his studies was his first great work, *Emendationum et opinionum libri IV juris civilis* (Basel 1544), a book which aroused the admiration of all scholars. It was followed by a series of studies of constantly increasing importance, one on the *Novels* of Justinian, the manuscripts of which he studied in Venice; another, the splendid work *De propriis nominibus τοῦ πανδεκτοῦ Florentini* (Tarragona 1579) which revealed wide horizons to juristic science. Of the utmost importance in canon law are his corrections to the so-called Gratian Decretal, in his book *De emendatione Gratiani* (Tarragona 1587).

Agustín's theological and juristic learning combined to make him one of the greatest authorities and one of the most frequently consulted at the Council of Trent for the three years during which he was present at its sessions. The papacy entrusted delicate diplomatic missions to him, and in 1574 the king of Spain named him archbishop of Tarragona, where he died in 1586. His labors as a humanist and archaeologist were considerable.

FERNANDO DE LOS RIOS

Works: *Opera omnia*, ed. by J. Rocchius, 8 vols (Lucca 1765-74).

AHRENS, HEINRICH (1808–74), author and teacher in the field of legal philosophy and political science. He was born in Hanover, was a student and later *Privatdocent* in the University of Göttingen, and was professor successively at Brussels, Graz and Leipsic. His departure from Göttingen was made necessary by his part in the revolutionary disturbances of 1831.

Ahrens' chief work was in legal philosophy. His particular contribution in that field was that of elaborating, explaining and popularizing (among savants) the legal doctrine of another German author—the philosopher K. C. F. Krause. According to Krause, law, viewed ideally, is the embodiment of principles that harmonize nature, human reason and God; laws, more concretely, define the modes of progress toward the actualization of that ideal harmony. This "idealistic-organismic" legal philosophy, which Krause set forth in a somewhat mystic spirit and in difficult and technical terminology, Ahrens expressed in fuller, clearer, more realistic form. He is thus known as founder or principal representative of this particular sort of "natural law" legal philosophy. A specific contribution of importance which he made is in his application of that philosophy to the social basis of the state, with detailed discussion of the organic relations between the state and the various smaller corporate associations into which individuals naturally group themselves.

FRANCIS W. COKER

Important works: *Cours de droit naturel* (Paris 1838) (over twenty editions in six languages); *Die organische Staatslehre auf philosophisch-anthropologischer Grundlage* (Vienna 1850); *Juristische Encyclopadie* (Vienna 1855) (editions in five languages); *Naturrecht oder Philosophie des Rechts*, 2 vols. (Vienna 1870–71) (a complete revision of the *Cours de droit naturel* and the *Organische Staatslehre*).

Consult: Mohl, R. v., *Die Geschichte und Literatur der Staatswissenschaften*, 3 vols. (Erlangen 1855–58) vol. i, p. 86–87, 157; Berolzheimer, F., *System der Rechts- und Wirtschaftsphilosophie*, 5 vols. (Munich 1904–07) vol. ii, p. 259–63, tr. by R. Sz. Jastrow as *The World's Legal Philosophies* (Boston 1912) p. 244–48; Coker, F. W., *Organismic Theories of the State* (New York 1910) p. 32–35.

AIDS. The word aid (*aide*, *ayde*) meant originally any aid or subsidy granted to a suzerain at irregular intervals. By custom the lord had the right to call upon his vassals or copy-holders for aids on stated occasions. In general these were the payment of the ransom of the lord when made prisoner of war, and of the expenses incident to the arming of his eldest son when knighted, the marriage of his eldest daughter and his departure for a crusade. In this original form aids were known throughout feudal Europe, but only in France did they survive feudalism. This article will therefore consider the development of aids in France from the fourteenth century to the revolution.

Toward the end of the thirteenth century, when the great expansion of the royal domain transformed the little Capetian suzerainty into an important state, the resources in men and money that the feudal law granted to the lords, and above them to the king, became quite insufficient. It was therefore necessary for Philip the Fair (1285–1314) and his successors to find new revenues. They tried to force the acceptance of the new and non-feudal principle that to the king belonged the right of taking all the necessary measures, fiscal and military, for the defense of the kingdom. The entire history of the fourteenth century is filled with the struggles which the French kings had to wage in order to levy throughout the kingdom new taxes not allowed by the feudal law. When they obtained these taxes they were usually limited by the condition that these *aides*, taking as they did the most diverse forms (taxes on the sale of merchandise, taxes on salt, taxes on income, hearth-money, etc.), should be collected and expended by the *élus* (deputies of the Estates) and that they be devoted exclusively to the object—generally the upkeep of the army—for which they had been requested from, and approved by, the Estates General.

By a remarkable coincidence even the military defeats of the French monarchy made for progress in this direction. The captivity of John the Good (1350–64) and his ransom, payment of which was a recognized obligation for the entire feudal hierarchy, facilitated the transformation of these occasional *aides* into a permanent tax, and of the *élus* or *surintendants* charged with their administration into royal agents. The skilful policy of Charles V (1364–80) initiated the transformation which, though it was slow and difficult, was completed by the time of Charles VII (1422–61). At the same time that the *taille* was made permanent under this king, the *aides* also became permanent. The ordinance of February, 1436, reestablished them after a long interruption as an indirect tax consisting of a basic rate of 12 deniers to the livre on all sales, plus special taxes on the sale of wines and other drinks. The same ordinance detailed the measures to be taken for

the farming of *aide* taxes—farming which until 1604 was done, not *en bloc*, but separately for each kind of tax and for each province. Thus from that method of collections of *aides* by the *élus* of the Estates, nothing remained but the word *élus*. This continued to be applied, erroneously, to agents who were no longer elective but were appointees of the king and were soon owners of their offices. These *élus* constituted the local fiscal administration in *pays d'élections*, that part of France which had no provincial Estates. Above them were two types of superior officers originally chosen by the Estates General: *généraux sur le fait des finances*, charged with administrative supervision, and *généraux sur le fait de justice*, who as *cours des aides* passed final judgments on all tax litigations.

Henceforth the word *aides*, entirely losing its original general meaning, came to be applied only to taxes on drinks and certain other articles of minor importance. There were considerable local differences in the levying of these *aides*, differences which dated from the very time of their establishment and which were retained to the end of the *ancien régime*. Some provinces and cities had bought themselves free of these taxes, in whole or in part; some assessed the tax at their pleasure; some refused any subsidy even when neighboring provinces granted them; the provinces newly added to the kingdom kept their special regime. Nothing was less uniform than the system of *aides*, and the number of extremely complicated taxes which it included was very large. One of the *aide* taxes was the wholesale (*le gros*), a tax of one twentieth on the sale price, which toward the end of the old regime was collected only on drinks. Another *aide* duty was a tax on the sale price at retail, a rate of one fourth in a few localities and of one eighth in the majority of them. The *aides* included also an unpopular tax which figured prominently in the *cahiers* of 1789, the *trop bu* or *gros manquant*. This was the duty levied on drinks used by the vine cultivators in excess of the quantity fixed for their family consumption, and therefore presumed to have been sold by them without declaration, in evasion of the wholesale tax. It gave rise to house to house searches, against which feeling ran very high when the revolution broke out.

The unpopularity of these *aides* was very great; it is not clear, however, that it was always justified. Ministers who were devoted to the public welfare, such as Colbert, greatly preferred the *aides* to the *taille* and would have wished to reduce the rate of the direct tax and to raise that of the *aides*. This policy would have been more equitable in a society burdened with special privileges, for although the *aides* themselves admitted of certain very regrettable exemptions, these were far less important than those allowed under the direct tax. The great defect of the *aides* was the confusion to which they gave rise, varying as they did according to locality, and being complicated therefore by a host of vexatious rules. In itself, however, the administration of the *aides* was well conceived; when the law of the 28th of April, 1816, put the tax on drinks in the form that it retained throughout the nineteenth century, it did little more than copy what had been done for the *aides*. For a long time *aides* were included in that group of royal revenues which was farmed out as a unit. In 1780 Necker put them under a separate administration which by 1789 netted the treasury slightly over fifty million livres.

The *cours des aides* were courts of last instance whose jurisdiction extended to the assessment and the levying of only those taxes which were in existence at the time when these courts were established and acquired their power. Consequently they had nothing to do with such imposts as the *capitation*, *dixième* or *vingtième*, which date from the seventeenth or eighteenth century. The word *aides* had thus kept, in this case, the general meaning that everywhere else it had lost. These courts, together with the *parlements* and the *chambres des comptes*, constituted that group of courts of last instance whose officers owned their offices, and which caused so much embarrassment to the crown during the Fronde and throughout the eighteenth century. The spirit that animated the *cours des aides* was very anti-fiscal; they constantly stood out against the improvements that the crown tried to introduce in the field of taxation. Men like Malesherbes (the first president of the *cours des aides* of Paris) were rather rare. Besides the *cour des aides* in Paris there were twelve in the provinces; several of these were identical with the *parlements* or *chambres des comptes* of the cities where they were situated.

MARCEL MARION

See: TAXATION; EXCISE; TAILLE; REVENUE FARMING.

Consult: Callery, A., *Histoire du pouvoir royal d'imposer* (Brussels 1879); Viard, M. J., "Les ressources extraordinaires de la royauté sous Philippe VI de Valois" in *Revue des questions historiques*, vol. xliv (1888) 167–218; Dupont-Ferrier, G., "Histoire et signification du mot 'aides' " in *Bibliothèque de l'école*

des chartes, vol. lxxxix (1928) 53–69; Brunet de Grandmaison, P., *Dictionnaire des aydes* (Paris 1726); Lefebvre de la Bellande, J. L., *Traité général des droits d'aides* (Paris 1760); Moreau de Beaumont, J. L., *Mémoires concernant les impositions et droits*, 4 vols. (Paris 1768–69) vol. iii, p. 277–477. H. Taine gives a colorful, if not always accurate, description in his *Origines de la France contemporaine*, 11 vols. (23rd ed. Paris 1899–1901), tr. by J. Durand, 5 vols. (New York 1896) vol. i (*The Ancient Regime*) p. 349–73.

AILLY, PIERRE D' (1350–1420), educator, theologian, geographer. In 1389 he became chancellor of the University of Paris, where he was the teacher of Gerson. He held positions of considerable importance in the church and in 1411 received the office of cardinal. As a theologian many of his ideas seem adventurous and even heterodox, but he desired above all else a thoroughgoing reform of the church. In the Great Schism he was the first to propose a general council which would be superior to the pope, and hoped by this means to effect a compromise which might solve the difficult problem then facing the church. At the council of Constance he put forth his views for the reform of the calendar which was finally accomplished by Gregory XIII. He is most important, however, as author of the *Imago mundi* (written in 1410, printed shortly before 1487), a summary of the geographical knowledge of the time, based on the ideas of Aristotle and Roger Bacon. It is here that one finds the first references to America. This book was attacked by many authors, but it was highly regarded by Columbus, who became acquainted with it, perhaps, even before his discoveries. D'Ailly's works comprise one hundred and seventy-four scattered monographs of varied importance.

PAUL HARSIN

Consult: Tschakert, P., *Peter von Ailli* (Gotha 1877); Salembier, L., *Petrus de Alliaco* (Lille 1886), and *Pierre d'Ailly et la découverte de l'Amérique* (Paris 1912); Guignebert, C., *De imagine mundi ceterisque Petri de Alliaco geographicis opusculis* (Paris 1902).

AINGO DE EZPELETA, PEDRO. *See* EZPELETA, PEDRO AINGO DE.

AKSAKOVS. Sergey Timofeyevich Aksakov (1791–1859) and his two sons Konstantin (1817–60) and Ivan (1823–86) form a triple spiritual constellation occupying an important place in the history of Russian culture. The elder Aksakov was a typical Russian country gentleman. One of the first students of the newly founded Kazan University, he afterwards was in the government service as censor and educational official. Not until he was approaching the age of sixty did he become a writer of importance. He was not a fiction writer in the strict sense of the word, being a rare specimen of a first class artist who invented nothing but wrote about what really happened and what he himself had lived through. Hence the great, almost exceptional value of his writings as human and social documents. The classical family recollections of Sergey Aksakov give a serene and epic picture of the life of a Russian country gentleman during the later period of serfdom, in the eighteenth and early nineteenth centuries, and more particularly of that manorial colonization, hitherto very little investigated, which played such an important role in the making of Russia. The most important of his works is the famous *Family Chronicle*, of which there exist three English translations: by "a Russian Lady"(Calcutta 1871); by J. D. Duff of Cambridge (3 vols., London 1917); and by M. C. Beverley (London 1924), with introduction by Prince Mirsky.

Konstantin Aksakov was a learned historian and philologist who, however, never did any teaching. Among the so-called Slavophiles (*q.v.*) he was the one who contributed most to the formation of their historico-philosophic doctrine in its application to the facts of Russian history. His general system of ideas shaped itself under the influence of the philosophic ideas of Schelling and Hegel. But that influence was only a passing one, and mainly formal. Having built up his Christian, semi-anarchist ideal of national and social life emancipated from the principle of coercion, Konstantin Aksakov found in the history of Russia a nearly complete fulfilment of that ideal. The essential element in his philosophy is contained in his treatment of the moral problem of social organization. Here he introduces his categories of *Bit* (customs) and *Zemlia* (country or land). *Bit* is a specifically Russian notion more or less corresponding to the German *Sitte*; it denotes the mores of a people not molded by state coercion. A community organized on the lines of *Bit* and embracing the whole nation forms the *Zemlia* which Aksakov opposes to the state. The Slavs who inhabited Russia did not "form the state out of their own midst"; they "called the state from outside" (the "calling of the Varangians," as the starting point of Russian history). The Slavs, and the Russians more particularly, are by their nature "custom"

peoples, this conception of "custom" implying in the eyes of Aksakov not only historical backwardness but a certain moral supremacy over the "state" peoples. Whereas the western nations chose the path of "external law," i.e. of "constitution" and "regulation," the Russian people, being the most Christian of all, followed and will follow the way of "conscience," of "inner truth." "The history of the Russian people is a history, unique in the whole world, of a people that is Christian not only by religion but also by its life, at least by the tendency of that life." It is surprising how Aksakov managed to combine such mystical, unhistorical idealization with an excellent first hand knowledge of the facts which enabled him as historian to utter some sound and critically fruitful judgments. Like the rest of the Slavophiles K. Aksakov believed autocracy, somehow combined with individual rights and consultative popular representation, to be the only form of government suited to the spirit and interests of the Russian people. His original approval of the reform of Peter the Great and his belief in its historical vindication and necessity changed afterwards into a vehement denial of Peter's life work, as well as of the entire "Petersburg period of Russian history" (the expression was coined by him). He regarded it as a pernicious departure from the right path for which the government and the upper classes were to blame. Thus, like all real Slavophiles, K. Aksakov was a preacher of a peculiar kind of social and ethical nationalism, being in practical politics a moderate liberal and a partisan of liberal reforms. Ivan Aksakov, who on the whole faithfully clung to the historico-philosophical and sociological ideas of his brother, regarded the latter's social ideal as in some respects akin to that of the German sociologist W. H. Riehl. The works of K. Aksakov were edited by his brother Ivan in three volumes (Moscow 1861–80); this edition remained incomplete; the first volume, containing the most important historical works, was republished in the twentieth century.

Ivan Aksakov was the practical politician of the Slavophile movement. He had in general a practical mind and great literary and oratorical gifts. At first a government official and a judge (1842–52), he afterwards became and remained a journalist, engaging in economic studies and researches whenever the conditions of censorship reduced him to silence. The significance of Ivan Aksakov lies in the fact that while sharing the ideas of mystical nationalism common to all the Slavophiles, he yet fought for liberal reforms and was a staunch supporter of the policy of moderate liberalism. I. Aksakov exerted an especially strong influence as chairman of the Slavonic Philanthropic Committee of Moscow during the Russo-Turkish War of 1877–78; because of Aksakov's daring speech against the decisions of the Berlin Congress, the commitee was later dissolved and Aksakov himself subjected to persecution. He was a champion of Russia's mission as the liberator of the Slavs from the Turkish yoke, and as such was named in some Bulgarian quarters as a candidate for the Bulgarian throne when the Bulgarian principality was created. In Russian home affairs he of all the Slavophiles was probably the most sober and the best endowed with a sense of realities. There is in the Russian language no better defense of the freedom of speech than Aksakov's brilliant writings on this subject. His letters, a classical example of Russian epistolary literature, have also a great historical documentary value. His verses on political themes give him a prominent place in the history of Russian poetry. Quite a special place in the life work of I. Aksakov is occupied by his investigation into the conditions of trade at the Ukrainian fairs, the results of which were embodied in a large monograph, *Recherches sur le commerce des marchés de l'Ukraine* (St. Petersburg 1858). This classical work of Russian descriptive political economy is full of subtle psychological observations, and among other things contains a very interesting characterization of the "Great Russian" and the "Little Russian" as psychological and economic types. The collected works of I. Aksakov consist of seven volumes (Moscow 1886–87), but that edition is not complete. Three volumes of his *Letters* were published separately (Moscow 1888–92).

PETER STRUVE

Consult: Struve, Peter, "Ivan Aksakov" in *Slavonic Review*, vol. ii (1923–24) 514–18; Masaryk, T. G., *Zur russischen Geschichts- und Religions-Philosophie*, 2 vols. (Jena 1913), tr. by E. and C. Paul as *The Spirit of Russia*, 2 vols. (London 1919) vol. i, ch. ix; Fischel, Alfred, *Der Panslawismus bis zum Weltkrieg* (Stuttgart 1919).

ALABAMA CLAIMS. The *Alabama* claims, settlement of which constitutes an outstanding example of arbitration in a dispute of major importance, arose from the inadequate performance of neutral duties by Great Britain during the American Civil War. Confederate cruisers, equipped in British ports and later armed out-

side British jurisdiction, or whose force was augmented in British colonial ports, inflicted damages on Union commerce estimated at nearly eighteen million dollars and caused the Union navy to spend seven millions in pursuit of them.

In the North great bitterness against England prevailed on this score. Lord Russell refused arbitration in 1865 on grounds of national honor, but his successors at the Foreign Office showed a greater desire to assuage American ill will and, by setting up a higher standard of neutral obligations, a wish to protect British commerce from new *Alabamas* in the event that Great Britain should be a belligerent. The Johnson-Clarendon claims convention of January 14, 1869, contained no expression of British regret but provided for the appointment of an umpire by lot in the case of each claim as to which the commissioners disagreed, if the commissioners failed to agree on one umpire for all the cases. It was rejected by the Senate, forty-four to one, after an extravagant speech by Sumner holding England responsible for the prolongation of the war. Danger of an Anglo-Russian war in 1870, however, led to a confidential mission entrusted to Sir John Rose. This paved the way for a joint high commission which, by the Treaty of Washington, May 8, 1871, referred pending disputes to four separate arbitrations. The British expressed regret for the escape and depredations of the *Alabama* and other vessels, and agreed to refer the claims growing out of the acts of these vessels to a tribunal of five arbitrators which should meet at Geneva and should apply the following three rules, even though the British denied the American contention that these rules stated the principles of international law in force when the claims arose:

"A neutral Government is bound—

"First, to use due diligence to prevent the fitting out, arming or equipping, within its jurisdiction, of any vessel which it has reasonable ground to believe is intended to cruise or to carry on war against a Power with which it is at peace; and also to use like diligence to prevent the departure from its jurisdiction of any vessel intended to cruise or carry on war as above, such vessels having been specially adapted, in whole or in part, within such jurisdiction, to warlike use.

"Secondly, not to permit or suffer either belligerent to make use of its ports or waters as the base of naval operations against the other, or for the purpose of the renewal or augmentation of military supplies or arms, or the recruitment of men.

"Thirdly, to exercise due diligence in its own ports and waters, and, as to all persons within its jurisdiction, to prevent any violation of the foregoing obligations and duties."

Inclusion in the American case of indirect claims arising from the transfer of American shipping to British registry enhanced insurance premiums, and the prolongation of the war was apparently designed to obtain the rejection of such claims by the tribunal and thus to protect the United States, when neutral, from similar pretensions. As the British held that such claims were barred by the treaty, the tribunal saved the arbitration from imminent shipwreck by excluding the indirect claims from consideration. On September 14, 1872, by a majority of four to one, the tribunal awarded the United States $15,500,000, including interest, for losses caused by the *Alabama*, the *Florida* and their tenders, and by the *Shenandoah* after her force was augmented at Melbourne. Judgment was in favor of Great Britain in the other cases. Costs of pursuit were excluded as not properly distinguishable from the general expenses of the war.

The decision, however, that " 'due diligence' . . . ought to be exercised by neutral governments in exact proportion to the risks to which either of the belligerents may be exposed, from a failure to fulfil the obligations of neutrality on their part," is believed to be a vague and unsatisfactory measure of neutral obligation. It is to be noted that the Hague Rules of 1907, while recognizing the first rule of the Treaty of Washington as expressing a general principle of international law, substituted for the obligation of "due diligence" the duty of employing "the means at its disposal."

Thus the *Alabama* claims served to crystallize a much discussed problem in international law as to the duty of neutrals in preventing not only the outfitting but the building of armed vessels or vessels of war. The subject was of small importance in the days when only small sailing vessels were built and used for naval warfare. The destructiveness of a modern war vessel, however, is so great that it may prove a decisive factor; moreover its sale by a neutral is more readily recognized as an unfriendly act.

JAMES P. BAXTER, 3RD

See: ARBITRATION, INTERNATIONAL; NEUTRALITY; BELLIGERENCY.

Consult: Cushing, Caleb, *The Treaty of Washington*

(New York 1873); Davis, J. C., *Mr. Fish and the Alabama Claims* (New York 1893); Hackett, F. W., *Reminiscences of the Geneva Tribunal of Arbitration* (Boston 1911); Lang, Andrew, *Life, Letters, and Diaries of Sir Stafford Northcote*, 2 vols. (Edinburgh 1890) vol. ii, ch. xii; Selborne, Roundell Palmer, first Earl of, *Memorials*, 4 vols. (London 1896–98) vol. i, pt. ii, chs. x-xii; Wolf, Lucien, *Life of the First Marquess of Ripon*, 2 vols. (London 1921) vol. i, p. 236–71; Moore, J. B., *History and Digest of the International Arbitrations to which the United States has been a Party*, 5 vols. (Washington 1898) vol. i, ch. xiv; Adams, C. F., "Before and After the Treaty of Washington" in his *Lee at Appomattox and Other Papers* (Boston 1902) p. 31–255; *Cambridge History of British Foreign Policy, 1783–1919*, ed. by A. W. Ward and G. P. Gooch, 3 vols. (Cambridge, Eng. 1922–23) vol. iii, p. 54–71; Adams, E. D., *Great Britain and the American Civil War*, 2 vols. (London 1925); Baxter, J. P., 3rd, "The British Government and Neutral Rights, 1861–1865" and "Papers relating to Belligerent and Neutral Rights, 1861–1865" in *American Historical Review*, vol. xxxiv (1928) 9–29 and 77–91.

ALBERDI, JUAN BAUTISTA (1810–84), Argentine political scientist, sociologist, economist and lawyer. He studied in the University of Buenos Aires and received his doctorate in law from the University of Córdoba in 1838. He joined with Echeverria, Miguel Cané the elder and J. M. Gutiérrez in opposition to the dictatorship of Juan Manuel de Rosas and was forced to emigrate to Montevideo (1839), where he continued his propaganda, and thence to Chile, where he developed a reputation for his legal learning and his journalistic efforts. Upon the fall of Rosas (1852) he composed in five days *Las bases*, the best known of his works, an analysis of liberal American constitutions, with recommendations for the new Argentine constitution, which he anticipated. Most of his suggestions were adopted and he became adviser to the new Argentine president, Urquiza, who sent him on a diplomatic mission to England, Spain, France and the Holy See. When Urquiza's confederation was overthrown in 1861 by political combinations in Buenos Aires headed by Mitre and Sarmiento, Alberdi remained in Europe. He died in Paris, a virtual exile. His works on social subjects totaled twenty-four volumes, sixteen of which were published posthumously. His long residence in Europe, in contact with leading minds, made him the most competent of the Argentine social scientists of his day, while his ability and liberalism made him the idol of the generation of political thinkers that followed him.

L. L. BERNARD

Important works: *Las bases* (Valparaiso 1852); *Sistema económico y rentístico de la Confederación* (Valparaiso 1854); *Estudios económicos* (Buenos Aires 1895); *Peregrinación de Luz del Dia* (a Utopian romance) (Buenos Aires, n.d.); *Ensayos sobre la sociedad* (Buenos Aires 1898); *El crimen de la guerra* (Buenos Aires 1915), tr. by C. J. MacConnell (London 1913).

Consult: Bernard, L. L., "Development and Present Tendencies of Sociology in Argentina" in *Social Forces*, vol. vi (1927–28) 13–27; García Mérou, Martín, *Alberdi* (Buenos Aires 1916); Pereyra, Carlos, *El pensamiento político de Alberdi* (Madrid 1919); also biographical introductions to Alberdi's works (La Cultura Argentina edition) (Buenos Aires 1915–).

ALBERONI, JULIO (1664–1752), a cardinal and prime minister of Spain from 1715 to 1720. He was born of poor parents in the duchy of Parma, and after entering the priesthood rose rapidly to prominence. Alberoni was introduced to the court of Philip v through the French general, Marshal Vendôme, at the time when French dominance in Spanish councils was being maintained through the influence of the celebrated Madame des Ursins. Alberoni successfully induced her to sponsor the marriage of Philip v to Elizabeth Farnese (Isabel Farnesio), who later earned her title, the "Termagant of Spain." Backed by the determined queen, Alberoni managed to become head of the ministry and from that position was eventually elevated to the rank of cardinal.

He found Spain at the lowest ebb of her political fortunes, but he was so competent an executive that under his administration Spain became again a first rate factor in European affairs. He introduced important changes in the fiscal system, encouraged the manufacture of woolens and linens, enlarged the navy and strengthened fortifications. These internal reforms were a necessary prelude to the ambitious role which Alberoni had decided that Spain should play in Europe.

The inspiration of his foreign policy remains somewhat enigmatic, but it has been conjectured that as a patriotic Italian he hated the emperor for having made Italy the battle ground of Europe, and looked toward the aggrandizement of Spain in order that its splendor might insure the peace of Italy. He spread a remarkable net of secret intrigue in all the courts of Europe in furtherance of his plans to secure alliances for Spain. Finally, assisted by the great organizer Patiño, he sent Spanish forces to Sardinia in 1717 and to Sicily in 1718, overrunning both. This aroused a storm in Europe and produced a coalition of England, France and Austria; the kingdom of Sardinia eventually

forced Spain to yield her conquests and to dismiss her minister.

In a sense Alberoni had failed, but he had in fact started that movement of regeneration in the peninsula which was to culminate in the reign of Charles III (1759–88). In his later years he drew up plans for a Diet of Perpetual Peace, advocating a European league of the Christian nations. These ideas of one of the greatest exponents of secret diplomacy in its most exaggerated form were in their time, perhaps, not inconsistent with an ultimate objective aiming at the general pacification of Europe.

CHARLES E. CHAPMAN

Consult: Ballesteros y Beretta, Antonio, *Historia de España y su influencia en la historia universal*, vols. i–v (Barcelona 1919–) vol. v, p. 48, 118–19, which gives an extensive bibliography. Of the recent works in English see Vesnich, M. R., "Cardinal Alberoni, an Italian Precursor of Pacifism and International Arbitration" in *American Journal of International Law*, vol. vii (1913) 51–82.

ALBERTI, LEON BATTISTA (1404–72), Italian humanist, born in Venice of an illustrious Florentine family. A man of universal interests, his work as an author, scientist, moralist, economist and aesthetic philosopher was distinguished by clear judgment and good taste, which also guided him in the practise of the arts of music, painting, sculpture and architecture. His life was one of industry and concentration and, possessed of a strong sense of reality, he achieved a happy equilibrium between the useful and the ideal, between scientific precision and free imagination, and between the demands of the ego and those of social consciousness.

Alberti's educational ideal differed from that of the fifteenth century, in which literary culture was considered equivalent to a knowledge of humanity (Petrarch, Vittorino, Vergerio, Vegio, Filelfo, etc.). The struggle with fate, the necessity of feeling God in his own nature, were the realities of man's existence and were far removed from the life of the man of letters, whom Alberti regarded as being a naïve child—the eternal pupil. He expressed this contrast in striking fashion in his first great satires on the literary man, the theologian and the scholar; the man of action is contrasted with the littérateur, and the reality of a life of activity in which the will is directed to the cultivation of virtue and of the art of life is opposed to the concept of human culture as study dependent upon erudition and memory. He advised the aristocrat to educate his son for some occupation such as agriculture, navigation or the crafts rather than for the empty life of a literary dilettante. Life is an art, and art in this larger sense is the result of active practise. The proper direction of a family is the highest art. The perfect school is that which is directed by experts; education culminates in self-control, and the perfect society is the society of the self-controlled.

GIUSEPPE LOMBARDO-RADICE

Works: *Opere volgari*, ed. by A. Bonucci, 5 vols. (Florence 1843–49); *I libri della famiglia*, ed. by G. Mancini (Florence 1908); *I primi tre libri della famiglia*, ed. by F. C. Pellegrini (Florence 1913); *Opera inedita et pauca separatim impressa*, ed. by G. Mancini (Florence 1890).

Consult: Mancini, G., *Vita de L. B. Alberti* (Florence 1882); Brunelli, Valina Benetti, *Leon Battista Alberti e il rinnovamento pedagogico nel quattrocento* (Florence 1925); Voigt, G., *Die Wiederbelebung des classischen Alterthums*, 2 vols. (2nd ed. Berlin 1880) vol. i, p. 372–79; Gerini, G. B., *Gli scrittori pedagogici italiani del secolo decimoquinto* (Turin 1896) p. 149–204; Woodward, W. H., *Studies in Education during the Age of the Renaissance, 1400–1600* (Cambridge, Eng. 1906) ch. iii.

ALBERTUS MAGNUS (1206–80), theologian and philosopher. While his father, a powerful feudal noble, was at war with Lombardy he was sent to study at Padua, where he joined the Dominican order (1223). He studied and taught theology at Cologne and at various Dominican monasteries, and in 1245 went to Paris to occupy one of the Dominican chairs in theology. Thomas Aquinas studied under him at Paris and returned with him to Cologne (1248), where Albertus was to establish a *studium generale*. Together with Aquinas and Peter of Tarentasia he drew up the regulations governing studies in the Dominician order (1259). He was made bishop of Ratisbon (1260–62), accepting the post against his wishes in order to indicate his obedience, and resigning it after having shown his incapacity for a decent period. After the death of Thomas Aquinas he traveled to Paris to defend the doctrines of Thomas from the attacks of the bishop and the clergy (1277).

Albertus' project was to write a work for every work Aristotle had written or had planned. The completion of that encyclopaedic task introduced to western Europe for the first time a body of positivistic knowledge modeled on the sciences of the Greeks. In the course of his labors Albertus wrote an *Ethics* and a

Politics which made readily available the social theory of Aristotle, and reenforced with a body of theory the emphasis placed in Christian ethics and canon law on importance of habituation in the virtues and on consent in law. It was Thomas who synthesized and systematized the vast and diverse materials which Albertus had assimilated.

RICHARD MCKEON

Works: *Opera omnia*, ed. by A. Borgnet, 38 vols. (Paris 1890–99).

Consult: Thorndike, L., *A History of Magic and Experimental Science*, 2 vols. (New York 1923) vol. ii, p. 517–92; Lottin, Odon, *Le droit naturel chez Saint Thomas et ses prédécesseurs* (Bruges 1925); Feiler, W., *Die Moral des Albertus Magnus* (Leipsic 1891).

ALBUQUERQUE, AFFONSO DE (1453–1515), Portuguese soldier and statesman, founder of Portugal's Indian empire, one of the earliest advocates of commercial imperialism and of preparedness as the means to prevent war. The aim of his conquests as governor general of India (1509–15) was the Portuguese monopoly of Indian commerce. To effect this he determined to control the source of supply by occupying the principal Indian ports from Malacca westward and to prevent all Mohammedan commerce with Europe by policing the Red Sea, especially at Aden, its southern entrance. His Red Sea expedition failed, but at the time of his death Portugal was strongly entrenched in Malacca, Ormuz, Calicut, Cochin, Cannanore, Goa, and was on friendly terms with the East Indian kingdoms and with Siam, China and Java.

Since eastern commerce was almost entirely in the hands of the Mohammedans, to destroy it was also to spread the gospel. To this end Albuquerque allied himself with Hindoo princes. He appointed Hindoos to minor administrative positions and attempted to establish schools to educate them in western customs and language. Hindoo women were married to Portuguese men in a consistent attempt at permanent colonization. Albuquerque was not deficient in cruelty yet he prohibited suttee in the island of Goa; and he restored the original tax levy which had been doubled by a previous conqueror. The Hindoos said of him when he died "that God had need of him for some war and had therefore sent for him."

CLARA W. MAYER

Consult: Stephens, H. Morse, *Albuquerque* in Rulers of India series (Oxford 1892); *Commentarios do grande Afonso Dalboquerque*, 2 vols. (Lisbon 1774), tr. by Walter de Gray Birch as *The Commentaries of the Great Afonso Dalboquerque*, 4 vols. (London 1875–84); *Cartas de Affonso de Albuquerque*, Collecção de monumentos in editos para a historia das conquistas dos Portuguezes em Africa, Asia e America, series I, vols. x, xii–xvi (Lisbon 1884–1915).

ALCABALA is a turnover tax which exerted considerable influence in the economic development of Spain. It has a very long history. A successful complaint on the part of some Spanish communities against the dishonest farming out of the alcabala by the praetors is recorded as early as 171 B.C. An inscription indicates a turnover tax of one half percent in Baetica at the time of Augustus. Coimbra had a turnover tax in 734. In documents of the twelfth century the alcabala is mentioned as a community tax, corresponding to earlier regulations in Greece, Macedonia and Rome, and to a contemporary development in Germany, France and the Orient (Mecca).

Through its reintroduction in 1342 the alcabala became generally significant. The Cortes of Castile in Burgos and the Cortes of León granted it to Alfonso XI (1312–50) in the form of a 5 percent tax on all goods in Castile and León, i.e. on all business turnovers, from producer to consumer, on condition that it be in force only during the siege of Tarifa and Algeciras. The alcabala retained its character as both war tax and special tax during the fourteenth century, as is evidenced in the levy by the Cortes of Alcaba for the siege of Gibraltar (1349). Beginning with 1366 the tax rate was 10 percent, and after a temporary reduction it rose to the same amount under Ferdinand V and Isabella of Castile (1474–1516) and under Philip II (1556–98).The Spaniards began to introduce the alcabala into the kingdom of Naples and into their American colonies in 1558. An attempt to introduce it into the Netherlands, however, met with failure in 1571.

Philip IV increased the rate on the last turnover by 1 percent successively in 1642, 1656 and 1664; henceforth until about 1785 the rate was 11 percent for the retail trade, the charge on other business turnovers remaining at 10 percent. From 1785 on, the general rate on the necessities of life was lowered to 2 percent; moreover the tax was made payable only for the first sale, all subsequent transfers being made free of tax. The alcabala acquired thus the character of a production tax.

To avoid the difficulties of administration the

kings made tax agreements (*encabeziamiento*) with the communities (1494, 1509, 1513, 1537, 1556), according to which the latter had to pay in each case stipulated lump sums that were raised by means of the alcabala administered by them. The amount payable to the king was calculated in such a way that the actual total burden of the alcabala, making allowances for exemptions, did not amount to more than 5 percent. Owing to laxity in administration the yield declined to 2 or 3 percent, but the administration improved and the yield increased under Philip II. This caused the cities to oppose the *encabeziamiento* procedure. Charles V attempted to avoid this difficulty first by abolishing this method of collection, then by extending it to all taxes and in 1523 by substituting a head tax for the alcabala. The ensuing changes in the amounts payable to the king produced a total tax burden of 7 percent from 1562 to 1576, 20 percent from 1576 to 1584, 15 percent from 1584 to 1595, and 7 percent again in 1620 and afterwards.

As a rule the payment of the tax was shared equally by sellers and buyers. Confirmation by oath of the accuracy of tax statements was sometimes demanded and severe penalties were imposed for inaccurate statements, fraudulent bookkeeping or tardy payments. At first there were no exemptions, but later certain classes of persons and the sale of certain types of commodities were exempted. The persons exempted included the king and his household, many of his artisans, certain monasteries, castles and settlements, officers of the Inquisition, the nobility and some others. Except in connection with purely business transactions, the clergy were exempted. Certain prelates enjoyed the same privilege in selling the products of their orders' benefices. Transactions in saddle animals, books, manuscripts, paintings, hawks and other hunting birds, slaves imported from Moorish territory in war time, cattle, weapons, certain cloths, bread, money, wedding presents, legacies, fir wood for the royal wharves in Seville were all exempted.

The economic disadvantages of the alcabala were reflected in the acuteness of the conflicts over the rate and the lump sum agreements. They were accentuated by the nature of the exemptions and by the system of farming out the taxes, which allowed the tax farmer far reaching authority and which lasted, with interruptions, until 1747. There were numerous attempts at reform. So important had the problem become that Queen Isabella in her will ordered a commission, which, however, was never created, to investigate the legality of the alcabala. In the eighteenth century the opposition was active in the textile industry in particular, but it was also carried on by individuals (as in the memorandum of Don Miguel de Zabala to Philip V in 1734). It was difficult to dispense with the alcabala; even although inefficiently administered it was a highly productive tax, so that the decrease in revenue resulting from its abolition could scarcely be compensated by other taxes. The radical changes of 1785 foreshadowed the final abolition of the alcabala by the decree of June 20, 1843, and, after its temporary reintroduction, by the federal law of May 23, 1845. The name is retained today only in connection with special transfer taxes such as the tax on real estate.

It has been thought that the alcabala retarded and inconvenienced trade and restricted production for distant markets, and it has been considered the cause of the ruin of manufactures in Spain. Some writers, especially in the eighteenth century, have even maintained that the alcabala was the sole or principal cause of the downfall of Spain. However, for lack of sufficient evidence one would hesitate to ascribe this event to any single cause. Economic greatness is a function of too many variables—political, cultural, technological—to be so completely affected and determined by a single feature of governmental policy.

ROLF GRABOWER

See: SALES TAX; BUSINESS TAXES; REVENUE FARMING.

Consult: Grabower, Rolf, *Die Geschichte der Umsatzsteuer und ihre gegenwartige Gestaltung im Inland und im Ausland* (Berlin 1925) p. 147–62, 275–80; Espejo, Cristóbal, "El encabeziamiento de Madrid por alcabalas, de 1547 a 1556" in *Revista nacional de economía*, vol. xxvii (1928) 3–26 and 193–216; Colmeiro, Manuel, *Historia de la economía política en España*, 2 vols. (Madrid 1863); Goury du Roslan, Jules, *Essai sur l'histoire économique de l'Espagne* (Paris 1888).

ALCHEMY. An art of solitary adepts working in secret under the lure of great personal gain, alchemy has always remained in a stage of uncertainty and suggests the somewhat confused mental attitude of the would-be inventor who has not yet succeeded in working out his idea and making it practical. At various times and places it has been illegal, or at least the object of hostile legislation and moral criticism. If it did not originate in, it has been associated

with, the fraudulent practises of workers in metal, the making of imitation or artificial gems, counterfeiting, medical quackery and the magic arts (for specific illustrations of magic in alchemy see L. Thorndike, *History of Magic and Experimental Science*, 2 vols., New York 1923). At the same time it has closely accompanied the social service rendered by medicine and technology, and has antedated modern chemistry. It has not merely been a social fact with which we must reckon through a long period of history; it is still extensively practised and credited in Egypt and the Near and Far East.

Alchemy finds its place in intellectual history as a delusion, more learned and technical than popular, based upon or enveloping the fact, imperfectly apprehended, of chemical change. With this sound foundation and scientific center of interest, alchemy could not go wholly wrong in its aberrations or fail to stumble occasionally upon new facts of nature or useful processes. The modern scientific laboratory is in no small measure an outgrowth of the mediaeval alchemist's workshop. Because of this element of truth and the rational purposiveness and practical character of much of alchemy's procedure, such as distillation and sublimation, one hesitates to classify it as an occult science or form of superstition. But when the alchemist takes pen in hand, he is likely to begin with as large promises and startling announcements as a circus poster, to continue as fluently as a longwinded preacher, only to terminate in cryptic and enigmatic evasions. He often employs religious phraseology and reasoning, alludes to initiations and mysteries, makes much use of allegory and symbolism. On the other hand it is hard to draw any fast line between the recipes of alchemy and those of the arts, since they are found in the same treatises and authors. Alchemical theory had relations with philosophy and perhaps originated in the discussion of world grounds and the constitution of matter by the early Greek thinkers. Mediaeval alchemists related their argumentation to the philosophy of Aristotle, with further touches of neo-Platonism, mysticism and especially the astrological hypothesis that things terrestrial are governed by things celestial. Perhaps the earliest explicit association of seven metals with the planets is in the account of Persian Mithraism by Celsus, the second century foe of Christianity (see Origen, "Reply to Celsus," in *Ante-Nicene Fathers*, 10 vols., Buffalo 1887–96, vol. iv, p. 583).

The earliest extant alchemical writings, however, are in Greek from about the third to the fifth century. Zosimus was alchemist as well as historian. The authors of these treatises regard their art as descended from ancient Egyptian kings and priests, and there are other reasons for tracing alchemy back to Egypt or for assuming a strong influence of Egyptian thought and ritual upon alchemy, perhaps indirectly through gnosticism. A recent Greek writer has placed the birth of alchemy rather late in Egyptian history, at 718 B.C. during the Ethiopian invasions (see M. Stephanides, "La naissance de la chimie" in *Scientia*, vol. xxxi, 1922, 189–97). But Julius Ruska, in a still more recent detailed study of the Emerald Table ascribed to Hermes Trismegistus, finds signs of a strong Persian influence.

Although alchemical writings in Greek run into the Byzantine period, and technical recipes in Latin continue in unbroken tradition through the early Middle Ages, it was especially by translation of works in Arabic that alchemy spread in western Europe from the twelfth century on. Berthelot regarded Arabic alchemy as fantastic and magical compared to later mediaeval works in Latin. But the recent investigations by such scholars as E. Wiedemann, E. Darmstaedter, H. E. Stapleton and E. J. Holmyard in Arabic manuscripts and sources have rehabilitated Jabir ibn Hayyan as one of the greatest figures in the history of alchemy, and brought out the positive experimental contribution of Arabic alchemy.

The generalization may nevertheless be hazarded that alchemy grows less magical and more scientific as we advance through mediaeval to modern times. The use of minerals, metals and chemicals in medicine may be traced back earlier than Paracelsus and the iatrochemists of the sixteenth and seventeenth centuries. Learned men such as Conring, Libavius, Ashmole and Sir Hans Sloane, founder of the British Museum in 1753, and even such scientists as Stahl and Boyle, retained faith or at least interest in the possibility of transmutation.

This was a speculative or scientific interest rather than a craving for lucre. Possibly the scarcity of capital before modern times may have motivated the activities of alchemists, but success on their part is seldom recognized in past literature outside of their own propaganda. Diocletian is said to have burned the books of

the alchemists in Egypt because their activity had financed revolts against him, but one recalls more allusions to persons who lost their gold by employing alchemists in the effort to multiply it. In the fourteenth century the inquisitor Eymeric declared that alchemists come under the censure of divine law as intent on gold, and accused them of defrauding even the poor. On the other hand both Franciscan friars and Rhenish archbishops are listed prominently among devotees of the art.

LYNN THORNDIKE

See: MAGIC; SUPERSTITION; PHILOSOPHY; SCIENCE; MEDICINE.

Consult: GUIDES: Borel, P., *Bibliotheca chimica; seu catalogus librorum philosophicorum hermeticorum usque ad annum 1653* (Paris 1654); International Union of Academies, *Catalogue des manuscrits alchimiques grecs*, ed. by J. Bidez, F. Cumont, J. H. Heiberg and O. Lagercrantz, vols. i–iii, v–vi (Brussels 1924–28); Singer, D. W., and Anderson, A., *Catalogue of Latin and Vernacular Alchemical Manuscripts in Great Britain and Ireland Dating from before the Sixteenth Century* (Brussels 1928); Carbonelli, G., *Sulle fonti storiche della chimica e dell' alchimia in Italia* (Rome 1925).

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HISTORIES: Lenglet du Fresnoy, N., *Histoire de la philosophie hermétique*, 3 vols. (Paris 1742), containing a bibliography in vol. iii; Wiegleb, J. C., *Historisch-kritische Untersuchung der Alchemie* (Weimar 1777); Kopp, H., *Die Alchemie in alterer und neuerer Zeit*, 2 vols. (Heidelberg 1886); Berthelot, M., *Les origines de l'alchimie* (Paris 1885), *La chimie au moyen âge*, 3 vols. (Paris 1893), and *Collection des anciens alchimistes grecs*, 3 vols. (Paris 1887–88); Poisson, A., *Théories et symboles des alchimistes* (Paris 1891), and *Histoire de l'alchimie*, XIVe *siècle* (Paris 1893); Lippmann, E. O. von, *Entstehung und Ausbreitung der Alchemie* (Berlin 1919); Mercer, J. E., *Alchemy, Its Science and Romance* (London 1921); Mieli, A., *Pagine di storia della chimica* (Rome 1922); Ray, P. C., *A History of Hindu Chemistry from the Earliest Times to the Middle of the Sixteenth Century*, 2 vols. (London 1902–09); Johnson, O. S., *A Study of Chinese Alchemy* (Shanghai 1928); Luanco y Riego, J. R. de, *La alquimia en España*, 2 vols. (Barcelona 1889–97).

ALCIATI, ANDREA (1492–1550), Italian jurist, who played a leading part in the revival of the study of Roman law and in the reestablishment of its authentic texts during the humanist movement of the sixteenth century. He held successive chairs of law at various Italian and French universities, wandering to and fro at the invitation of sovereigns or as a result of local strife and the tumults of war. His lectures drew large audiences, including distinguished scholars and aspiring social and religious reformers from many countries; his numerous writings soon exercised a profound influence on the development of legal science in Europe. He was in constant touch with the general reform and renaissance movement, and was closely associated with such men as Erasmus, Bembo, Sir Thomas More, Zasius, John Calvin, Theodore Beza, Vasari and J. Amyot. He admired Luther's ardent courage, but deplored his invective and rough manners. He never abandoned Catholicism, though he disapproved of the license at the papal court, superstitious belief and any violent assertion of authority.

Alciati's works, which are inevitably fragmentary, represent the lifelong strivings of a keen explorer, the critical views of an untiring controversialist, and the reconstructive conceptions of one who sought to separate the true from the false (which had been mixed up for centuries), the trivial and irrelevant from the significant and material. His aim throughout was to show the real meaning and application of the Roman law, and to liberate it from its destructive incubus of spurious additions and erroneous interpretations by preceding glossators and commentators: that is to say, his purpose was not merely analytical and expository, but—what was of supreme importance then—historical and comparative, based on the true original sources.

As a humanist he held, contrary to many contemporary jurists, that he who would be a sound lawyer should not limit himself to the study of law but should devote himself also to history, literature, philology, political science and other ancillary subjects. In the search for truth he set knowledge and independence of thought over against unreasoning tradition and dogmatic authority; and he regarded a jurist as a priest in the service of justice. He is a founder of the scientific method in jurisprudence, and to him is due the rise of the great French school of law in the sixteenth century.

COLEMAN PHILLIPSON

Works: *Opera omnia*, ed. by F. Alciatus, 4 vols. (Frankfort 1617).

Consult: Moeller, E. V., *Andreas Alciat* (Breslau 1907); Phillipson, Coleman, "Andrea Alciati and His Predecessors" in *Great Jurists of the World* (Boston 1914) p. 58–82.

ALCOHOL.

HISTORICAL ASPECTS. Alcohol has been used by mankind since the remotest antiquity, and its use has extended over virtually all parts of the earth. Its principal significance for the history of culture arises from its use as a beverage.

It is convenient and customary to classify alcoholic drinks as beers, wines and distilled liquors. Beer is produced by the fermentation, aided or unaided, of grains or roots. Virtually every cultivated cereal known to man, and many roots, appear to have been in use for beer making. To judge from its distribution, the making of beer may be considered to have originated relatively early among some agricultural group of the Old World and to have spread throughout the agricultural cultures of the Old World and most of those of the New World. Non-agricultural hunters, mere gatherers of wild grains and roots, such as the wild rice gatherers of the Great Lakes region of North America, the root gatherers of northwestern North America and the aboriginal Australians, have no knowledge of beer making. The agriculturists of North America, save in the Pueblo region of the Southwest of the United States, had no knowledge of beer; neither, apparently, had the agricultural Melanesians and Polynesians.

The problem concerning the appearance of beer making in America has not yet been settled, although the idea of diffusion is strongly supported by the distribution in America, Oceania and southeastern Asia of the masticatory preparation of beer and kava (the latter a non-alcoholic drink). Mastication of starchy grains and roots through the action of the saliva facilitates the conversion of the starch into sugar, and consequently hastens the fermentation. In Formosa and southeastern Asia rice flour is masticated by women in the preparation of rice beer. In Polynesia (but not Melanesia) the pepper root is masticated in preparation of kava by both men and women. The saliva aids in releasing the active alkaloid. Throughout the range of maize and manioc culture in the Americas, except in non-Puebloan United States, maize flour or manioc root is masticated by women in preparation of maize or manioc beer. In Mexico peyote was thus masticated in the preparation of a non-alcoholic beverage. This and kava preparation are perhaps interesting examples of a process taken from one complex and transferred to another.

Wines are the fermented juices of stems (such as sugar cane and palms), of fruits (such as the grape), of flowers or of berries. Mead—fermented honey—may be classed as a wine, and also kumiss—fermented milk. Grape wine is peculiar to the grape growing region surrounding the Mediterranean. Palm wine is universal in agricultural Africa, around the Indian Ocean littoral, and in the agricultural Americas except north of Mexico. In Mexico sap from the flower stalk of the agave (century plant, or aloe) was used to make wine (pulque). Mead and kumiss appear to be correlated in distribution and may be presumed to have originated among the pastoral peoples of the central Eurasian plains. Both of these aberrant forms of wine were used throughout Europe (even in Iceland and Lapland) and western and central Asia; and among the Kaffirs of South Africa (to whom they spread, no doubt, with cattle domestication). The Chinese, Japanese and southeast Asiatics will not use milk or milk products and consequently have never adopted kumiss. Non-agricultural and non-pastoral races do not use wild berries or fruits for wine making, and all forms of wine may be considered to be, with beer, originations of some agricultural people.

The history of distillation is very obscure. From the available data it may tentatively be considered to have been invented for non-beverage purposes by the alchemists shortly before our era and then applied to the distillation of wines and beers. Distillation was perhaps first used to produce distilled alcoholic beverages in India about the beginning of our era; it spread thence throughout Europe and Asia in the first millennium of our era, and in the second half became world wide; it spread even to primitive peoples such as the North American Indians, who had previously not known even wine or beer. Thus it appears that the use of beers and wines is correlated with the distribution of advanced primitive culture; and the distribution of distilled liquor is correlated with higher civilization and its spread.

One might expect to perceive in history evidence of physical and cultural disintegration, at least among groups where there has been widespread use of governmentally uncontrolled and therefore imperfectly performed distillation of strong liquors. But even in the case of mediaeval Japan (*cf.* Morewood) and of Ireland and Scotland of the past several centuries, where there was such a widespread use of badly distilled illicit whiskey, we witness the development of populations of more than average health and physical vigor. In contrast to the

peoples just mentioned we witness in history the physical and cultural recession of the Hindoo and Moslem peoples who have measurably reduced alcohol consumption through prohibitory legislation. However, conclusions from history as to the racial benefits of alcoholic consumption are difficult to draw.

Social history evidences repeated opposition on the part of the organs of social control of various groups to the abuse of alcoholic beverages. Usually the opposition to their abuse has led to their prohibition. And it is a striking fact that, until the recent prohibition in Russia and the United States, all prohibitory legislation has been among wine drinking nations. It is furthermore a striking fact that all prohibition has been a failure, the effect having been only to increase social hypocrisy and to augment the use of liquors distilled without governmental supervision or commercial standardization and therefore containing poisonous by-products of imperfect distillation, with consequent menace to the public health.

Hindoos have been forbidden the use of alcoholic beverages since late Vedic times. In the later *Smritis* the manufacture, transportation, giving, sale, acceptance or use of any alcoholic beverages was a capital offense. The laws of Manu required suicide of any Brahman touching liquor. Even using a wine bottle for water was a sin and a penal offense. Hindoo prohibition for two thousand years has been ignored by the lower classes and only nominally obeyed by the upper classes. Even the Brahmans have always drunk secretly. Breath purifiers were and are used to conceal the universal hypocrisy. Some important Hindoo cults even drink openly, but before drinking they recite a formula over the liquor to secure advance absolution for the sin of drinking it.

Mohammed forbade all use of alcoholic beverages to all Moslems, but alcohol has been stronger than the Koran and, save for several small fanatical sects, all Moslems have drunk, some openly, some secretly, some moderately, some to excess.

The Aztec cities of ancient Mexico had prohibition laws which permitted the use of alcoholic beverages only to the sick and aged, to hard workers in the building trades, and on festal occasions to the common people. There was much infringement of the law, but available data seem to indicate that it may have had some measure of success. In Incaic Peru there was prohibition only of the use of one particularly intoxicating beer (the *sora*). In ancient China and the ancient Mediterranean region there were several minor sporadic attempts at prohibitory legislation, short lived and unsuccessful.

In the movements of frontiers during the modern period (since the initiation, about 1450 A.D., of the establishment of direct European contacts with the relatively primitive peoples of Africa, Oceania and America), we are able to witness the effect of the introduction of distilled liquors among peoples who previously were ignorant of them—even, like the North American Indians and Polynesians, ignorant of wines and beers. A resumé of the facts shows that the effect was initially disastrous but that the native peoples were gradually able to develop control over their appetites and moderate their consumption. The Polynesians and North American Indians, it is true, have virtually died off, but this has been due to the operation of factors which were chiefly economic; the Indians of Latin America and the Negro in Africa and America have become adjusted socially to alcohol and are increasingly vigorous and prolific.

Economically alcoholic drinks have not played a very significant role in history. Their bulk in relation to value has been such, considered along with the fact of the universal prevalence of raw materials from which they may be manufactured, that transportation costs make economically unprofitable inter-group trade in any but local specialities desired by the rich for variety's sake. As an element in consumption economically considered these drinks have been more significant, but their economic importance is reduced by the fact of their cheapness considered in relation to the cost of other foods or indulgences and in relation to the amount an individual may regularly consume. It is true that the drinks are often made costly by state taxation and the total national expenditure on them is relatively great, but much of the price paid by the consumer is then properly chargeable not to the consumption of alcohol but to contribution to the public treasury.

W. C. MacLeod

Biological Aspects. The reasons why mankind has used alcoholic beverages so long and so universally may reasonably be presumed to be basically two in number. In age long experience mankind has found that, in general, alcoholic beverages are pleasant rather than painful in their physical and psychic effects upon the organism and useful to the physiologi-

cal (including the psychological) economy to a degree which throws the balance on this score in their favor. If in the common sense of mankind alcohol as a beverage had been found to be unpleasant, useless or necessarily and inevitably harmful, its use in this way would have ceased centuries ago.

Dodge and Benedict have pointed out that at the present time millions of people regularly obtain a somewhat larger proportion of their total energy requirement from alcohol than they do from proteins. Alcohol in moderate amounts is almost completely oxidized or burned in the human body, yielding energy available for use in muscular work and in the maintenance of body temperature. This fact, by definition, makes alcohol a food. It can within limits replace equivalent amounts of fats and carbohydrates in the diet, and within these limits can spare protein in the same way that fats and carbohydrates can. Richter, in a remarkably thorough, long continued and critical piece of research, has demonstrated that rats which took alcohol ate from 16.9 to 35.6 percent less than controls which drank pure water. In spite of the fact that they ate so much less they grew just as rapidly and reached the same body weight at maturity as the controls. Under conditions of nearly equal activity the energy of the alcohol, calculated in calories per kilogram body weight, exactly counterbalanced the decrease in energy intake. The conclusion was drawn that, in the rat, alcohol not only replaces isodynamic quantities of food in maintaining energy balance, as was demonstrated in man by Atwater and Benedict, but it is also used for growth and development.

In its normal use as distinguished from its abuse alcohol has been important sociologically in two ways. The first of these is as food. The present day nutritional habits of the populations of the wine and beer drinking countries of Europe perfectly illustrate the importance of alcohol in this respect. The second way has been as a facilitating agent to social relations between human beings. Alcohol in ordinary doses is a mild narcotic, of rapid action because it is extremely diffusible and passes easily through all animal membranes. It thus brings about quickly a diminution of function of the neural mechanisms of the highest level in the cerebral cortex. Starling has well described the resulting effects upon behavior: "The self-consciousness and preoccupation of each man with his own affairs become lessened. He is more receptive of the moods and interests of his companions. His emotional responses are more readily aroused; the solemn man unbends, the critical becomes charitable and sympathetic, the silent man more loquacious. Each man thus not only reveals himself more to his fellows but is more ready to appreciate the merits and conversation of those around him. In a word, the use of alcohol in moderation promotes good fellowship" (*The Action of Alcohol on Man*, p. 77). The collective experience of mankind has demonstrated that such forms of behavior favor social intercourse and relations.

When alcohol is taken in excessive doses its narcotic action extends from the highest neural levels to those lower and lower. If the amount taken is sufficient the personality of the individual may become completely disorganized, and death may result from the acute toxic effects of the alcohol. In the successive stages of disorganization of the personality by alcohol, the individual tends progressively to become a nuisance and potentially a menace to society, precisely as would be the case if a similar physiological and psychological alteration were brought about by any other agent.

Although in its action on the nervous system alcohol is a narcotic, its action on the biological function of growth appears generally to be stimulating. For example, Puri showed that low concentrations of ethyl alcohol in the nutrient solutions in which barley seedlings were grown had a definite stimulating effect. Pearl and Allen found that cantaloupe seeds, soaked in solutions of ethyl alcohol up to 12 percent concentration, made better seedling growth than controls soaked in pure water. Mast and Ibara found that tadpoles in weak solutions of alcohol not only lived longer than the controls but grew much larger in the same length of time; so much so that the superiority was apparent at a glance and required no elaborate measurements for its demonstration. But these findings are of purely biological interest.

As far as man is concerned there are two aspects of the problem of the biological effects of alcohol which are of direct sociological import: first, the effect of alcohol upon longevity; and second, the racial effect of alcohol. The experience of insurance companies has long been cited as demonstrating that the use of alcoholic beverages of any amount or kind shortens the duration of life, as compared with total abstention. This evidence, however, cannot be taken as conclusive regarding the point of real interest,

namely moderate use as contrasted with abuse, because no insurance records have made possible a distinction between moderate drinkers and heavy drinkers. An extensive and critical study of this problem has been made by Pearl, using specially collected and reliable material. The results regarding expectation of life are shown for males in the following table:

EXPECTATION OF LIFE, IN YEARS, IN THE SPECIFIED GROUPS OF MALES

AGE	ABSTAINERS	MODERATE DRINKERS	HEAVY DRINKERS
30	36.34	36.75	28.57
35	32.69	33.22	26.31
40	29.06	29.69	22.41
45	25.47	26.21	19.85
50	21.99	22.84	17.57
55	18.64	19.60	15.51
60	15.49	16.56	13.61
65	12.58	13.75	11.83
70	9.97	11.21	10.13
75	7.71	8.96	8.45
80	5.90	7.01	6.78
85	4.55	5.35	5.18
90	3.44	3.99	3.88
95	2.54	2.90	2.83
Person-years exposed to risk in the group	21,594.0	43,011.5	24,371.0

The data show two things: first, that heavy drinking in this group of people, as compared with either total abstention or moderate drinking, definitely reduces the expectation of life at all ages from thirty to seventy; and second, that moderate drinking in the group studied did not reduce the expectation of life, at any age from thirty on, below that of abstainers.

When, however, both moderate and heavy drinkers in this experience were combined to form an "all drinker" class and this combined class was compared with the total abstainer class, it was found that at all ages up to seventy the death rates were higher for the drinker than for the abstainer group. This is the same thing that general insurance data show. These results again demonstrate the importance of a clear distinction between the normal moderate use of alcoholic beverages and their abuse.

The racial effect of the use of alcohol has been extensively studied. The important net results of the considerable body of careful, painstaking experimental research with lower animals which has been concerned with this problem lead to several significant conclusions. First, the racial effect of alcohol is preponderantly beneficial or, at the worst, not harmful. This is true for characters depending upon general vigor in guinea pigs (after early generations are passed), fowls, rats, mice, rabbits, insects and probably frogs. Second, this beneficial racial effect appears to be the result primarily of the fact that alcohol acts as a definite but not too drastic selective agent upon both germ cells and developing embryos, eliminating the weak and leaving the strong. Third, there are only three racial effects of alcohol which can possibly be regarded as harmful that have yet been brought to light by this mass of experimental work. The first is the production of defective offspring in early generations by alcoholizing guinea pigs (Stockard). This result is peculiar to the guinea pig and was not found even for that animal by Pictet. No such effect has been noted in any other animal: not in the fowl (Pearl, Danforth); rat (MacDowell, Hanson); mouse (Gyllenswärd, Nice, Bluhm); rabbit (Rost and Wolf); frog (Bilski); or various insects (Pictet, Harrison, Mann). The second is a possible slight reduction in activity and ability to learn among the offspring of alcoholized white rats (MacDowell). The third is a reduction in fertility following the administration of alcohol. This, however, is one element of a selective process which ultimately is beneficial to the race.

Comparatively little critical work has yet been done on the racial effect of alcohol upon man. But the most thorough and significant investigation which has been made in this field (Polisch) shows that in a group of very heavy, steady drinkers there was not the slightest evidence of demonstrable germinal injury of the offspring.

RAYMOND PEARL

ALCOHOLISM. The problem of alcoholism arises from the results, individual and social, that follow the excessive consumption of alcoholic liquors. Its study involves an inquiry into what these results are in fact, altogether apart from what they should be according to our notions of the fitness of things.

There is a group of substances, of the methane series, which are known to chemists as alcohols. These include glycerine; most of them, however, are intoxicating and some, such as amyl alcohol, are highly dangerous to health. Of these, ethyl alcohol is the basis of all malted and distilled liquors and, along with such substances as ether, is one of the chief known intoxicants. In the Pharmacopoeia it is labeled as a poison, being a mild drug of addiction of less potency than cocaine, opium derivatives and crude opium, in the order named. The lethal

dose for a normal man is about a pint and a half of proof spirit. This harmfulness when taken in excess alcohol shares with common substances such as nicotine and table salt. Unlike these, however, alcohol is pleasant to most palates and the system has no automatic check upon excessive absorption. Although both acute and chronic alcoholic poisoning are by no means uncommon, the chief significance of alcohol is as a beverage, a food and a drug. The problem of alcoholism arises from the narcotic effect of a liquor which is pleasant as a beverage and which may have properties as a food.

The use of alcohol as a beverage is almost universal among the human race, the exceptions being a few primitive peoples such as the Andaman Islanders. The theory, however, of the late Dr. Archdall Reid that the craving for alcohol is an "instinct" has not been widely admitted. Nor have the attempts to explain alcoholism in terms of climate or of race been generally accepted. Climatic considerations will scarcely account for the heavy alcoholic consumption per capita of France, for the fact that Denmark consumed between three and four times as much liquor as Norway before the latter adopted prohibition, or for the great changes from decade to decade (apart from a climatic seasonal rate) in the amount consumed. The Committee of Fifty and others have shown that some races have heavy drinking habits and that the Jews have a universal reputation for sobriety, but immigration and change of conditions seem to modify these habits, and good authorities are of the opinion that Jewish temperance is due to cultural influences such as operate in the case of members of many religious denominations. Too much weight, then, must not be attributed to indications of climatic and racial variations.

The consumption of distilled spirits has increased rapidly since the seventeenth century. Drinking by industrial workers in connection with their employment has largely replaced the heavy but spasmodic convivial drinking of the Middle Ages. According to Shadwell (*Drink, Temperance and Legislation*, p. 24), the known consumption of distilled spirits in England has been:

Year	Thousands of Gals. (U.S.)
1684	633
1714	2,500
1727	4,322
1735	6,475
1751	13,200

From 1894–98 the annual per capita consumption of absolute alcohol in any form (Rowntree and Sherwell, p. 613) was:

United States	1.00 Gals. (U.S.)
United Kingdom	2.08 "
France	3.56 "

The annual per capita consumption separately for distilled spirits, wines and beer in United States gallons is given in the table below:

	Year	Distilled Spirits (Proof Gals.)	Wine	Beer
United States	1875	1.50	.45	6.71
	1900–04	1.36	.47	16.94
	1905–09	1.43	.57	19.46
	1910–14	1.46	.60	20.38
United Kingdom	1871–80	1.42	.61	33.80
	1891–95	1.20	.45	35.70
	1900–04	1.25	.41	36.23
	1905–09	1.01	.32	32.90
	1910–13	.83	.31	32.62
Great Britain and Northern Ireland only	1923	.41	.37	19.96
	1926	.33	.50	21.53
France	1900–04	.98	38.36	7.32
	1905–09	.90	41.36	7.66
	1910–13	1.01	33.89	8.69
	1923	.71	44.38	8.03
	1926	.71	33.81	7.21

Source: The figures for the United States are adapted from the *Statistical Abstract of U. S. 1922*, p 694. The English figures for the period until 1905 are adapted from the various issues of the *Statistical Abstract for the United Kingdom*. From 1905 on the figures given in the *Reports of Commissioners of Customs and Excises* were used; these apply to years beginning April 1 The data for France come from the *Annuaire statistique 1927*.

As indicated by the table, the consumption of alcohol in the United States was on the whole increasing before war time restrictions and prohibition went into force. In the United Kingdom there was for some years a trend toward reduced consumption, but this was slow until legislative restrictions were introduced after the war. Since convictions for drunkenness in Great Britain, however, have fallen more rapidly than the decrease in consumption, despite presumably increased police stringency, it would be improper to conclude that there is a direct relationship between consumption and the problem of public intoxication. At the same time the slow change in consumption between the middle of the last century and the first decade of this, in contrast with the rapid decline under post-war taxation, indicates the power of the legislature to control this problem far more rapidly than can be done by the slow change of manners. In 1834 the number of persons apprehended in London as

drunk and disorderly was 12.3 per 1000; in 1857 it was 6.9; in 1874 it was 6.5; in 1892 it was 5.2. In England and Wales in 1857–61 the number proceeded against for drunkenness was 428.5 per 100,000 of population; in 1874–78 it was 812.4; in 1899 it was 674.6. In 1905 the gross figures for convictions were 207,171; in 1913 they were 188,877, and in 1926 they were 67,126.

The physiological effects of the excessive consumption of alcohol are apparent in the mortality statistics. The deaths from alcoholism (using the word in the medical sense) in England and Wales were, in 1913, 2153 and, in 1924, 542, or, per 100,000 of estimated population, 5.8 and 1.4 respectively. In the United States (registration area), the figures are, for 1914, 3257 and, for 1924, 3153, or, per 100,000 of estimated population, 4.9 and 3.2 respectively (being in 1920, when prohibition was perhaps most effective, 1.0). Alcoholism is therefore a quite minor cause of death (much less than 1 percent of total deaths) and is chiefly significant as a probable index of excessive consumption. To these figures must probably be added those for cirrhosis of the liver. How far alcohol is a causative factor in this disease is by no means precisely known. Although many deaths are probably due to cirrhosis which are not due to alcohol, it is almost certainly the case that cirrhosis is primarily alcoholic and provides an index of the fluctuations of alcoholism. It thus corrects a certain unreliability, which is due to medical reluctance to certify death as being due to alcoholism, in the figures appearing under this heading. The number of deaths due to cirrhosis in England and Wales in 1913 was 3558 (1519 women) and, in 1924, 1609 (573 women), or, per 100,000 of estimated population, 9.6 and 4.2 respectively. The sex ratio will be noticed, women being by far the more sober sex. This fact is due presumably to cultural considerations and militates against any doctrine of inherited alcoholism, although heavy drinking among women is by no means recent (Shadwell). In the United States (registration area) there were, in 1914, 8526 deaths from cirrhosis and, in 1924, 7344, or, per 100,000 of estimated population, 13.0 and 7.4 respectively. This is also, then, a quite minor cause of death. Alcoholic degeneration of the heart, or "beer-drinker's heart," is probably another directly alcoholic disease, especially in heavy beer drinking countries such as Germany. Alcoholism is, however, a secondary cause of death in many cases where the primary responsibility is not fastened upon it. According to the United States Census Bureau (1918) alcoholism is responsible as secondary cause in twice as many cases as when it is primary cause, and other careful calculations (Vernon) place the proportion at three times as many.

The morbidity statistics are unfortunately neither so easy of access nor so precise as the mortality figures. There is reason, however, to believe that the most serious effects of excessive drinking lie in a weakened resistance to disease rather than in actual alcoholic complaints. There is even more evidence for supposing that it has a deleterious influence upon the chances of recovery from illness. This is recognized as true in the case of syphilis and is also probably true (G. Sims Woodhead, Drolet) of tuberculosis. In the Bellevue and Allied Hospitals, New York, in 1912, 20 percent of the admittedly alcoholic cases, and 35 per cent of the non-alcoholic, had tuberculosis arrested or cured. In New York City in 1921 the death rate from nephritis and Bright's disease was heaviest among the Irish and Germans, traditionally heavy drinking groups.

Whatever is true of a normal drinking of alcohol, it is alleged that chronic alcoholism has an injurious effect upon subsequent generations. Early experiments (Ridge, Féré) showed the injurious effects of alcohol solutions on germinating animal life. The experiments of Stockard with guinea pigs confirmed these results and demonstrated that the number of survivors in the second generation was reduced and that of these an abnormal proportion was somehow defective. Excessive alcoholic doses, moreover, while encouraging the sexual and other impulsive activities, are liable to have a degenerative effect upon the sexual glands (Bertholet, Weichselbaum). These findings, along with the evidence of certain family studies (Dugdale, Mott), indicate that alcohol is a racial poison if taken in sufficient quantity. Stockard's further experiments, however, confirmed by others, especially MacDowell and Pearl, point to the conclusion, adumbrated by Pearson, that descendants of the normal specimens among those whose parents were alcoholized are physically superior to the descendants of the unalcoholized, presumably because of the elimination of less fit stocks. But this lethal and selective effect of alcohol can only operate when stronger and heavier doses of alcohol are taken than are probable in human consumption

Perhaps more practically relevant to the problem of alcohol as a race poison is the probability that a pathological desire for alcohol or a remarkably low resistance to it is symptomatic of defective stock. Excessive drinking may cause defectiveness in the next generation (Kerr, Combemale, Mott), and a vicious biological circle seems to be set up, as a result of which this defectiveness itself is symptomatized by alcoholic excess.

The psychological effects of alcoholism, as shown in insanity, seem to be entirely consistent with the above hypothesis. The work of Sullivan and Mott has tended to discredit the view that alcoholism is a cause of any extensive amount of certifiable insanity, but to confirm the opinion that inebriety is one of the ways in which inferior stock proclaims itself. But if we include the earlier stages of mental defectiveness, then, as Sullivan himself says, "alcoholism is a very important cause of insanity." Persons of this kind, whether neurotics because drunkards or drunkards because neurotics, will tend to endeavor to obtain drink whenever obtainable and of whatever quality obtainable. Hence imperfectly enforced prohibition seems to have a selective and adverse influence upon them. The observations of Pollock and Firbush show that in the civil state hospitals of New York in 1912, 565 new cases of alcoholic insanity were admitted (131 females); in 1920 there were 122 cases (32 females); in 1922 there were 225 cases (32 females).

A deep seated if not inherited tendency to drink alcohol for its peculiar properties can be found in many persons who are neither drunkards nor defectives. The theory of an alcoholic diathesis, or similar theories to the effect that the individual craves alcohol to supply a deficiency of euphoric substances in the blood or glandular system or to compensate a lack of "endocrine balance" (Campbell, Crichton Miller, Berman), cannot yet be taken as generally accepted. But even if there is not a physiological basis for the craving, it may well be suggested that the psychological craving has determinable causes. According to the Freudian school this is to be found in repressed homosexuality. While admitting the intimate connection between alcoholism and release from sexual (as well as other) repressions, it seems more consistent with experience to substitute for this dogma the explanation that alcoholism is a method of finding refuge from strain. Except among defectives, alcoholic excess is probably specifically associated with a sense of inferiority, which is allayed by the heightening of the impulsive functions in distinction to the more Hamlet-like sensitive and critical functions. Hence it has perhaps a peculiar attraction for the more introspective races (McDougall); the Negro, even if he drinks convivially and dangerously, is seldom a chronic alcoholic (Committee of Fifty). If we examine the distinct types of drinking we discover that there are roughly four. First, "misery-drinking," for which a sense of inferiority or of being unequal to the demands of the external world is responsible, although wretched economic and social conditions may often provide only the predisposing cause and personal afflictions the stimulant cause (Pringle, Kelynack). "The quickest way out of Manchester is the gin-shop." This type of drinking goes with low wages, cheap spirits and a desire for complete intoxication. Second, "industrial drinking," due partly to undernourishment but chiefly to fatigue and heat, consistent with "soaking" rather than drunkenness, and due to a desire to drink something with sufficient "kick" in it to make one equal to the task in hand. Third, "occupational drinking," where success in a trade depends upon "treating" the would-be customer or the fellow worker. In so far as it is not genuinely convivial, of all forms of drinking this seems to be the most artificial and the most easily restricted by legislation such as the British "no-treating" order. In this and the previous case occupational statistics (Dublin, Lewinski-Corwin) are of great value in throwing light upon the problem. Fourth, "convivial drinking," where there is no particular desire to become unconscious. This type of drinking conduces rather to drunkenness than to chronic alcoholism. Thus the English mining countries head the list for convictions for drunkenness, but miners are low in the statistics of mortality from alcoholism. On the other hand, at the present time, of the five economic classes in the British mortality returns, the two richest classes have the worst record of deaths from alcoholism, being able to afford the liquor. In certain circles a sense of social superiority is given by having a well filled cellar and a taste in wines of good vintage. In convivial drinking, on the whole, one notes a desire to be equal to an occasion, to secure artificially a sense of vitality which one does not possess innately, and to rise above minor worries and anxiety. Alcohol is distinctly a fear dispeller and, as a

narcotic, results in boldness of decision. Hence its use in emergencies of public speaking or social events. As Kraepelin says, its drug uses may enable morbid inhibitions to be overcome when quick decisions are needed.

Excessive consumption, to which those who stand most in need of alcohol are most tempted, may have serious social consequences stretching beyond considerations of health. Here drunkenness must probably be sharply distinguished from chronic alcoholism. In its elaborate study a generation ago the Committee of Fifty found, among 13,402 convicts, that intemperance was directly responsible for the crime in 16.87 percent of the cases, a primary cause in 31.2 percent and a factor (including herein the intemperance of others, parents or associates) in 49.9 percent. There is undoubtedly an association of drunkenness with brawls (Corradini), and also with destruction of property, assaults upon women, and solicitation of women, unwilling and willing (although there is, on the other hand, at least as much evidence that the successful prostitute is abstemious as that she is a drunkard). But skilled crimes require a steady hand. Even of crimes of violence the English figures do not fluctuate with the figures of liquor consumption (Shadwell). The more recent survey of Sullivan leads him to the conclusion that simple drunkenness is "rarely a cause of serious crime," except in connection with the sexual instinct. On the other hand, of 220 attempted suicides he attributes 78 percent to alcoholism, four fifths of the cases supervening upon chronic alcoholism. Of 200 convicts guilty of homicide, Sullivan found the act in 60 percent of the cases to be due to alcoholism; in matters of a less serious nature, especially aggravated assaults, this was the cause in 82 percent of the cases. In both groups the alcoholism was to some degree chronic. There is little proof that alcoholism has any relation to drug addiction, save that both are neurotic symptoms; restriction from the one has not been shown to lead to an increase of the other, nor yet the one to conduce to the other. In brief, the peculiar mental condition of the chronic alcoholic leads to a rather small number of offenses but these of an exceedingly serious nature (Crothers, Sullivan). It is important to add that one of the consequences of alcoholism is jealousy and a tendency to assault those with whom one is sexually related, chronic alcoholism conducing also to offenses of a perverted nature. In this connection those best competent to judge consider as a significant index of the secondary consequences attributable to alcoholism the fact that the number of divorces granted in certain states on the ground of drunkenness has declined in direct ratio with the decline in consumption of alcoholic liquors. For the period 1887–1906 the average of the percent of divorces due to alcoholism was 3.9; in 1922 the percent was 1.0 and in 1925 it was 1.4.

The worst effects of alcoholism fall probably upon the other members of the family who do not enjoy the alcoholic euphoria. The connection between intemperance and poverty and dependence has always been recognized. For many reasons the statistics are not of a strictly scientific nature. The Committee of Fifty attributed 25 percent of the cases for relief which came within the purview of the charity organization societies to the use of alcoholic liquor, 18 percent being due to its personal use. Of cases in almshouses and workhouses 37 percent owed their dependency to intemperance and 32 percent to personal use (12.7 percent of women owing their position to the habits of others as against 6 percent of men). Of the destitution of children 45 percent was attributed to the drinking habits of others. Comparison of city with city and the previous investigation of the Massachusetts Bureau of Labor confirm these figures. Charles Booth, in his survey of East London, attributed pauperism to intemperance in 14 percent of cases, but declared it to be "the most prolific of all causes" (and the least necessary) because without it the major causes—sickness and old age—could be better met. In 1916 intemperance (with a careful definition) was found to be a cause of poverty in 18 percent of cases by the Philadelphia Charity Organization Society; the New York Charity Organization Society placed the figure at 20 percent, the Hartford, Connecticut, agency at 24 percent, and the Portland, Maine, agency, as a major cause, at 30 percent (*The Prohibition Situation*, p. 18–19). If drink is a cause of poverty, the question remains how far bad economic conditions are in turn a cause of "misery drinking" and "industrial drinking."

In the case of juvenile delinquency, although the juvenile usually becomes a delinquent before he has had time to become a heavy drinker, most social workers assert as an important factor in this delinquency the effect of intemperance in the home, although here again we may be confronted with the problem of neurotic stock. It has been demonstrated

by numerous physiological and industrial experiments that alcohol is not a thing to work on; the extent, however, of the decrease in industrial efficiency must depend upon such considerations as the time when the liquor is consumed, and the nature of the work, such as heavy routine work, on the one hand, or automobile driving, on the other. Investigations by Vernon have tended to show that the percentage of industrial accidents among munition workers was at its maximum when the chance of the recent consumption of an alcoholic beverage was at maximum. The statistics for certain British cities show a maximum of general accidents in the hours immediately following closing time on Saturday nights. The most satisfactory test, however, of the effect of drinking upon economic efficiency lies in the considered opinions of those most closely in touch with industrial conditions—the employers and workmen. In reply to a carefully worded and non-tendential questionnaire sent out by Herman Feldman, out of 175 firms replying on the subject of the individual productivity of the worker 101 stated that there was an increase due to prohibition, 3 affirmed that there was a decrease; of 223 firms answering on industrial accidents 74 claimed a reduction due to prohibition, none an increase; of 287 answering on attendance on Monday and the day after pay-day 184 notified an improvement attributed to prohibition and only 9 stated that the situation had become worse. It is affirmed by representative union officials that restriction of consumption increases the clear-headedness and disposition for initiative of the worker, and offers an escape from the vicious circle of the social consequences of alcoholism (in the sense not of intoxication but of bondage to an incapacitating habit). The shutting of the saloon, however, has left unsolved the problem of where the workers' impulse for sociability may be satisfied. The movies, which have benefited by the closing of the saloon (Feldman), have also been perhaps one of the major factors making for sobriety, since these theaters almost certainly offer a far better substitute for the saloon than the museums or libraries commended by Rowntree and Sherwell.

In summary it may be said that the problem of alcoholism is primarily the problem of a narcotic, and hence a psychological problem to which depressing environmental conditions predispose, as well as conditions of strain or conditions, physiological or social, which leave the individual with a sense of inadequacy or deficient vitality. It may be urged that alcohol is especially deleterious in two types of cases: the economically depressed, for whom there is an external predisposing cause; and the neuropathic. The difficulty with the first could be mitigated by ownership of drinking places by the state or by public trusts, designed to remove the more obvious abuses, to encourage the drinking of alcohol only dilute and on a full stomach, not continuously, and to prevent the undue pushing of sales. It can be met more effectively (*cf.* the English figures of drunkenness convictions, *supra*) by heavy taxation, provided there be no objection to what is in effect class legislation; or by prohibition, where this is effective for both rich and poor so far as the availability of drinkable liquor is concerned. The second difficulty can in part be met by a satisfactory organization of inebriate homes and by an effective system of personal license, or by similar temperance legislation. It may be urged that alcohol is beneficial in certain emergency cases; for persons of a physiological or psychological defect of constitution (potential heavy drinkers though these be); and in the interests of conviviality. In most instances the right of medical prescription and the availability of light wines and beers could meet these difficulties. It must be remembered, however, that the effective enforcement of "light wines and beer" legislation, with a human nature which is easily incited to demand something with a "kick" in it, presents almost as many difficulties as prohibition. At least it may be said that, whatever may be the future trend of legislation, its effectiveness and permanence will depend upon its taking into consideration the local social conditions and scientific considerations of human physiology and psychology.

GEORGE E. G. CATLIN

REGULATION. *See* LIQUOR TRAFFIC.

See: LIQUOR INDUSTRY; LIQUOR TRAFFIC; TEMPERANCE MOVEMENTS; PROHIBITION; ANTI-SALOON LEAGUE; WOMEN'S CHRISTIAN TEMPERANCE UNION; DRUG ADDICTION.

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land, *Journal*, vol. viii (1878–79) 239–53; Mitra, B. R., "Spirituous Drinks in Ancient India" in Asiatic Society of Bengal, *Journal*, vol. xliii (1873) 1–23; MacLeod, W. C., *The American Indian Frontier* (London 1928) ch. iii.

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ALCOTT, AMOS BRONSON (1799–1888), educator and author. He was the son of a farmer and mechanic and had no formal education. In 1814 he began to earn his living in a clock factory at Plymouth, Connecticut, and afterwards traveled for many years as a peddler, chiefly in the South. He began to teach in 1823 and conducted schools at Bristol and Cheshire, Connecticut, and at Germantown and Philadelphia in Pennsylvania. In 1834 he opened the famous school in Boston where he developed his original methods of self-instruction with the purpose of stimulating the personalities of the children. He was obliged, as a result of financial failure, to abandon this enterprise in 1839, although he had originated methods that were to be adopted by subsequent generations and that are admirably described in Miss Elizabeth P. Peabody's *Record of Mr. Alcott's School* (Boston 1835). He had been one of the founders of, and chief contributors to, *The Dial* and was intimately associated with the group of transcendentalists, whose ideas he spent his life disseminating. In 1840 he settled in Concord, Massachusetts, as the friend and neighbor of Emerson and Thoreau. After visiting England in 1842 he founded the communistic enterprise of "Fruitlands" at Harvard, Massachusetts, an attempt to combine farming and spiritual development under ideal conditions. The experiment, however, resulted in almost immediate failure. He lived for the rest of his life in Concord, and traveled throughout the country, conducting the "Conversations" for which he became famous—informal talks on a wide range of practical and spiritual topics, emphasizing the ideas of the transcendentalists.

As a thinker he was an imitator and paler counterpart of Emerson, but his philosophy never crystallized into any concrete form. His old age was brightened by the fame and financial success of his daughter Louisa, and he became in 1879 the nominal head of the Concord School of Philosophy. He was an active abolitionist.

VAN WYCK BROOKS

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ALCUIN (735–804), theologian and educator. He was trained at the cathedral school at York, then famous for its teachers and its library. In 780 the superintendence of the York library and school was entrusted to him. Two years later he was persuaded by Charlemagne to go to Aix-la-Chapelle and take over the direction of the palace school. Save for two brief visits to England, Alcuin remained in the Frankish kingdom until his death. In 796 he was presented with the great monastery of St. Martin at Tours, where he passed the last eight years of his life.

His numerous writings, consisting of letters, commentaries on the Bible, theological tractates, educational treatises and a considerable body of poetry, show that Alcuin had read extensively, but do not display great originality of thought. He defended the orthodox view against the adoptionist heresy preached by the bishops of Toledo (Elipandus) and Urgel (Felix). In the question concerning the relations between the temporal power and the church, Alcuin's views seem from his correspondence to coincide with those of Jonas of Orléans and of the pseudo-Isidorian Decretals, namely that the church may claim authority over all its members, including

those in whom the chief temporal power is vested.

Alcuin's chief fame rests on his work as a teacher and as Charlemagne's informal minister of education. He made the palace school and later the school at Tours the foremost in the kingdom. He inspired many of Charlemagne's decrees, which contributed much toward the establishment of an educational system and the creation of an educated clergy. Finally, according to an undisproved tradition, he supervised the much needed revision of the Vulgate.

M. L. W. LAISTNER

Works: His complete works are to be found in Migne, J., *Patrologia latina*, vols. c–ci; there is a modern, critical edition of the letters in *Monumenta Germaniae Historica: Epistolarum*, vols. i–vi (Berlin 1891–) vol. iv, and of the poems in *Monumenta Germaniae Historica: Poetarum latini aevi carolini*, vols. i–vi (Berlin 1880–) vol. i, p. 160–351.

Consult: Werner, K., *Alcuin und sein Jahrhundert* (Paderborn 1876); Gaskoin, C. J. B., *Alcuin: His Life and His Work* (London 1904); West, A. F., *Alcuin and the Rise of the Christian Schools* (New York 1892).

ALDRICH, NELSON WILMARTH (1841–1915), American party leader, known chiefly as a staunch defender of the Republican policy of protectionism and as an advocate of banking reforms. He was senator from Rhode Island from 1881 to 1911, and his own extensive investments in banking, sugar, rubber, traction, gas and electricity made him in popular fancy the representative par excellence of the big business point of view in Congress. The rotten borough system in Rhode Island enabled him to disregard the popular currents of the day without concern for his own reelection.

From 1897 until 1905 he was the leader of the inner ring which virtually dominated the affairs of the Senate. His genius as a parliamentarian and his skill in handling men extended his influence over a much longer period. He was an important factor in the framing of the following measures: the tariff acts of 1890, 1894, 1897 and 1909, the Gold Standard Act of 1900, and the Aldrich-Vreeland Currency Act of 1908.

His chief constructive contribution is in the field of banking and currency reform. As head of the National Monetary Commission, created in 1908, he made a thorough study of the leading banking systems in the world. In 1911 this commission urged the adoption of a system of emergency currency based upon the rediscounting of commercial paper and the creation of a national reserve association with fifteen regional branches. Although Aldrich was not a member of the Senate at the time of the passage of the Federal Reserve Act, his influence on the measure is unmistakable. His plan differed from the one adopted in that it left final control with the bankers rather than with the government.

HAROLD F. GOSNELL

Consult: Willis, H. P., *The Federal Reserve System* (New York 1923) chs. iii–iv; *Selections from the Correspondence of Theodore Roosevelt and Henry Cabot Lodge*, 2 vols. (New York 1925); La Follette, R. M., *Autobiography* (6th ed. Madison 1913) ch. x. A biography of Aldrich is in preparation by N. W. Stephenson.

ALDRICH PLAN. *See* FEDERAL RESERVE SYSTEM.

ALEATORY CONTRACTS. *See* CONTRACTS.

ALEMBERT, JEAN LEROND D' (1717–83), French mathematician, philosopher and man of letters. He was editor, with Diderot, of the *Encyclopédie* (1751–80), at least for the first seven volumes (1751–57). He wrote for it the *Discours préliminaire* (republished separately, Paris 1894), where he set forth, along with a general classification of human knowledge, a theory of the formation of ideas, and views on the historical progress of the sciences, as well as on the psychological and social factors in their origin and development. A disciple of Locke and of Condillac, his general attitude is empirical, sensationalist and, with regard to metaphysical problems, skeptical.

His classification of knowledge is derived from Bacon, and based upon the distinction between the three essential mental faculties: memory (history), reason (philosophy), imagination (the fine arts). But this order, which with Bacon is purely static, becomes with d'Alembert psychogenetic and even historical: it represents the normal development of the mental processes in an individual man; it epitomizes the real progress of knowledge during the early history of humanity. This order occurs again and again in history, with one important reservation—the period beginning with the Renaissance. The imaginative arts, born of imitation of the ancients, this time preceded the rational sciences. Learning, art and literature, natural philosophy, has been the order of modern progress.

Finally the sciences owe their origin to human needs and their development principally to life in society, for "the ideas which are

acquired by reading and by association with others are the germ of nearly all discoveries." These two ideas of a historical order and of the preponderance of social factors in intellectual evolution were taken up again by A. Comte, who rightly saw in d'Alembert one of the precursors of positivistic sociology.

RENÉ HUBERT

Works: *Oeuvres*, 5 vols. (Paris 1821–22).

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ALEXANDER I (1777–1825), emperor of Russia. As a youth he was inculcated with liberal ideas by his Swiss tutor Laharpe, and later he had to manoeuvre skilfully between his grandmother Catherine II and his father Pavel I, who were always at loggerheads. This stimulated the development of a temperamental secretiveness, a double personality and a variety of histrionism which remained with Alexander through life. Depressed by the despotism of his father's reign, Alexander hoped in the future to liberalize the government of Russia and to make possible the abolition of serfdom. Immediately upon his enthronement (1801) he created a committee of personal friends to prepare the reforms. The work of the committee yielded little of value because it set itself an impossible task of combining freedom within the law with unlimited absolutism. The machinery of administration was technically improved, rules were promulgated for the liberation of serfs with their lords' consent, but that was all. Defeats suffered in the ensuing wars with France forced Alexander to form an alliance (Tilsit treaty) with Napoleon, which aroused serious opposition in Russia. To allay the unrest Alexander resumed the preparation of reform acts. Speransky drew up a project of a constitutional monarchy, according to which the legislative power was to be shared by the monarch with a representative assembly. Speransky fell from grace through court intrigues by conservatives and his project was not brought to life because of the War of 1812.

The events of this war left a deep impress on Alexander. He became subject to mystic moods, and drafted the plan of the Holy Alliance for the promotion throughout the world of state policies based on the Gospels. During the Vienna Congress and in the following years Alexander was dominated by ideas of legitimism and of restoration of pre-revolutionary regimes as an antidote to the revolutionary movements in Europe. In domestic affairs he also renounced the liberalism of his earlier years. Alexander completely approved of the regime of unenlightened absolutism, introduced by his closest confidant, Arakcheyev. This led to a recrudescence of revolutionary sentiments among the young officers imbued with western radical ideas, and to the organization of a net of revolutionary secret societies among them. Although the plot became known to Alexander, he was slow to take action. His growing vacillation was also apparent in the foreign policy of the last years of his reign. When the Greeks rebelled against the Turkish authorities, the Holy Alliance headed by Alexander had to support either legitimism against revolution, as it had consistently done heretofore, or Christians against Moslems, in accordance with Russian policy in the Balkans. Alexander hesitated for some time, but was spared the necessity of a decision by his sudden death.

A. KIESEWETTER

Consult: Shildef, N. K., *Imperator Aleksandr Pervïy, evo zhizn i tsarstvovanie* (Emperor Alexander I, His Life and Reign), 4 vols. (2nd ed. St. Petersburg 1904–05); Nikolay Mikhaylovich, Grand Duke, *Imperator Aleksandr I*, 2 vols. (St. Petersburg 1912); Schiemann, Theodor, *Geschichte Russlands unter Kaiser Nikolaus I*, 4 vols. (Berlin 1904–19) vol. i; Pypin, A. N., *Obshchestvennoe dvizhenie v Rossii pri Aleksandre I* (4th ed. St. Petersburg 1908), tr. by B. Minzes as *Die russische Gesellschaft unter Alexander I* (Berlin 1894); Melgunov, S. P., *Dela i lyudi Aleksandrovskovo vremeni* (The Affairs and People of the Time of Alexander) (Berlin 1923); Kornilov, A. A., *Kurs istorii Rossii XIX veka* (Moscow 1912–14), tr. by A. S. Kaun as *Modern Russian History* (New York 1924) chs. iv–xiii.

ALEXANDER II (1818–81), emperor of Russia from 1855. The reign of Alexander began during the Crimean War, which brought out the inefficiency of the regime of absolutism and made comprehensive reforms inevitable. Although not in sympathy with constitutional ideas Alexander understood the seriousness of the situation. "Better that reform should come from above than wait until it is imposed from below." The reforms began with the abolition of serfdom (1861); the peasants were granted personal freedom and some land, and the government provided assistance to peasant communities in paying compensation to the former landowners. Other progressive measures included the introduction of local self-government (*zemstvos* and municipalities), of a new court system and of universal military service.

As a whole these reforms removed the most serious obstacles to free economic and social development of Russia, and the country began to progress rapidly along the lines of economy and industrialization. Public opinion expected that the reforms would culminate in the creation of a parliament, but these expectations failed to materialize. A conflict between the government and the liberal groups appeared therefore inevitable and revolutionary activities spread rapidly. The government tried to suppress the movement by police measures which merely made the conflict more acute. Only at the end of his reign did Alexander agree to summon *zemstvo* deputies to some committees of the Imperial Council, but before this measure could be promulgated he was assassinated by the revolutionists.

As regards the non-Russian parts of the empire and especially Finland and Poland, Alexander pursued a conciliatory policy. The Polish extremists, however, drifted toward a radical solution of the Polish problem, so that after the unsuccessful insurrection of 1863 the remnants of Polish autonomy were abolished. Simultaneously a far reaching land reform was carried out in Poland favoring the peasants against the nobility who then constituted the mainstay of Polish nationalism.

Alexander II pursued an aggressive policy in the Middle East (as exemplified by the conquest of Turkestan) and in the Near East. In 1870 Russia reassumed the right, lost after the Crimean War, of maintaining a fleet in the Black Sea. The Russo-Turkish War of 1877–78 resulted in the liberation of Bulgaria and the acquisition of Kars and Batum in Transcaucasia.

G. VERNADSKY

Consult: Tatishchev, S. S., *Imperator Alexander II* (in Russian), 2 vols. (2nd ed. St. Petersburg 1911); Cardonne, C. de, *L'Empereur Alexandre II* (Paris 1883); Rambaud, Alfred, *Histoire de la Russie* (7th ed. Paris 1918) p. 671–755; Kornilov, A. A., *Kurs istorii Rossii XIX veka* (Moscow 1912–14), tr. by A. S. Kaun as *Modern Russian History* (New York 1924) pt. ii, p. 1–248; Vernadsky, G., *A History of Russia* (New Haven 1929) p. 151–66, 191–98.

ALEXANDER THE GREAT (356–323 B.C.), Hellenic conqueror and statesman. Alexander's inheritance included his ancestral kingdom Macedon, the headship of the Hellenic League founded by his father Philip II, and a mandate to wage a war of revenge, liberation and spoliation against the Persians. The first phase of this war (334–331 B.C.) left him in possession of all the lands around the Eastern Mediterranean included up to that time in Greek aspirations. Not content with this he succeeded in hurling the Persian king (Darius III) from his imperial throne and in asserting his authority over all the Iranian peoples and the entire basin of the Indus.

On the death of Darius Alexander assumed the kingship of the Persians, and despite Macedonian opposition he drew freely for his administrative and military services on the former Aryan lords of Asia. He carried this policy of fusing the imperial races so far as himself to choose his queen from among the conquered, and to require eighty of his officers to marry Iranian ladies and ten thousand of his soldiers to take native wives. This astounding policy was a recognition of the fact that Macedonians and Greeks alone were too few to dominate the vast alien population involved in the second phase of his war of conquest (331–324 B.C.). It encountered too many national prejudices to have any chance of success after Alexander's premature death (323 B.C.); but through emphasizing the common humanity that underlay differences of race, language, religion and culture it reenforced other cosmopolitan tendencies of the time (the Greek *koiné*, individualistic philosophies and religions, etc.), and entered into the imaginative heritage of Zeno, the founder of the stoic school of philosophy.

The conquests of Alexander prepared the way for larger world unity by breaking down existent states. They permitted the expansion of the Greeks into the East, and this expansion, being one of city-states both because it was the instinct of the Greeks to expand that way and because Alexander conceived city-states as essential for civilizing the fused world of his vision, became a further element of political disintegration. The monarchy of Alexander, although theoretically triune in character—to the Macedonians he was a national king, to the Greek city-states a god-king, to the Asiatics a king by divine grace—was actually one all embracing autocracy. By divorcing government from self-government it facilitated the task for Rome. By uniting Europe and Asia in one denationalized political world the conquests of Alexander favored the rise and spread of the religious ideas which ultimately found expression in Christianity. Such was the compelling quality of the great Macedonian's work and personality that the Alexander of legend

achieved triumphs undreamed of by the Alexander of history.

WILLIAM SCOTT FERGUSON

Consult: Arrian, *Anabasis*, tr. by E. J. Chinnock (London 1884); Wheeler, B. I., *Alexander the Great* (New York 1900); Tarn, W. W., in *Cambridge Ancient History*, vols. i–vii (Cambridge, Eng. 1923–) vol. vi (1927) p. 352–504; Magoun, F. P., *The Gests of King Alexander of Macedon* (Cambridge, Mass. 1929).

ALFIERI, VITTORIO, CONTE (1749–1803), Italian tragic poet, dramatist and political writer. He was born in Piedmont of an old and illustrious family. In his famous autobiography (*Vita . . . scritta da esso*, tr. by C. E. Lester, 2nd ed. New York 1845; in *Opere*, vol. i) he tells of the superficial education he received at the Academy of Turin, of his lack of interest in study during his youth, and his astonishing indifference to the Italian language and traditions. He spent about six years in the principal countries of Europe, and it was in this period that he first read Dante, Petrarch, Boccaccio, Machiavelli and Tasso. It was not until his twenty-sixth year, disgusted with a life of self-indulgence, ashamed of his ignorance and fired with ambition, that he determined to become an author. At first he wrote in French, but he soon made up his mind to "unfrenchify" himself, and he went to Florence to begin the serious study of the Italian language and literature. Within fourteen years, from 1775—the date of his literary "conversion"—to 1789, he published nineteen tragedies and wrote much verse as well as some noteworthy prose works on political subjects. Between 1786 and 1792 he spent most of his time in Paris and had an opportunity to observe the development of the French Revolution. At first he was favorably disposed toward it, praising in an ode the storming of the Bastille, *Parigi sbastigliato* (in his *Opere*, vol. iii, p. 132–39), but he later regarded the excesses of the revolution as a corruption of true liberal principles. He fled from Paris in 1792 and gave expression to his hatred of the French people and of the revolution in his *Misogallo* (The Anti-Gallican—*Opere*, vol. iv).

Alfieri denounced all forms of arbitrary power and emphasized the necessity of liberty, of government animated by ideals of freedom and regulated by law (consult his tragedies and some of his principal prose works—*Della tirannide*, *Del principe e delle lettere*, *Panegirico di Plinio a Traiano*—in *Opere*, vol. x). His *Bruto primo* (in *Opere*, vol. vi, p. 299–340) is dedicated to "General Washington, the liberator of America." He wrote a long ode, *L'America libera* (in *Opere*, vol. iii, p. 36–53), exalting the American revolutionary movement. In a chapter of his *Del principe e delle lettere* (in *Opere*, vol. x) entitled "Esortazione a liberar l'Italia dai barbari," Alfieri emphasized among other things the use of literature as a means of achieving Italian unity and sensed the extinction of the temporal power of the popes. His *Bruto secondo* (in *Opere*, vol. vi, p. 385–428) is dedicated to the "future Italian People." In his *Misogallo* he envisaged the unity of Italy and spoke of hatred of the French as the fundamental basis of Italy's political existence. This book is important as an expression of a need for the political, intellectual and moral autonomy of Italy. Alfieri may be considered the father of modern Italian patriotic literature and is renowned for his part in arousing the Italian people to a sense of national consciousness.

GAUDENCE MEGARO

Works: *Opere di Vittorio Alfieri ristampate nel primo centenario della sua morte*, 11 vols. (Turin 1903).

Consult: Bustico, G., *Bibliografia di Vittorio Alfieri* (3rd ed. Florence 1927); Bertana, E., *Vittorio Alfieri studiato nella vita, nel pensiero e nell'arte* (2nd ed. Turin 1904); Scandura, S., *Il pensiero politico di Vittorio Alfieri e le sue fonti* (Catania 1919); Gobetti, G., *La filosofia politica di Vittorio Alfieri* (Turin 1922); Calosso, U., *L'Anarchia di Vittorio Alfieri* (Bari 1924); Gentile, G., *L'Eredità di Vittorio Alfieri* (Venice 1926); Ruggiero, G. de, *Storia del liberatismo europeo* (Bari 1925), tr. by R. G. Collingwood (London 1927) p. 281–84.

ALFONSO X (1226–84), king of Castile, royal scholar and lawgiver, succeeded his father Fernando III in 1252. His thirty years' reign was marked by continued strife with the Moors, fruitless efforts to attain the throne of the Holy Roman (German) Empire, and domestic insurrections resulting finally in his overthrow by his own son Sancho. The title of *el sabio* (the learned), which distinguishes him from all other Spanish monarchs, marks his fame as a man of learning according to the notions of his time. He was fond of astrology (e.g. his lengthy dissertation in the *Partidas* on the significance of the number seven); a work (*Libro del Tesoro*) on alchemy, which had long been cultivated in Moslem Spain, is doubtfully attributed to him; he translated Arabic works, wrote poetry and patronized learning. Yet his achievements as a lawgiver, for which posterity honors him, were then so little appreciated that he made no

attempt to give the greatest of them more than academic force.

Fernando III had planned a comprehensive scheme of codification to relieve the confusion and diversity of Spanish law; and almost immediately upon his accession Alfonso took up this project. After causing the preparation of several preliminary works he produced, about 1260, the celebrated compilation known as *Las siete partidas* (The Seven Parts), which was not promulgated until the reign of his great-grandson in the Cortes of Alcalá (1348). He probably took a direct part in its preparation and thus the influence of his learning was here most permanent. The work is preponderantly a reproduction of Justinian law, the first to appear in a western vernacular. It marks the reception of Roman law in Spain (displacing the native *fueros*) and its extension to her vast colonial empire overseas. It provided a basis for practical legal accord throughout the Spanish speaking world, including Spanish America and the Philippines, long after severance of the political tie.

CHARLES SUMNER LOBINGIER

Consult: Altamira, R., "Legal Sources in Castile" in *A General Survey of Events, Sources, Persons and Movements*, by various European authors, Continental Legal History Series, vol. i (Boston 1912) p. 607–10; Antequera, J. M., *Historica de la legislación española* (3rd ed. Madrid 1890).

ALGECIRAS CONFERENCE. *See* MOROCCO QUESTION.

ALIEN. The attitude toward the alien in modern as well as primitive society represents the crossing point of two contradictory lines of behavior, best mirrored, perhaps, in the etymology of the Latin *hostis* and *hospes*. These types of behavior are indicated, on the one hand, by the self-consciousness of an exclusive group which involves distrust, fear and hatred of strangers and, on the other, by the feeling of mankind, conscious or subconscious, which calls for the honoring and protection of visitors or those without help or kindred. Accordingly the position of the alien throughout social and economic history has been two sided, and has varied with the various currents of racial and national migration. Even open societies, like that of the United States, may close their gates more or less; and a society will always make some distinction between what it regards as "desirable" or "undesirable" aliens.

The civilization of classical times seems to have been the first to rationalize the group consciousness of a large aggregate of territorial units into a superior cultural value, thus making the alien a "barbarian." The extension of Greek culture, and later of Roman citizenship, operated to break down this general exclusiveness and, until the beginnings of European nationalities at the close of the Middle Ages, the natural unit of cohesion against aliens was local, as in primitive times. This consisted either of the tribe (which in most cases meant equally the religious community) or of local settlements deriving from agricultural communities, either intensified into town life or extended into territorial government.

The concept of the alien varies in content and extent with these changing units. In the village community it designated even the landholder of a neighboring village, and he was permitted to hold local property only with the limited rights of an outsider (*Ausmärker* of German folklaw). In the mediaeval town it extended to foreign traders, who were subjected to a stringent guest law. In fact the creation of territorial government, from the jurisdiction of the Carolingian Empire down to the absolute monarchies of early modern times, shows a ceaseless struggle between the principle of *indigenatus* put forward by territorial estates and aristocracies as a claim to self-government, and the principle of an alien magistrature and bureaucracy used by the central authority to unify and standardize the administration of wider areas, whether national or supranational.

Not only political groupings but also racial contrasts sharpen the outlines of the concept of alien, as can be seen in the great commercial races such as the modern Greeks and Armenians and, even more, the Syrians and Jews. The part played by the Jews in the shaping of modern capitalism is well known. It is, however, to be borne in mind that the Jews represent only a marked instance of a well known and universal process in precapitalist society. The infiltration of aliens as commercial and banking entrepreneurs is exemplified in European history by the domination of the German Hanse and the mediaeval Italian and southern French traders, and also by the colonizing activities of the western nations in Asia, Africa and America.

According to the principle of exclusive settlement there is a tendency toward a segregation of these "guests" in special dwelling places. The Jewish ghetto in mediaeval and early modern towns stands as the most marked example of apparently hostile seclusion. Here

it must be remembered that separate alien settlements do not necessarily imply feelings of group hatred or contempt, but simply constitute a means by which two or more communities may associate without giving up their particular customs and traditions. Thus we find Germanic and Slav settlements living independently side by side all over the region of Germanic colonization in eastern Europe, and the splitting up of the modern oriental town or American city into the quarters of different races, nationalities and religions.

Not only in his economic position is the alien distinctive in his foreign surroundings. He is living in a new and strange environment or, if he is part of an alien group, he shares with the group the sense of a barrier between him and the race or nation which is in the position of host. Usually, therefore, he is characterized by a high degree of mobility and freedom from convention. Sometimes this has a positive value, as in the case of the Calvinist refugees from France, England and the Netherlands, who did so much to spread economic and social individualism in the static society based on the traditional ethics of the mediaeval Catholic church. Sometimes it is merely the plasticity and adaptability of a lower cultural stage, such as that of the Savoyard peddler in Europe, the Indian trader in Africa or the immigrant southerner and easterner in America.

Current interpretations of alien psychology have not taken into sufficient consideration the great change that has slowly taken place in the average type of world migrations. From the age of the prehistoric and protohistoric conquests of agricultural by nomadic tribes down to the nineteenth century, the dispersion of man over a larger territory was preeminently the result of superior physical or mental ability. The end of the nineteenth and beginning of the twentieth centuries are marked, on the other hand, by the overflowing of the weak and unprivileged, not only of capitalist and feudal Europe but also of the middle and far eastern empires. This change implies an alteration of methods in the aliens' struggle for existence. Instead of making their way by capacities for direct economic and political organization and leadership, they undercut the labor market and assume the role of critics of the social order which oppresses them. The mobility and unconventionality of the alien have always tended to make him an "objective" and rational judge of conditions that for him lack the character of the "natural," and have even made him attach himself to dissenting parties inside the society of his hosts. These qualities are now developing into at least a potential element of social and political unrest. The role of the revolutionary or Bolshevist alien in modern world politics is familiar. Its importance should not, however, be exaggerated. Socialism and anarchism are to a large extent the result of an internal process, a necessary outgrowth of the unhealthy sides of modern capitalist civilization, just as capitalism itself, although on occasion drawing heavily upon alien forces, Jewish or Protestant or imperialist, is essentially an internal process.

The juridical concept of the alien in international law could not but follow the general lines of these changing relations between higher and lower levels of economic and political organization. The old teaching of the founders of modern international law, strongly emphasizing the right of free access and asylum for the alien, closely corresponded to the interest of civilized governments in attracting valuable cultural and economic elements from abroad. Thus the alien law of nations like England, America and Switzerland was an indispensable component of their general policy of self-preservation and competition in the modern political and economic world. But characteristically the turn of the tide, first indicated by the British Aliens Act of 1905, was most clearly expressed in these same countries. Even if the treatment of enemy aliens and their property in the World War and the peace treaties be considered as a transient phase of international legal history, the present state of the problem, in opposition to the abstract rules of the "law of nature," is based on two positive principles. The first is the balancing of aliens' rights and aliens' duties, discriminating against them in the granting of full citizenship; the second is a reciprocity between nations in the treatment of their respective citizens.

CARL BRINKMANN

See: ASSIMILATION, SOCIAL; SEGREGATION; GHETTO; INTOLERANCE; ANTISEMITISM; ANTIRADICALISM; MOBILITY, SOCIAL; MIGRATION; IMMIGRATION; NATURALIZATION; CITIZENSHIP; ALLEGIANCE; ALIEN PROPERTY; ENEMY ALIEN; DIPLOMATIC PROTECTION.

Consult: Park, R. E., and Burgess, E. W., *Introduction to the Science of Sociology* (2nd ed. Chicago 1924) abstracts from W. Sombart and G. Simmel, p. 317–27; Michels, R., "Materialien zu einer Soziologie des Fremden" in *Jahrbuch für Soziologie*, vol. i (1925) 296–317; Brinkmann, C., *Wirtschafts- und Sozialgeschichte* (Munich 1927) p. 72–73.

FOR INTERNATIONAL LAW: Fauchille, P., *Traité de*

droit international public (8th ed. of Bonfils' *Manuel*) 2 vols. (Paris 1921–26) vol. i, pt. i, p. 888–986; Liszt F., *Volkerrecht*, ed. by Max Fleischmann (12th ed. Berlin 1925) p. 170–83; Hyde, C. C., *International Law*, 2 vols. (Boston 1922) vol. i, p. 94–106; Borchard, E. M., *The Diplomatic Protection of Citizens Abroad* (New York 1916).

ALIEN AND SEDITION ACTS. The Alien and Sedition laws were passed in 1798 by an overconfident Federalist party. The country was expecting war with France, and the X. Y. Z. incident had raised antiforeign hatred to the boiling point. The French government was believed to be spreading propaganda through paid agents, and the Republican press, edited largely by foreigners, was hurling virulent and scurrilous denunciation against the government and its officials. To meet this apparent crisis four laws were passed. The Naturalization Act (1 U. S. Statutes at Large 566) increased the period of residence necessary for naturalization from five to fourteen years. The Enemy Alien Act (1 U. S. Statutes at Large 577) authorized the president in his discretion to arrest, imprison or banish enemy aliens. The Alien Act (1 U. S. Statutes at Large 570) gave the president power to expel from the country any alien whom he regarded as dangerous to public peace or safety, or whom he believed to be plotting against the government. The last two acts were to expire in two years. The Sedition Act (1 U. S. Statutes at Large 596) forbade, first, seditious conspiracies or incitements, and second, the publication of any false, scandalous or malicious writing against the government of the United States, the president or Congress with intent to defame or bring them into disrepute, or to stir up hatred against them or to incite sedition, or to aid any hostile designs of any foreign nation against the United States. The maximum penalty for such publication was two thousand dollars fine and two years imprisonment. One accused under the act was allowed to prove the truth of writings alleged to be seditious; and the jury was made the judge of criminality. The act was to expire by limitation March 3, 1801.

The indignation and alarm of the Republicans was great, and justly so. The first prosecution under the Sedition Act was against a Republican member of Congress running for reelection, and all subsequent victims were Republicans. The cases were tried before unsympathetic Federalist judges and juries. While no aliens were deported, about twenty-five persons were arrested for seditious libel; at least fifteen of them were indicted and ten convicted. Many years later (1840 and 1850) Congress repaid the fines imposed upon the most conspicuous victims. Jefferson and Madison made the laws the basis of attack in the famous Kentucky and Virginia Resolutions (1799), which declared the acts invalid and asserted the right of the states to nullify unconstitutional acts of Congress. The harsh enforcement of the laws cut deep into the public consciousness, and they were an important factor in the Federalist defeat in 1800 and in the final ruin of the party. Nor was the lesson soon forgotten. The War of 1812 was fought without restrictions upon freedom of expression; and during the Civil War, in spite of the most virulent newspaper attacks upon the government, no sedition law was enacted, although certain executive and military restrictions were sporadically enforced.

The constitutionality of the Sedition Act was sustained in the lower federal courts and by three Supreme Court justices sitting on circuit; but the question never came to the Supreme Court The Alien Act was alleged to be void because it denied jury trial to deported aliens, and because it gave the president judicial powers. At the present time there can be no doubt as to its validity. The Sedition Act was based on the hypothesis, later declared unsound, that there is a federal common law of seditious libel which the statute clarified and in some respects softened. The Republicans attacked the act as an exercise of a power not delegated to Congress, and as a violation of the freedom of press and speech protected by the First Amendment. The weight of opinion is that as a peace-time measure it was void on this last ground. Certainly it went to the very limits of constitutionality.

The whole episode of the Alien and Sedition Acts burned itself indelibly into the American mind and tradition. It became accepted doctrine that freedom of speech and of the press is beyond the reach of any congressional peace-time regulation, and that it includes the right of full and free political criticism. Nor was the sharp punishment meted out to the party which enacted these unpopular laws likely to be forgotten by responsible party leaders. It was not until the World War that Congress again imposed restrictions upon freedom of utterance and publication. And it was no small part of the bitter cost of the World War that it thus provided the occasion for the weakening in a

measure of the traditions of unrestricted freedom of speech and press which were born out of the popular resentment against the Alien and Sedition laws of 1798.

ROBERT E. CUSHMAN

See: ALIEN; SEDITION; TREASON; ENEMY ALIEN; NATURALIZATION; ANTIRADICALISM; CIVIL LIBERTIES; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Anderson, F. M., "Enforcement of the Alien and Sedition Laws" in American Historical Association, *Annual Report 1912*, p. 113–26; Bassett, J. S., *The Federalist System* (New York 1906); Chafee, Z., *Freedom of Speech* (New York 1920).

ALIEN PROPERTY. The treatment of alien property in time of war was greatly affected by the growth of trade from the thirteenth to the eighteenth century. It is generally assumed that confiscation was common until the thirteenth century, but there was comparatively little alien property, except ships, to be found in most countries. The beginning of expansion of international trade found its first reflection in the Magna Carta (1215). Article 41 provides that alien property shall be safe in time of war if reciprocity is granted to English property by the national enemy. From that time many influences served to support immunity for private property, evidenced in the main by treaties. Although enemy property in enemy territory was generally confiscated, the practise of confiscating enemy property in one's own territory had gradually become unusual by the end of the eighteenth century, although numerous writers of the eighteenth and nineteenth centuries, failing adequately to distinguish between alien property in one's own jurisdiction and alien property in enemy territory, continued to speak of the "right" to confiscate long after the exercise of the alleged right had been abandoned.

The rule of immunity for private property, which in 1914 was deemed impregnable, was not the result of any outburst of humanitarian sentiment, but rested upon a sound development in political and legal theory which emphasized the essential distinction between private property and public property, between enemy owned property in one's own jurisdiction and in enemy territory, and between combatants and non-combatants. The natural law philosophers of the eighteenth century were not without their influence, proclaiming the conviction that those surviving the devastating effects of unmitigated war should have something left with which to take up again the thread of life. Modern economic relations in their international manifestations, being based upon the mobility of capital, also brought the realization of the mutually destructive effects and futility of confiscation.

In the United States a special tradition in this matter had developed. There had been some sequestration of British debts by several of the colonies in the Revolutionary War, and the Treaty of 1783 undertook to restore the right of suit to the British creditors. The effort was not successful, so that the United States in 1802 paid to Great Britain some $3,000,000 to make good its inability to carry out the treaty promise of 1783. Meanwhile the Jay Treaty of 1794, declaring in Article 10 against confiscation of debts or funds in any future wars of the signatories, had been concluded with Great Britain. Alexander Hamilton, in his defense of this provision of the treaty contained in his famous Camillus Letters, presented the reasons for this policy as lying in the reliance placed by aliens on the hospitality of the country in which they live. His argument may be said to have laid the foundation for American policy, for some forty treaties of like purport were concluded with other countries. They were designed to afford to aliens, resident and non-resident, an assurance of safety for their property, either by permitting its removal from the country within a limited period of six or nine months or by categorically denying the privilege of sequestration or confiscation. Although judges after the War of 1812 and the Civil War, relying upon text writers, occasionally expressed dicta justifying an alleged rule of confiscation, the fact is that the political departments of the government—Congress and the executive—had not authorized the confiscation of enemy property in any war of the United States until 1917.

The several belligerents in Europe at the time of the outbreak of the World War in 1914 enacted measures sequestrating enemy property and prohibiting payments to the enemy. There was at that time no idea of confiscation, but the authorization of liquidation made restoration in kind difficult, if not impossible. As late as 1918 the English House of Lords reiterated the time honored doctrine that the property of enemy subjects was not to be confiscated.

The United States adopted a sequestration statute on October 6, 1917. The property of non-resident Germans was to be demanded and held by an alien property custodian as a 'common law trustee" to manage the property and "if and when necessary" to sell it in order "to

prevent waste and protect such property" and to prevent its hostile use against the United States. The first alien property custodian announced that "there is no thought of a confiscation or dissipation of property thus held in trust." As the war proceeded new ideas seemed to develop in the mind of the custodian. He persuaded Congress to authorize what he called "Americanization" of the property and obtained authority under the Act of March 28, 1918, to sell the property as though he were an "absolute owner." Much property was sold at sacrifice prices, although Congress did not intend to authorize confiscation. Most of the sales were made after the Armistice, when no belligerent purpose could have been served. Perhaps the most notorious of the cases was the Chemical Foundation transaction, in which 4500 chemical patents worth many millions were transferred *en bloc* at a uniform price of fifty dollars each to the so-called Chemical Foundation, organized by a group of industrialists and the then alien property custodian. The Supreme Court sustained this transaction as valid under the statute. Seizures were discontinued only on July 2, 1921.

The Peace Conference met in 1919. To the surprise of many thoughtful students there issued from the conference, in the form of Article 297 of the Treaty of Versailles, a provision to the effect that the Allied Powers reserved "the right to retain and liquidate all the property, rights, and interests belonging . . . to German nationals" in the territories under allied control. A similar provision is to be found in the other peace treaties. The proceeds were to be devoted to the payment of certain claims against Germany or German nationals. These claims were in the nature of private debts, claims due to exceptional war measures such as sequestrations, and so-called neutrality claims, which arose before the various countries entered the war. Any balance could be turned back to the owners or to the Reparation Commission for general distribution. The provision was not mandatory on the different allies, each country being left free to liquidate or return the sequestrated property. The German government was to indemnify the expropriated private owners.

Most of the European countries—notably England, France and its colonies, Italy and, with minor exceptions, Belgium and Rumania (old territory)—have confiscated the sequestrated property. As a matter of grace England has consented to return amounts up to £1000 to certain persons domiciled in Great Britain and in certain necessitous cases. Not many have been able to take advantage of this concession, it is understood. South Africa has released the property of domiciled Germans and given South African bonds to non-resident Germans for their liquidated property. Italy has released up to 50,000 lire to each enemy owner, but has taken the balance. Japan has released up to 10,000 yen and portions of the balance varying from 20 to 50 percent, retaining an amount sufficient to pay private debts. Most of the South American states have released the sequestrated property in full. Canada has not yet determined its final policy, but unofficially appears to be committed to return at least the excess beyond that required to pay private debts. This at least has been the arrangement with respect to Austrian nationals. The British colonies adopted varied practises. The succession states—Poland, Rumania, Jugoslavia, Czechoslovakia—were restricted in their privilege of confiscation, but liquidated the property to some extent and were supposed to pay the proceeds to the expropriated owners. Some differences were made between territory previously possessed, in the case of an existing state, and that newly acquired. Turkey, after its victory over the Greeks at Smyrna, was able to nullify (by Article 65 of the Treaty of Lausanne) that provision of the Treaty of Sèvres which provided for the confiscation of Turkish private property. "Personal effects" were released only in some of the minor countries like Siam and the German colonies taken over by England, but patents and trade marks, unless sold with liquidated businesses, were in all countries returned to their owners. The so-called Young Plan of 1929 recommends that all further seizures or liquidations of German private property in allied countries shall cease. Probably not much property would be affected by this belated renunciation.

The German government has made but a small fractional payment to its expropriated owners, claiming inability to pay more. Germany brought a proceeding before the Dawes Plan Arbitration Commission claiming the right to deduct from the payment to the Allies the amount due to German expropriated owners, on the ground that this was an obligation imposed by the Treaty of Versailles, and that the plan stipulated that all German obligations under the treaty were embraced within its terms. Germany lost the case.

When peace was made between the United States and Germany, it was provided that German private property was to be retained until Germany made "suitable provision" for the satisfaction of American private claims against Germany. These included not merely the claims arising out of private debts, exceptional war measures and neutrality claims, as in the case of the European countries—an amount which would have been limited to about $50,000,000—but claims of every character. A Mixed Claims Commission was set up in August, 1922, to determine the amount of the claims, with an American citizen as umpire. The awards on private claims, including approximately ten years' interest at 5 percent, are estimated at about $200,000,000.

On June 5, 1920, a partial release was effected of the property of Germans, Austrians and Hungarians who became citizens of succession states by the treaties of peace, of certain classes of American citizens who by reason of their residence in Germany or other enemy territory had their property sequestrated, and of American born wives of ex-enemy citizens. On March 4, 1923, the Winslow Act was passed returning trusts up to $10,000, and $10,000 on the larger trusts, together with all income earned after March 4, 1923, up to $10,000 a year. On March 10, 1928, the Settlement of War Claims Act was passed, which returned 80 percent of the property of Germans and all the income earned since March 4, 1923. The owners of the withheld 20 percent are to receive 5 percent interest bearing participating certificates drawn against the fund to come to the United States under the Dawes Plan (2¼ percent of the reparations, after numerous prior charges). For the income on cash in the treasury accumulated between 1917 and 1923, the so-called Unallocated Interest Fund, the owners are to receive non-interest bearing participating certificates. The undelivered sum (about $75,000,000), together with the early payments to come to the United States from German reparations, is to be paid over to the American claimants against Germany. The property of Austrians has been returned in full, inasmuch as Austria has deposited a sum sufficient to take care of the American claims against that country, probably not over $4,000,000. The Hungarians will probably receive their property under similar conditions. Two percent is deducted by the alien property custodian from all the trusts, in order that the United States may be repaid for the cost of administering the property. The owners are thus paying the United States a substantial sum, in addition to taxes, as a condition of obtaining some 80 percent of their property. Because of the conditions attached to the retention of 20 percent, it seems unlikely that the United States will ultimately confiscate the 20 percent, even if German reparations should break down.

What of the future? The International Law Association at its 1924 meeting in Stockholm adopted the following resolution: "Resolved that this Conference is firmly of opinion that the revived practice of warring states by which they confiscate the available private property of alien citizens is a relic of barbarism worthy of the most severe condemnation." With few exceptions writers throughout the world have condemned the Allied practise of confiscation. It is a reversion to an ancient institution which had been deemed obsolete. Its destructive effects are likely to be considerable. Foreign investments become insecure, and the realization that the safety of foreign private property in war depends not on law but on the preponderance of force, is likely materially to hamper the reduction of armaments. It remains to be seen whether the confiscating countries will compensate the expropriated owners before the policy becomes irretrievable, and whether any legal code, in an effort to prevent the establishment of confiscation as a principle, will reaffirm the traditional rule of the immuntity of private property in time of war.

EDWIN M. BORCHARD

See: ALIEN; ENEMY ALIEN; WAR; WORLD WAR; PROPERTY; CONFISCATION; ANGARY; MERCHANTMEN, STATUS OF.

Consult: Garner, J. W., *International Law and the World War*, 2 vols. (London 1920) vol. i, chs. iv–v; Simonson, Paul F., *Private Property and Rights in Enemy Countries* (London 1921); Armstrong, J. W. S., *War and Treaty Legislation, 1914–22* (2nd ed. London 1922); Fachiri, A. P., "Expropriation and International Law" in *British Year Book of International Law* (1925) 159–71; *Die Beschlagnahme, Liquidation und Freigabe deutschen Vermögens im Auslande*, ed. by Ludwig Bänfer and others, pts. i–iii (Berlin 1924–); Hays, Arthur Garfield, *Enemy Property in America* (Albany 1923); U. S. House of Representatives, 69th Cong., 1st Sess., Committee on Ways and Means, *Return of Alien Property; Hearings*, 4 vols. (Washington 1926); U. S. Senate, 69th Cong., 2nd Sess., Committee on Finance, *Return of Alien Property; Hearings* (Washington 1927); Janssen, Hermann, *Das amerikanische Freigabe-Gesetz vom 10 März 1928* (Mannheim 1928); Williams, J. F., "International Law and the Property of Aliens" in *British Year Book of International Law* (1928) 1–30.

ALIENATION OF PROPERTY may be voluntary, resulting from the intended acts of the owner, or involuntary, through the acts of organized society in forcibly taking the property for the benefit of creditors or of one long in adverse possession, or for the public use. It may be effected by acts *inter vivos*, or it may be testamentary, effective at the death of the owner.

From the Middle Ages down to our own times the power of alienation has been regarded as a necessary and natural element of property. In the language of the Supreme Court of the United States, it is "an inherent attribute of the property itself," but historically it is by no means that. In primitive social orders alienation is quite unnatural. The earliest known form of property was the community ownership of chattels, such as weapons, cattle and slaves, by the family, tribe or village. The community property was for community use, not for sale. Even when growing trade between tribes provided an economic urge for the transfer of chattels, alienation was possible only with the consent of the whole community, evidenced by elaborate ceremonial. Later forms of such ceremonials in proof of transfer are strikingly illustrated by the *mancipium* of the earlier Roman law, the dramatic livery of seisin of land and even of chattels in the Middle Ages throughout Europe, and by divers skeleton survivals in our own time, such as the sealing of written documents, acknowledgment before a notary and registration.

With the increase of trade and the improvement and expansion of political organization, community property in chattels and later in land slowly broke down and disintegrated into individual ownership, with broadening powers of alienation and decreasing requirements of time-consuming attesting ceremonial. Community ownership persisted in the *patria potestas* of the highly developed Roman law, with all its consequent restriction upon the power of alienation. Survivals of it were found in the feudal system of land tenure which during the Middle Ages spread over nearly all of Europe. Even in our own time we have remnants of the primitive institution of community property in the several forms of cotenancy still existing, and particularly in the common interests of husband and wife, such as tenancy by entireties, homestead and other rights of succession, and the "community property" generally recognized in legal systems derived from the civil law, and even in a few of the American states. Safeguarding the family, even at the expense of business interests, the law will not permit either spouse by alienation to prejudice the rights of the other.

The older complex classification of property, based on the mode and extent of alienation allowed, such as, in the Roman law, *res mancipi*, alienable only by burdensome ceremonial, and the *res nec mancipi*, alienable by mere delivery, ultimately gave place, in the law of Rome and of those countries in Europe later deriving their law from Justinian's code, to a simpler and more natural division into movables and immovables, both quite freely alienable by the individual owner, *inter vivos* and by will. But this result was not achieved so easily or directly in England. Before the conquest Anglo-Saxon law made a sharp distinction between movables and immovables. The former were freely alienable, but quite a different rule obtained in regard to immovables. Folkland, which included by far the greater part of the valuable land of the island, held in community ownership, was wholly inalienable, although book-land, consisting of royal grants to religious houses and great men, appears to have been freely alienable. The Norman conquerors brought to England much of Norman law. The simple and natural division of property into movables and immovables was abandoned for the highly artificial and complex classification into personalty and realty. Rights in personalty, left largely to the church courts, in which the influence of the civil law was predominant, remained freely alienable. But the king's courts, in the interest of feudal control, assumed exclusive jurisdiction over the land, which was quickly put in feudal shackles that have scarcely yet been fully cast off. A unique system of feudal tenure was established, in which all land was held of the crown, while the tenant took an interest so narrowly limited that it could be aliened only with the consent of his overlord on the one hand, and of his heir presumptive on the other.

Those holding the land as tenants in chivalry under this system formed a privileged land-owning class who had no interest in trade, and dimly perceived that so long as they controlled the land of England they could control the people who must live on the land. Naturally they resisted every effort to facilitate its alienation, but such a static condition of property could not long survive. With trade increasing and lack-land burghers growing richer, with

population expanding and more and more mouths calling for corn, the restraints on alienation began to give way. The judges, almost uniformly sympathetic with the demand for freer alienation, first cut off the interest of the heir presumptive, and later defeated the lords' expected reversion by holding that feoffment to A and the heirs of his body created a fee conditional upon the birth of issue to A. The lords countered with the enactment by Parliament of the statute *De Donis* (1285), which created estates tail. But five years later in the statute *Quia Emptores*, known as the "charter of free alienation," they were forced to assent to the validity of feoffment in fee simple without the consent of the overlord, securing thereby the abolition of subinfeudation, which had hitherto greatly reduced the value of their feudal services.

The inalienable entails set up under the statute *De Donis* did not long remain unchallenged. Fines, or collusive suits, were used to bar entails but could not defeat the vested interests of reversioners and remaindermen. It was not until 1473, nearly two centuries after the creation of entails, that landed property was freed from this ' perpetuity" by the decision in Taltarum's case. This bold piece of judicial legislation enabled the tenant in tail in possession, by the fictitious proceedings of a collusive suit termed "suffering a common recovery," to bar the entail and create in the plaintiff an estate in fee simple absolute. In the meantime the development of "uses" in land had greatly facilitated alienation. In 1535 the Statute of Uses much simplified the formalities required for the conveyance of land, while in 1541 land was made alienable by will.

By this time the evils consequent upon unreasonable restraints on alienation were fully recognized by the courts, but a new form of "perpetuity" soon appeared by reason of a decision in 1620 that certain future interests, known as executory devises and uses, did not share the destructible quality of contingent remainders. This ruling, threatening to take land out of trade channels altogether, was met by another famous achievement of judicial legislation known as the rule against perpetuities. This rule, in its fully developed form, may be stated thus: any estate so limited that it may, under any possible circumstances, vest in right at a later date than twenty-one years after lives in being at the time of its creation, is absolutely void. In form it imposed a restriction upon the power of alienation. In fact it kept property open for the uses of business by freeing it from a tangled web of remote future interests. In like manner the long series of mortmain acts, beginning with *magna carta*, by prohibiting the transfer of lands to religious houses, thereby kept it from the "dead hand" of the church and made it available for the needs of commerce.

The rule against perpetuities being judge-made and not arbitrarily fixed by the words of a statute, its operation is highly elastic. Its application goes no further than the mischief sought to be remedied. Thus it does not affect an interest, however remote, if it is so limited as to be always in the control of the tenant in possession. For that reason it has not been applied to covenants to renew long term leases, or to rights of reverter and rights of entry, because such interests are not believed in fact to clog alienation.

The next move of the landowning class, in their struggle to retain control of the land by restricting alienation as far as possible, was the invention of the "strict settlement," a method of marriage settlement by a series of entails which, although not legally a perpetuity, nevertheless, under the influence of family and class pressure, in fact rendered a considerable part of the land of England inalienable in the hands of the landed gentry. This situation was met by the Settled Land Act of 1882, confirmed and extended by the Law of Property Act of 1925, under which the freehold tenant in possession has the unrestricted power of alienating in fee simple. This legislation also abolished primogeniture.

The American colonists brought with them to the New World the fully developed idea of the common law that unreasonable restraints upon alienation of property and perpetuities are contrary to public policy and void, but in determining just what restraints are unreasonable there appear some curious and interesting variations from the law of England. The most notable of these is found in the curious doctrine of spendthrift trusts. In England it is settled policy that any beneficial property right available to a person *sui juris*, whether by way of trust or otherwise, is also available to his creditors; but it is now equally well settled in all but a very few of the American states that, by the use of apt words in a deed of trust, an interest for life, at least, may be given in any

form of property, real or personal, which is beyond the power of the spendthrift to alien, or of his creditors to seize. The English rule results from an appreciation by a nation of traders that honesty is not merely the best policy but the only policy to safeguard commerce. The American doctrine seems to result from a reverence for the wishes of a grantor or testator which outweighs the interest of trade and extends to the spendthrift the protection always allowed to married women, to whose separate use trust property may be devoted freed from the perils of unwise alienation, voluntary or otherwise.

W. R. VANCE

See: PROPERTY; LAND TENURE; LAND TRANSFER; CONTRACT; MORTGAGE; INHERITANCE; ENTAIL; PRIMOGENITURE; EMINENT DOMAIN; EXCESS CONDEMNATION; COMMUNITY PROPERTY.

Consult: Gray, John C., *Restraints on the Alienation of Property* (2nd ed. Boston 1895); Digby, K. E., *An Introduction to the History of the Law of Real Property* (4th ed. Oxford 1892); Vinogradoff, Paul, *Outlines of Historical Jurisprudence*, 2 vols. (Oxford 1920–22) vol. i, p. 232–369; Holdsworth, W. S., *History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. iii, p. 73–256; Pollock, Sir Frederick, *The Land Laws* (3rd ed. London 1896); Maine, H. J. S., *Ancient Law* (London 1906) ch. viii.

ALIENIST. The word alienist has largely been used in the past as synonymous with the word psychiatrist, but in recent years there has tended to grow up a distinction between the two terms. While psychiatry is used to cover the whole specialty of medicine which devotes itself to the care and treatment of mental disease, the practise of the alienist, or alienistics as it is sometimes referred to, has to do only with the determination of insanity in the legal sense, insanity being conceived to be only certain aspects or degrees of mental illness limited in accordance with legal definitions. Mental disease is therefore a medical or scientific term, while insanity is the legal and sociological term.

The function of the alienist, which is essentially that of the expert witness, is in theory to give the results of his scientific experience with mental disease in general, and in particular with reference to the case in hand, for the assistance of the court and the instruction of the jury. As an expert he is not confined to testimony as to facts. His testimony is essentially opinion evidence, and on the witness stand he is called upon to give his opinion of the bearing of certain symptoms upon certain legal issues involved, such as responsibility in criminal actions and testamentary capacity in civil ones.

The testimony of alienists has in recent years fallen somewhat into disrepute because they have been pitted against one another in equal numbers; and because of the technical character of their evidence and the fact that they contradict each other, juries have tended to disregard it. Many efforts have been made to correct this state of affairs. The most outstanding suggestion is to employ state alienists who occupy a neutral position in the cause at issue and who may therefore be cross-examined by both the defense and the prosecution. Such a course does not limit either the defense or the prosecution from employing additional alienists, but it is felt that the neutral position of the state alienists would materially increase the weight of their testimony. In practise, however, the problem of the expert testimony of alienists remains in a very unsatisfactory state.

The psychiatrists, however, are coming into court work from a somewhat different angle and are rendering most valuable service. They are rarely seen on the witness stand, but usually make scientific investigations into the mental condition of individuals who come before the courts and render their reports directly to the court for its guidance. They have been of especial service in the juvenile courts, but are coming now gradually to do similar work in the criminal courts.

The taking over of this pre-trial work by the psychiatrist has made less and less necessary the employment of the alienist as an expert at the trial, and it is perhaps in this direction that one may look for the solution of the expert witness problem, so far as it relates to the question of mental disease and insanity.

WILLIAM A. WHITE

See: INSANITY; CRIME; EXPERT; EVIDENCE; CRIMINAL LAW; PSYCHIATRY; MENTAL HYGIENE.

Consult: Witthaus, R. A., and Becker, T. C., *Medical Jurisprudence, Forensic Medicine and Toxicology*, 4 vols. (2nd ed. New York 1906–11) vol. iii, p. 147–346; Glueck, S. Sheldon, *Mental Disorder and the Criminal Law* (Boston 1925); White, William A., *Insanity and the Criminal Law* (New York 1923); Glueck, Bernard, *Studies in Forensic Psychiatry* (Boston 1916); Brasol, Boris L., *The Elements of Crime, A Psycho-Social Interpretation* (New York 1927); Southard, E. E., and Jarett, Mary C., *Kingdom of Evils* (New York 1922) p. 438–41.

ALIMONY, as the term is popularly understood, denotes the obligation of a husband to continue to support his wife and any dependent children after absolute divorce or

judicial separation. As such it is generally understood simply as a provision for maintenance.

Historically, however, alimony is to be conceived as any compensation to either spouse for the disruption of the marriage. In the broadest sense it is an adjustment of the economic relations of the spouses. In its origin and evolution it is as much a penalty to prevent divorce as a provision in case of divorce. In ancient patriarchal societies, where divorce was absolutely unlimited for the husband, he might put his wife away without providing for her at all. In a more advanced stage a fixed penalty is often assessed against the husband if the wife is innocent of offense. This right probably arose to prevent blood feuds with the wife's relatives. Thus under the Code of Hammurabi a husband who divorced his wife without cause had to forfeit to her one mina of silver, and in addition restore her portion.

This latter provision marked an advance representing a greater stability of matrimonial and economic institutions. Alimony is now imposed as a positive legal duty which can be controlled by the spouses only to a very limited extent, but in its origin it was largely contractual. The husband's unlimited right of divorce began to be controlled by marriage contracts among the ancient Egyptians, Greeks and Jews. Indeed the Greeks finally went so far as to declare a marriage without a property settlement for the wife to be invalid and void.

The Roman law, which has had most influence upon western institutions, exhibited all these stages of development. Under the *manus* system of marriage the wife had no rights at all, but by the time of Justinian, when husband and wife were upon an equality before the law, it was established that a guilty wife lost her *dos*, and a guilty husband his *donatio propter nuptias*. Both spouses were liable to contribute to the support of the children. In the absence of marriage settlements, however, the guilty spouse forfeited one hundred pounds in gold. In case of divorce by mutual consent the parties could make any arrangement they wished about their property.

Perpetual alimony for the wife followed as a necessary metaphysical and economic corollary of the mediaeval church's doctrine of the indissolubility of marriage. The Protestant reformers who could allow divorce only by conceiving one of the spouses as a criminal emphasized particularly the penal character of alimony. Much of the extravagance of the present Anglo-American law of alimony is to be attributed to the persisting influence of Reformation ideas which passed from the English ecclesiastical courts into the common law.

The present rules of alimony exhibit many of these survivals. Judges on the whole are still inclined to look upon alimony as a punishment. Its amount is usually affected by the degree of the husband's guilt, and is proportioned not so much to the wife's necessities as to her husband's financial capacity. It may be as high as one third of his income. Although the wife has to be innocent, she remains entitled to alimony if only guilty of lesser matrimonial offences than adultery. A wife may get temporary alimony (*pendente lite*) pending the very determination of her right to divorce. Alimony does not automatically cease upon her remarriage. Imprisonment for debt has long ceased to be popular, but a divorced husband may be incarcerated for failure to pay alimony. The alimony laws thus make marriage an opportunity for the determined "gold-digger." It is to be doubted, however, that alimony is related to the recent increase of divorce. If the wife is encouraged, the husband is correspondingly restrained.

The first step to reform the alimony laws will be taken when the principle is recognized that the mere fact of marriage can only metaphysically be regarded as a proper basis for alimony. This view would permit the duration of the marriage to be taken into account. The present economic emancipation of women should dictate the substitution of an equitable liquidation of the economic claims of the spouses upon each other for alimony. Even in the absence of a legalized institution of community property the intimacy of marriage creates its natural equivalent. The woman who has made her household her career would certainly be entitled to some allowance when the value of her services to her husband are considered. In any event the sexual disabilities of women remain, and the wife with dependent children should be entitled to adequate protection. In three American jurisdictions, Massachusetts, North Dakota and Ohio, statutes now give a husband the right to alimony under certain circumstances when he is the injured spouse. This reciprocity may be just in the present impasse but it represents a dubious reform. Where the conduct of one of the spouses has been such as to injure the other in health, reputation or property, a mutual right to damages might be allowed in the liquidation.

Many of these reforms have long been law in various European countries. The influence there of the Code Napoléon restored much of the enlightenment in matrimonial relations which characterized Roman law. The freedom with which alimony is granted in American states is in part a reflex of our economic efflorescence and social undifferentiation. But the general equivalent of the community and dotal property systems on the continent have restrained alimony. When granted it is limited mostly to cases of actual need. The husband, it is true, often has a right to alimony when incapacitated. The wife generally may be liable for a contribution for the support of the children. There was no right to alimony at all in Sweden until the new law of 1920 which established it only in cases of actual want. The reciprocal claims for specific injuries are also law now in the Scandinavian countries, but have been long allowed in Switzerland. In most countries where both parties are at fault in any way neither is entitled to alimony. Finally it should be noted that the right to divorce by mutual consent in Russia, Austria, Belgium, Rumania and the Scandinavian countries is itself a solution of the alimony problem, for then the parties may come to an amicable understanding upon the subject without the intervention of the law.

WILLIAM SEAGLE

See: MARRIAGE; DIVORCE; DOWRY; COMMUNITY PROPERTY; FAMILY; FAMILY LAW; FEMINISM; WOMAN, POSITION IN SOCIETY.

Consult: Howard, George E., *A History of Matrimonial Institutions* (Chicago 1904); Kitchin, S. B., *A History of Divorce* (London 1912); Bishop, J. P., *New Commentaries on Marriage, Divorce and Separation*, 2 vols. (Chicago 1891); Schouler, James, *A Treatise on the Law of Marriage, Divorce and Separation, and Domestic Relations*, 3 vols. (6th ed. Albany 1921); Barbié, Léon, *Guide pratique du divorce* (Paris 1927); Sellin, J. T., *Marriage and Divorce Legislation in Sweden* (Minneapolis 1922); Stylow, Herbert, *Die Unterhaltspflicht als Folge der Ehescheidung* (Leipsic 1920).

ALISON, ARCHIBALD, BART. (1792–1867), historian. He was born at Kenley, Shropshire, of Scottish parentage, studied at Edinburgh University, joined the Scottish bar and in 1834 became Sheriff of Lanarkshire. Before this he had entered literature as a contributor to *Blackwood's*, in whose pages he advocated the undiluted Toryism of the day, and he had long been collecting material for a *History of Europe from the Commencement of the French Revolution in 1789 to the Restoration of the Bourbons in 1815*. This work appeared in ten volumes at Edinburgh between 1833 and 1842, and had a prodigious sale; by 1848 America alone had bought 100,000 copies. Assuming the role of political philosopher, he made the mistake of writing as a violent partisan. He frankly admitted that he wrote to illustrate certain theories. One was the comfortable notion that to disturb the established oligarchic order of society was to challenge destiny. With Alison in mind Disraeli, in *Coningsby* (1844), made Mr. Rigby speak of "Mr. Wordy's History of the late war" as "a capital work which proves that Providence was on the side of the Tories." Critics of the liberal persuasion had no difficulty in making matchwood of his most confident dogmatism. Later he brought the narrative down to 1852 in his *History of Europe from the Fall of Napoleon in 1815 to the Accession of Louis Napoleon in 1852* (9 vols. Edinburgh 1852–59), which gave him the opportunity of attacking the 1832 Reform Act, the 1844 act restricting the paper currency, and the abolition of the Corn Laws. Whenever he touched either economics or politics in the *History* or in his other writings it was as a die-hard Tory. He naturally sided with the South in the American Civil War.

W. H. DAWSON

ALLAN, HUGH, BART. (1810–82), Canadian captain of industry. He was born in Saltcoats, Ayrshire, Scotland, and received a thorough apprenticeship in Glasgow and Montreal in the management and business side of shipping and shipbuilding. His contributions to Canadian economic development consisted primarily in his ability to meet the demands of shipping in capital, organization and technique during the difficult period of technological change from wooden sailing vessels to iron steamships. The eventual success of the shipping industry was accompanied by the tying-in of that business with various other lines of development, industrial, mining and financial (Merchants Bank), a process in which he played an important part. The Pacific Scandal, however, is evidence that the railroads, with their heavier demands for capital and organization, were largely beyond his control.

H. A. INNIS

Consult: Dent, J. C., *The Canadian Portrait Gallery*, 4 vols. (Toronto 1880–81) vol. ii, p. 38–40; Innis, H. A., *A History of the Canadian Pacific Railway* (London 1923) p. 75–83; Bowen, F. C., *History of the Canadian Pacific Line* (London 1928) p. 3–45.

ALLAN, WILLIAM (1813–74), English trade union leader. He worked as journeyman engineer until his appointment (1847) as general secretary of an engineering workers' union. Allan favored amalgamation of the various engineers' unions and contributed largely to the formation of the Amalgamated Society of Engineers (1851), of which he was general secretary for over twenty years. During this time the numerical and financial strength of this national society of skilled craftsmen became so impressive that many unions took its constitution as a model. It provided substantial unemployment, sickness and other friendly benefits; and the moderation of its policy contrasted with the aggressiveness and violence of various old-fashioned local unions. William Allan instituted an elaborate system of financial control, but the amount of administrative routine involved, together with his extreme caution and desire to conserve the society's funds, resulted in lack of constructive trade policy.

William Allan was associated with Robert Applegarth in the informal "cabinet" of trade-union leaders who guided the movement resulting in legislation for full legal status of the unions (1871). The success of this movement was facilitated by the favorable impression on public opinion created by the moderation and financial integrity with which Allan's society, and others modeled on it, were administered.

J. H. RICHARDSON

ALLEGIANCE is a concept which, despite its narrow legal meaning, is also of significance to political philosophy, for it connotes the emotional ties which bind the individual to a political group or association and to the symbols which represent it. The word allegiance is commonly related to the Latin *ligius* (French *lige*) and its derivatives *ligeantia*, *ligeitas*, etc. These terms denote feudal relationship; the adjective *ligius* therefore also occurs in connection with *homagium* when it characterizes unconditional homage. The English kings seem to have succeeded at an early period, certainly in the twelfth century, in establishing their exclusive right to unconditional feudal superiority, so that wherever *ligium homagium* is done, the express reservation of faith toward the king is required (for an interesting case *cf.* Coke, *Institutes*, pt. i, sect. 85). It seems that this claim of the king was effectively linked with another and more ancient institution going back to Anglo-Saxon times, namely with the oath to keep the king's peace, i.e. not to commit certain crimes nor to conceal the knowledge thereof. This oath was originally required of every man (*cf.* Laws of Eadmund I and Laws of Canute c. 21, quoted in Stubbs, *Select Charters*, 9th ed. Oxford 1913, p. 77, 87), but it appears to have been gradually restricted to those who did not do homage to the king, such as magnates, knights and their relatives, clerks, *liberi homines* and the like (Bracton, *De legibus Angliae*, vol. ii, f 124b). Whether or not this oath might be associated with the origin of frankpledge (*cf.* W. A. Morris, *The Frankpledge System*, New York 1910, ch. i, and the literature cited there), it is likely that it became associated with the view of frankpledge under Henry II. It has been suggested by Maitland that frankpledge and the tithing to which it belongs served as a foundation for a part of the system of administering justice initiated by Henry I and developed by Henry II (Assize of Clarendon c. 1. in Stubbs, *op. cit.*, p. 170); for "under the influence of the assize of Clarendon the duty of producing one's fellow-pledges to answer accusations seems to have been enlarged into a duty of reporting their offences, of making presentments of all that went wrong in the tithing" (Pollock and Maitland, *History of English Law*, Cambridge, Eng. 1895, vol. i, p. 557). This suggests that the oath of allegiance or allegeance, as it was often called until the seventeenth century, is the result of merging two oaths, namely the oath administered in connection with the allegiance of offenses violating the king's peace and the oath of fealty administered in the confirmation of the liege homage, later called the natural ligeance due to the king. If this hypothesis were accepted, it would solve the etymological problem involved in deriving the word allegiance from *ligius*, because it would explain the prefix "al-" and also why this peculiar concept should have arisen in England alone.

For certainly on the continent of Europe kings were not successful in advancing similar claims, and it was only in the fifteenth century that the French kings definitely established this right. In Germany, on the other hand, the *ligium homagium* as well as the feudal tenancy to which it belonged gradually disappeared after the efforts of the Hohenstaufen emperors, particularly Frederick I, to secure *ligium homagium* for themselves had been balked. The general development of feudal institutions in central Europe was unfavorable to such a doctrine; for the principle *nulle terre sans seigneur*,

which came to prevail in England even more widely than in France, never gained ascendancy in many parts of central Europe. As a result the concept of allegiance is peculiar to English law and has no real equivalent in French, German, Italian and other continental jurisdictions.

In England the concept of allegiance was effectively linked with the crime of treason by the statute 25 Edw. III c. 2., which defines the offenses which may be held to be treason. The gradual expansion of royal pretensions is evidenced in the reign of King Richard II by the statute 21 Rich. II c. 3., which made high treason merely the purpose and intent of killing or deposing the king, without any overt act to demonstrate it. Although these particular enactments were repealed under Richard's successor, the same tendency exhibited itself again under Henry IV and Henry VIII (Coke, *Institutes*, pt. iii, and Blackstone's *Commentaries*, bk. v, ch. vi) and Elizabeth. Particularly under the two latter monarchs there began the tendency to use breach of allegiance, that is, treason, in their struggle with the church, a tendency which culminated in the reign of James I, who might properly be described as the philosopher of allegiance, since three fourths of his writings center around this concept. It was the feudal proprietary nucleus of the concept of allegiance and its ancient relation with a most solemn oath which made it possible for James I to brand a breach of it as heresy. Moreover the notorious Gunpowder Plot strengthened his hand in insisting upon the complete separation of civil and ecclesiastical allegiance, at which his legislation of the next few years is aimed (3 Jac. I c. 2, 4, 5 and 7 Jac. I c. 2, 6). The center of this legislation was of course the oath of allegiance itself, in which the recognition of the pope as a temporal lord was foresworn. The famous decision in Calvin's case (v. 7 Coke Rep. 1; also to be found in Howell's *State Trials* vol. ii, 1608, no. 85), established this as the authoritative interpretation of the legal concept of allegiance for some time to come.

When in the succeeding century the people politically organized came to inherit the exercise of the power which the kings had consolidated, the concept of allegiance underwent a gradual transformation. While allegiance was formally still due to the king, it was in fact owed to the body politic of which he was the formal representative. This classical common law notion of perpetual allegiance as it prevailed in the England of the seventeenth and early eighteenth centuries is in many respects the most powerful expression of the national state in its rigid seclusion and insular self-sufficiency. As far as the individual was concerned, he was considered to owe this allegiance from the moment of his birth on English soil. He could not renounce it except by permission from the king in Parliament. It was the basis of all his rights and duties as an Englishman. Its feudal origin is clearly evidenced in the fact that only such allegiance gave a man the right to hold real property in England. Although an alien might acquire the status of subject through an act of Parliament, the procedure for effecting this was attended by cumbersome formalities.

Such a rigid concept was bound to be subjected to numerous alterations as modern trade began to develop, and the classical doctrine of allegiance as enunciated in Calvin's case (1608) was slowly weakened by many minor exceptions. This process eventually led to the Naturalization Act of 1870 (33 Vict. c. 14) which adapted the status of subjects to modern conditions, accepted the principle of free interchange of citizenship and thereby deprived the concept of allegiance of most of its significance.

This development had been anticipated by the fate of the concept of allegiance in the United States. In the early years of the republic the prevailing opinion seemed to be that a citizen could not divest himself of his allegiance except under the sanction of the law of the United States, and that until some legislative regulations were made, the rule of the common law that allegiance is perpetual must prevail (Talbot *v*, Janson, 1795, 3 Dal. 133–70). On the other hand, Caleb Cushing expressed the opinion, when he was attorney general, that the "doctrine of absolute and perpetual allegiance is inadmissible in the United States. It was a matter involved in, and settled by us by, the Revolution, which founded the American Union" (p. 166 in 8 Op. Atty. Genls. 139–69). In expounding the same doctrine Mr. Justice Story said that allegiance is "nothing more than the tie or duty of obedience of a subject to the sovereign under whose protection he is" (Inglis *v.* Sailor's Snug Harbor, 1830, 3 Peters 99–191). The complication introduced by the famous Dred Scott case (Dred Scott *v.* Sandford, 1856, 19 Howard 393–633) was swept aside by the Fourteenth Amendment, which significantly does not speak of allegiance at all but of an oath to the Constitution of the United States.

The same tendency later manifested itself in congressional legislation dealing with citizenship, expatriation and the like (Act of July 27, 1868). The citizen either expressly or impliedly takes an oath to support the constitution and the laws of the United States, and no personal relation is entered into with the government, legally speaking. It is a relation among the citizens that is involved and a pledge of obedience to the laws, which the citizens make for themselves (United States *v.* Wong Kim Ark, 1897, 169 U. S. 649–732). Still, law dictionaries nowadays usually distinguish three kinds of allegiance, natural allegiance, acquired allegiance, and local or temporary allegiance (for the latter see Carlisle *v.* the United States, 1872, 16 Wal. 147–56). Allegiance is there defined as "the obligation to fidelity and obedience which the individual owes to the government under which he lives, or to his sovereign, in return for the protection which he receives." This definition, when applied to the threefold distinction we have just indicated is lacking in definite meaning and prone to lead to confusion. This is most clearly shown by the cases of double allegiance which arise from the doctrine of dual nationality in international law when a naturalized citizen's country of origin refuses to recognize his right of expatriation.

The significant fact is that those relations of political loyalty which were formerly the result of allegiance are now the result of nationality. For the most part the only relations for which the term allegiance is really needed in modern law are those which exist between a resident alien and the state under whose jurisdiction he lives, due perhaps to the fact that in its territorial aspect the modern constitutional state resembles its feudal predecessor. The international mobility of population today has produced migrant nationals who wish to change or retain their original citizenship. This has given a new vitality to allegiance since it may now be used as the instrument whereby governments, before granting citizenship to an alien, assure themselves that he does not adhere to ideals and beliefs which are contrary to the prevailing national mores and which make an oath of allegiance without reservations impossible. The oath of allegiance, which has always been found useful in test acts motivated by a fear of the pope, may also be used even today in periods of subversive movements as a protection against radical organizations; in this connection it may even be applied to native citizens seeking public employment or entering public office. In another direction the concept of allegiance may take on a new lease of life in the recent tendencies to emphasize the role of the crown in rebuilding the British Empire in terms of a free commonwealth of nations. One might also mention the oath of "allegiance" to be taken by members of the Parliament of the Irish Free State (Art. 4 of the Peace Treaty). But even here it ought to be noted that the allegiance is to the constitution, and that the faithfulness to the king is "in virtue of the common citizenship of Ireland with Great Britain."

While the legal significance of allegiance is not great at present, its broader philosophical implications have entered into the pluralistic attack upon the classical theory of the state and sovereignty. For the emotional ties which bind the individual to his state and his country of birth cannot be separated clearly from the emotional ties which bind that same individual to other groups or communities and the symbols which represent them. The view of allegiance taken by monistic theories of the state varies with the reason advanced for the necessity of a supreme authority. The theory which emphasizes the natural necessity of a unitary authority sanctioning the body of legal rules upon which all other groups depend for their existence treats allegiance as a phenomenon of nature, expressive, as Blackstone says, of a debt of gratitude. To the theorist, however, who emphasizes the purposive cooperation of free-willing citizens sanctioning the legal rules upon which other groups depend, the duties of citizenship express the binding force of the actions implied therein much more adequately than does allegiance.

CARL JOACHIM FRIEDRICH

See: AUTHORITY; CITIZENSHIP; TREASON; FEUDALISM; MONARCHY; CHURCH; NATURALIZATION; DUAL CITIZENSHIP; ALIEN; PATRIOTISM.

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BETTING TAX	*See* GAMBLING
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BLACKMAIL	*See* EXTORTION
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BLACKWELL, LUCY STONE	*See* STONE, LUCY
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BOARDING OUT	*See* PLACING OUT
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BONDED WAREHOUSES	*See* WAREHOUSING
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BOSS, POLITICAL	*See* MACHINE, POLITICAL
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ALLIANCE. When three or more states exist in proximity they tend to group themselves into opposing political alliances, either for self-defense, or for aggression, or to preserve the status quo. This was the case among the city-states of ancient Greece. With the development of a single great empire, like that of Rome or of Charlemagne, embracing the larger part of the known world, alliances no longer played so important a role. But with the break up of Charlemagne's empire and the formation of many feudal kingdoms, principalities and cities, political alliances again revived and often became highly effective. Popes, anxious to wield sovereign authority and to prevent the rise of any strong rival state in Italy which might endanger their own temporal power, were commonly the focal centers of mediaeval alliances. During the Italian Renaissance alliances were formed and dissolved with kaleidoscopic rapidity, for reasons which Machiavelli has set forth so shrewdly and entertainingly in *The Prince*.

With the growth of modern national states since the sixteenth century, alliances have commonly aimed to prevent any one state from securing the hegemony of Europe. England allied with the Dutch to prevent the domination of Philip II and of Louis XIV; Sweden, France and the German Protestants allied during the Thirty Years' War against the power of the Jesuits and the Hapsburgs; Austria, Prussia, England, Russia and lesser states joined together against the contagion of French revolutionary ideas and the domination of Napoleon.

Bismarck may be regarded as the master hand in making alliances in recent times. His victories of 1864, 1866 and 1870 were partly made possible by his skilful diplomatic arrangements. After 1871, fearful of a possible French war of revenge and anxious to preserve undisturbed his newly created German Empire, Bismarck first brought about the "League of the Three Emperors" of Germany, Austria and Russia, which was to defend monarchical solidarity against the rising tide of international socialism, and to maintain the peace and status quo of Europe against possible moves of France or others to upset it. This league, solidified into a formal very secret alliance in 1881, virtually secured the domination of the three eastern emperors until Bismarck's dismissal in 1890, but was seriously weakened in the years 1878–81 and 1877–90 by the rivalry between Austria and Russia in the Balkans and by the growth of pan-Slavism. In order further to strengthen Germany Bismarck made a defensive alliance with Austria in 1879, by which Austria and Germany agreed to give full armed assistance to each other if either were attacked by Russia, and to observe a benevolent neutrality if either were attacked by a power other than Russia (such as Italy or France). In 1882 Italy was admitted into alliance with Austria and Germany, thus forming the Triple Alliance, and in 1883 Rumania adhered by alliance to this group.

To offset this quadruple combination dominated by Bismarck, Russia and France gradually overcame the mutual antagonism arising from republican radicalism on the Seine and reactionary absolutism on the Neva, and formed the Franco-Russian Alliance. Continental Europe was now divided into two groups so balanced against one another that neither cared to risk the uncertainties of war.

England, meanwhile, began to experience the difficulties of continuing a policy of "splendid isolation." In the years 1898–1904 she negotiated successively for friendly understandings with Russia, Germany, Japan and France. The negotiations with the first two proving abortive, she made an alliance with Japan in 1902, and an understanding (*entente*) with France in 1904. This was extended into the Triple Entente by an understanding with Russia in 1907. Henceforth the Triple Alliance and Triple Entente, standing face to face, caused a dangerous tension in international relations which contributed to the general conflagration in 1914.

Alliances may be of various types, public or secret, offensive or defensive, or with either general or limited objectives. But these various types are not always sharply distinguishable and the distinctions tend in practise to disappear.

This is evident in a few outstanding examples.

The Alliance of the Three Emperors of 1881 is a good example of a secret alliance, and the secret was so well kept that its very existence was not known until revealed by Goriainov in an article in the *Izvestia* (News) of the Russian Ministry of Foreign Affairs (no. 2, 1915) which appeared in English in the *American Historical Review* (vol. xxiii, 1918). On the other hand the Austro-German Alliance of 1879 was also secret but contained a clause that if Russian armaments grew menacing the two allies would inform the czar that they would consider an attack on either of themselves as an attack on both; and in 1887 Bismarck revealed this fact to Russia. The terms of the Franco-Russian Alliance, and most of the clauses of the Triple Alliance, were kept secret; but this secrecy did not prevent the statesmen of Europe from being perfectly aware of the existence of these alliances, or from surmising pretty correctly their substance.

There is a twofold objection to secret alliances. At home the minister who contracts one may deceive his own fellow citizens and impose obligations and dangers on them which public opinion would not have sanctioned; and abroad the fact that an alliance is known to exist whose terms are secret causes dangerous suspicions and fears, because men are more prone to suspect and fear what is vague or uncertain. To avoid this double danger alliances are sometimes made public, as in the case of the Anglo-Japanese Alliance of 1902. The constitutions of some democratic states, like France and the United States, do not permit the executive to make secret treaties of alliance; but in practise this constitutional limitation has sometimes been evaded by an "exchange of notes" or a "military convention," as in the case of the Franco-Russian Alliance of 1894, which has the practical force of an alliance but which, not being drawn up as a formal treaty, technically does not have to be laid before the legislature for ratification.

Alliances commonly include a statement that they are defensive. Both the Triple Alliance and the Franco-Russian Alliance were originally essentially defensive in character and purpose. But the ambitions of Austria and Italy tended to give the Triple Alliance an aggressive character, so that Germany often had to restrain her partners and warn them that the alliance was not an acquisitive organization but an insurance company. Similarly the Franco-Russian Alliance, originally defensive in essence, tended to become deformed into an offensive combination through Poincaré's support of Russia's policy in the Balkans.

An alliance may have general objectives, in which case the allies agree to support each other in case of war, and not to make a separate peace until the common enemy has been defeated and each victorious ally has achieved satisfaction. Or an alliance may have a limited objective, like that between England and Japan, which related only to the Far East. More often, however, no such distinction is observed. The same treaty of alliance often not only promises general support but also stipulates the limited conditions under which it is to be given, or the special gains which each victorious ally demands for itself.

Alliances have sometimes served as steps toward federation or the formation of international organizations, like the Delian League, the Hanseatic League, the Holy Alliance or the League of Nations. Where such an international organization has been formed, especially if it is wide reaching and aims to preserve peace and the status quo, there is less place for alliances of the ordinary type. Thus, since the establishment of the League of Nations, though alliances and ententes exist, they play a much less important role than they did before 1919, partly because League members are not permitted to make secret alliances (all treaties of members must be registered with the Secretariat of the League), and partly because the League's machinery for preserving peace and the penalties it imposes for war not only lessen the need for special defensive alliances but also render more hazardous the execution of offensive alliances.

SIDNEY B. FAY

See: BALANCE OF POWER; CONCERT OF POWERS; AGREEMENTS, INTERNATIONAL; TREATIES; SPHERES OF INFLUENCE; DIPLOMACY; WORLD WAR; LEAGUE OF NATIONS; ARMAMENTS.

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ALLIANCE, THE HOLY. *See* HOLY ALLIANCE.

ALLIED DEBTS. *See* LOANS, INTERGOVERNMENTAL.

ALLOTMENTS. The term allotment has always meant any parcel of land allotted or given to a person on the division of an estate in lands; but it became of special significance in English terminology during the chief period of the enclosure of the English common fields, 1760–1845. After 1790 it began to have a specific meaning best conveyed in the phrase of the time, "an allotment to the labouring poor." In economics the term as used from 1820 to the end of the nineteenth century signified a small plot of land occupied by a working man and cultivated to supplement the income from wages. This distinguishes the British allotment movement from continental efforts to retain rural workers on the land, for in most European countries the intention was that holders of small plots should substitute individual cultivation for employment for wages. In the beginning of this century, however, when the "allotment movement" in English urban areas gathered strength, the use of allotments spread to classes other than manual workers; in these communities the importance of subsidiary income yielded by cultivation was small. Some urban and suburban groups of allotment cultivators consist mainly of skilled artisans and small traders who hold and cultivate for personal interest and for leisure occupation, quite as much as for purposes of material production.

The earliest allotments were provided for the rural poor, recently deprived of their rights or privileges on the commons or wastes of their parishes. In some areas land was so allotted between 1760 and 1790, but the provision of land for this purpose became more general after 1790 when it had gained the support of influential persons like Arthur Young and Sir John Sinclair. An act of Parliament of 1801 (41 Geo. III. c. 109), relating to the conditions of enclosure, contained several clauses which recognized the right of the poor to participate in the division of common lands, particularly as compensation for their privileges of taking fuel from the common wastes. This, however, did not apply to cases in which the poor were specifically excluded by private enclosure acts; the provision of allotments in all cases was made compulsory only by the General Enclosure Act of 1845. Another enactment of 1819 gave to parish officers, churchwardens and overseers of the poor authority to hire land or, with the consent of the lord of the manor and the inhabitants, to enclose waste land and to let it to the poor. By 1830 the system of supplying plots of land to manual workers or unemployed persons had also spread to towns.

Although the movement at this time was in part an effort to restore the use and control of land to the agricultural and industrial worker, it is more significant as an attempt to provide sources of income to supplement wages insufficient to maintain families. Economists and social reformers were divided in their opinions as to the results of allotments. While all agreed that the sobriety, industry and thrift of the landless workers would be increased thereby, some feared that workers would be enabled to become too independent to work for wages, and others maintained that the opportunity of obtaining subsidiary income would lead to oversupply of labor and to further distress. The Poor Law commissioners in 1834 decided that the practise of letting land as allotments, beneficial to lessor as well as to lessee, and known to be so, might be left to the care of the self-interest of those involved. This led to a cessation of public activity in provision of allotments after 1835. Thus ended the formal connection between allotments and the system of poor relief, but the economic connection was to remain until the end of the nineteenth century.

The prejudice against the larger plots of land for laborers broke down very slowly, but by 1870 a clear distinction had developed between "garden" allotments, plots of one eighth to one fourth of an acre, and the larger "field" allotments, plots of one fourth of an acre to two acres devoted to the growing of cereal and potatoes. From 1880 on the former may be regarded as a natural amenity of country life for those people whose houses were not set in gardens, and as a special amenity of urban life for certain classes and persons who desired a profitable leisure occupation and a "sense of contact with natural things." Their direct economic importance was greater in rural than in urban areas. The "field" allotments were definitely associated with the irregularity of employment or underpayment of labor in agriculture. In the north of England and in Wales, where farm workers were engaged on annual contracts, the allotment system did not develop. In these areas, as in Scotland, farm workers were commonly supplied with potatoes, or "potato-ground," as part of the conditions of employment. But in the greater part of the rest of England allotments were in demand, and in greatest demand where wages were low and employment irregular.

By 1880 fear of the possible independence of the laborer had passed, and some fear of the landless laborer and the capitalist farmer had arisen. The idea was then promulgated that allotments should provide one step in a rural social ladder and small holdings the next step, and from this time allotments and small holdings were associated in political discussions and programs. The maximum area of one allotment was subsequently raised to five acres. From 1882 the law relating to the public provision of allotments slowly developed, until in 1908 the Small Holdings and Allotments Act contained an elaborate set of regulations which were expected to make possible a provision whenever there might be a demand. In the meantime the conditions of agricultural employment had changed. The agricultural depression of 1879–1906 had finally driven out a surplus of population, and the adoption of machinery for harvesting processes had done much to equalize the demand for labor and to regularize employment for the workers who remained. On the other hand the social ladder had not developed extensively. By 1913 there was little demand for many groups of allotments in agricultural villages, and many individual plots were uncultivated. Where all were used the plots were grouped into larger holdings often occupied by persons who did not work for wages, and who did not always depend on cultivation as a main source of livelihood. In some cases an "economic climb" was begun with allotments, and erstwhile laborers became small holders or entered other occupations such as that of teamster. Individuals in special areas developed market gardening businesses on the basis of allotments. But before 1913 village field allotments were little more than subsidiary sources of income for agricultural workers.

With the strong demand for labor in the early period of the World War the cultivation of allotments was still more neglected, until in the spring of 1917 the potato famine and the fear of a general food shortage caused an almost frenzied rush to every possible source of food supplies. From then until 1919 practically all allotments in villages were fully cultivated, in spite of shortage of labor and rising incomes. Nearly all classes partook of this effort both in villages and towns. The Cultivation of Lands Order (1917) gave local authorities power to occupy uncultivated land and to let it as allotments. This order, amended and then substituted by others, caused an increase of over 100 percent in the number of plots in cultivation. A total number of one million allotments was estimated to be in use at the end of the war. The pre-war number was probably 400,000, but no exact information is available. Societies of allotment holders had always been prominent in the urban movement, and these grew in numbers and activity during the war period. In rural areas societies were not so prominent, and it is probable that at least one half of the allotments in existence were let directly by owners of land to the individual cultivators.

In Great Britain the rural allotment system is essentially the result of the complete enclosure of common fields and wastes and of the consequent establishment of a class of landless workers. In other European countries land ownership is far more widely dispersed than it was in eighteenth and nineteenth century England; there is consequently no need for a public system of rural allotments. The distinction between a farm laborer and an independent agriculturist is usually not clearly drawn. Small holders earn a considerable share of their income as day laborers. Agricultural workers do not expect to remain dependent for the whole of their lives. Moreover they often enjoy the use of a cottage holding and of the employers' horses and implements as a part of their regular wage. Only in the twentieth century have certain governmental measures been taken for the settlement of the agricultural workers on the land. Such were the post-war provisions (preceded by enactments in 1907 and 1908) in Germany and the law of 1919 permitting local authorities to acquire land for laborers' cottage holdings in France. Cottage holdings in preference to detached allotments have recently found favor in England as well.

The urban allotment system had in its early stages pronounced utilitarian objects which were retained for a longer time in certain continental countries than in England. It is still primarily an economic arrangement in such countries as Belgium and the Netherlands, where industrial workers' families cultivate small garden plots in their spare time and thus provide variety in the family diet as well as some addition to the income. In Belgium the use of these garden plots is helped by low railway fare, which enables workmen to live where land is relatively cheap. It was of some economic and of undeniable psychological value in all of the belligerent countries during the war. On the

whole, however, the values attached to urban allotments at present are mainly sentimental, recreational and aesthetic rather than utilitarian.

A. W. ASHBY

See: ENCLOSURES; AGRICULTURAL LABOR; SMALL HOLDINGS; POOR RELIEF; FOOD SUPPLY; BACK-TO-THE-LAND MOVEMENTS; AGRARIAN MOVEMENTS.

Consult: Ashby, A. W., *Allotments and Small Holdings in Oxfordshire* (Oxford 1917); Johnston, George Arthur, *Small Holdings and Allotments* (2nd ed. London 1909); Green, J. L., *Allotments and Small Holdings* (London 1896); Wilkins (Jebb), L., *The Small Holdings of England* (London 1907); Onslow, W. H., *Landlords and Allotments* (London 1886); Dumsday, W. H., *The Law of Allotments and Small Holdings under the Small Holdings and Allotments Act, 1908, and Applied Enactments* (London 1909); Butcher, Gerald W., *Allotments for All* (London 1918); Tomlinson, F. L., "The Cultivation of Allotments in England and Wales during the War" in *International Review of Agricultural Economics*, n. s., vol. i (1923) 163–210; Mitchell, E. Lawrence, *The Law of Allotments and Allotment Gardens* (3rd ed. London 1922); Deromas, Paul, *Étude sur les lois françaises des 10 avril 1908 et 19 mars 1910 sur la reconstitution de la petite propriété rurale et les lois étrangères dont elles se sont inspirées* (Paris 1910); Heidenhain, W., "Organisationsfragen der Kleinsiedlung" in *Archiv fur exacte Wirtschaftsforschung*, vol. viii (1916) 86–145.

ALLOWANCE SYSTEM. The allowance system became common in England toward the end of the eighteenth century. Its essential feature was a rate-borne grant in aid of the wages of able bodied workmen, often associated, as in the famous "Speenhamland Act," with a bread scale graduating the relief according to the price of bread. It laid down a minimum living wage which varied with the size of the family and provided such an allowance out of the rates as would bring actual wages up to this minimum. The system, intended as a temporary expedient to meet severe distress, became both widespread and long lived, lasting, despite much criticism, until the Poor Law Amendment Act, 1834. It was very general in rural England, and prevailed also in some manufacturing districts, such as the weaving areas of south Lancashire.

Criticism of the system, which has been held up as a warning against the policy of subsidizing wages, has continued for over a hundred years. Some of it is undoubtedly justified. In certain parishes the rates became inordinately high, and this imposed a heavy burden sometimes on leaseholders and often on landlords. Many employers took advantage of the system to pay a lower wage than they would have done if it had not been enforced. But the view that outdoor relief in itself is vicious is largely discredited by the more humane attitude and fuller knowledge of today. When distress is widespread, it is futile to insist on granting relief only in certain institutions. There are not enough of them, and indoor relief costs more than outdoor.

Criticism has centered mainly on the variations of benefits according to the size of the family. Basing their arguments on certain moral presuppositions and assumptions, critics have arrived at a whole body of conclusions by purely a priori reasoning. They have argued that since the size of the family became a sure source of income, and a married man with children, or an unmarried mother of children, was better off than the childless man or woman, the system produced a rising birth rate. They have also contended that it was demoralizing—"that parental responsibility was discouraged, and that drunkenness, vice and crime grew apace." Recent research does not support this view. In some areas the birth rate was lower while the system was in force than in the succeeding period. From 1811 to 1821, while it was in full operation, the birth rate actually declined. But since identical fluctuations in statistics were observed in the non-Speenhamland counties no direct connection can be established. Perhaps the traditional melodramatic interpretation arose from the desire for a simple explanation of the degradation of the working class and the many evils of the early period of industrialism.

The new interest in the subject arises from the growing movement in a number of countries in favor of family endowment, for which the English "allowances" system constituted until recently the only available guiding experience.

JOSEPH L. COHEN

See: POOR LAWS; FAMILY ENDOWMENT; MINIMUM WAGE; WAGES; SOCIAL CASE WORK; PUBLIC WELFARE.

Consult: Great Britain, Poor Law Commissioners, *Report, 1834* (London 1905); Great Britain, Royal Commission on Poor Laws, "Report" in Great Britain, Parliament, *Sessional Papers, 1909*, 106 vols. (London 1909) vols. xxxvii-xlv; Webb, S. and B., "English Poor Law History in the Last Hundred Years" in their *English Local Government*, 9 vols. (London 1906–29) vol. vii; Rathbone, E. F., *The Disinherited Family* (London 1924); Blackmore, J. S., and Mellonie, F. C., "Family Endowment and the Birth Rate in the Early Nineteenth Century" in *Economic Journal Supplement*, vol. i (1926–29) 205–13, 412–18.

ALMSHOUSE. In the United States this term denotes a public institution for indoor relief of the poor. This type of institution originated in England, where it is known as the workhouse; "almshouse" in England refers to the private endowed home for aged indigents. The English workhouse is conducted by a parish or a union of parishes, hence, colloquially, the "union."

The English Poor Law of 1601 authorized relief for the "impotent," the "setting on work" of the able bodied and the provision of "convenient dwellings" for the old and feeble. The act was not mandatory, however, and only a few workhouses or poorhouses were built. After many amendments of the law and much public discussion the first effective workhouse was built in Bristol in 1697. It was restricted to the able bodied who were given no relief elsewhere. Encouraged by the decrease of vagrancy and pauperism which ensued in Bristol, other cities followed suit. In 1723 a national act enabled all parishes, singly or in groups, to build workhouses, and provided that any individual refusing to be thus confined should not be entitled to other relief. This "house test" was based on the theory that the condition of the able bodied pauper must be made less desirable than that of the lowest paid independent laborer. In 1788 the notorious Gilbert Act authorized each parish or union to create a poorhouse for all classes of paupers except the able bodied, for whom the guardians were to find work near their homes and whose wages were to "contribute to their support." This system resulted in the lowering of wages, the demoralization of industry and the degradation of the laborers.

The Gilbert Act inaugurated the "mixed workhouse," which led to, and was so scathingly denounced by, the Royal Commission on the Poor Laws in 1832. The report of this commission advocated a return to the principles of the act of 1601, with the additional principle of segregation of indoor paupers, especially defectives and children, in separate institutions. Thus the evils of the workhouse system laid the groundwork for the modern programs for care of children, defectives and other special classes. The Poor Law Amendment Act of 1834 did not provide for complete segregation, but it did prescribe improved administration and created the Local Government Board as a central supervising authority. With considerable power to forbid, but little to compel, action, this board effected many reforms, although the gravest faults of the mixed workhouse continued.

In 1908 another royal commission found the more serious evils still unabated. While its majority report advised little more than better administration, a famous minority report declared that the conditions were so intolerable that nothing but a break up of the whole system could improve them, and recommended the extension of provisions of social insurance to relieve the prevailing abuses. However, even during the worst period of the mixed workhouse there were many exceptions to the usual conditions. Some buildings were so costly that they were nicknamed "palaces for paupers." Some boards of guardians were intelligent, public spirited and sympathetic, and a few wardens and matrons were efficient and humane, but these were exceptions to the general rule.

In the United States the word almshouse is the generic term for public institutions for poor relief, but the actual names of such institutions vary according to locality. Thus although almshouse is the legal name in New England and is fairly consistently found in the East and South, in Ohio it is "infirmary"; in Indiana, "asylum"; and in the Middle West, "poorhouse," "poor farm," "county farm" or "county home." In California the county hospital has a department for the non-sick paupers, and in New York City there is a Home for the Aged and Infirm.

In the New England states, with the exception of the county almshouses of New Hampshire (which are also houses of correction), the state almshouses for the unsettled poor of Massachusetts and Rhode Island and a city almshouse in Boston, the almshouses are conducted by towns. In New Jersey there are county, township and municipal almshouses. Pennsylvania has five classes: county, township, township district, borough and municipal. In Virginia district homes are replacing county almshouses. Some cities conduct large institutions. In some states there are counties with almshouses and others in which the plan of letting out the care of the poor by contract, at one time a very common practise copied from an English law of 1723, still persists. New Mexico has no almshouses. Everywhere else the county almshouse prevails.

The almshouse was the first and for many years the only public charitable institution. The colonies copied English laws and practises, and at first, as in England, the care of the poor was connected with the church; some of the earliest laws provide for the support of both the poor and the parson. Attempts to combine relief of the destitute with labor for the unem-

ployed are noticeable even to the present day, and the term "Work and Poor House" is frequently found. Many states have laws requiring that able bodied inmates be kept at work. The early almshouse was often used as a house of correction. Later the states again followed England in the appointment of commissions for the study and improvement of conditions.

The inmate population of a present day almshouse may vary from three or four in a small town almshouse to 2500 or more in a large city institution. Some of the largest are conducted with economy and reasonable comfort, with departments for the sick and defectives, and a few with special provision for the better class of inmates. Some small almshouses are conducted like a farm home where the inmates are regarded as one big family. The cottage plan in the more modern almshouses, as in other public institutions, approximates these conditions for the large almshouse. In some places today, although less frequently than before, one finds almshouses where the cost is inordinate and the conditions abominable: old and young, feeble and strong, sick, insane, epileptic, idiotic, sometimes even male and female, herded together in squalor, neglect and vice. Wherever the standard of living of the laboring people is low, the standard of the almshouse is lower. There is little relation between the cost per capita and the comfort and decency of the accommodations; some of the worst conducted almshouses are among the most costly. There are instances where the number of employees is greater than that of the inmates. In 1924 there were 137 almshouses without inmates, many of them with employees on the pay roll. The quality of almshouse administration depends on the superintendent, who is rarely of superior ability, since local party politics often controls the selection of officials. Jobs are needed to reward party workers with each political shift, so that even with the best intentions the almshouse superintendent hardly learns his work before he is superseded. It is evident that, with no special ability or training among the officials, inmates requiring skilled treatment are neglected.

There are, however, provisions in many states for the specialized care of the insane and imbecile and for dependent children in most. The tendency, characteristic of contemporary case work, to emphasize the importance of family solidarity rather than economy of care results in the limitation of the almshouse population to the indigent aged, at least in sections where case work standards are highest. One alternative to almshouse care is outdoor relief, for which there are many requests from people who refuse to go to the almshouse. A second alternative is old age pensions and other forms of social insurance, which prevail in England and on the continent, but which have not yet been developed in the United States to any appreciable degree, although the prospect for old age pensions is now good.

Varying in different states according to the state provision for the class, from one fifth to one half of almshouse inmates are mental defectives, and these are usually the best inmates from the administrative point of view. There are well conducted almshouses wherein all the domestic and farm labor is performed by imbeciles or by harmless, chronic insane. On the other hand it is impossible in the ordinary almshouse to give adequate protection to imbecile females of child bearing age, and no state has yet made adequate provision for them, with the serious consequence that many imbeciles are by-products of almshouse care.

County almshouses are usually on farms, because of the supposed economy of raising one's own food supplies. There are rare instances in which the sale of surplus products has defrayed the cost of the institution. But as there is usually little available inmate labor, many farms are run at a loss. Of the 350,000 acres of farm land occupied by almshouses in the United States little more than half is utilized, and much of that poorly.

These and other unsatisfactory conditions have long been recognized, and many laws for regulation and improvement have been enacted. In most states standards are advancing. Many states have regulations forbidding the housing of children among paupers, although the laws are often disregarded. In states having boards of public welfare, almshouses are inspected and supervised. Although such boards, with rare exceptions, have no mandatory powers and depend on persuasion and publicity, much improvement is due to their efforts. In a few states county boards of welfare have been able to improve conditions by enlisting the force of public opinion in behalf of better county management. Eighteen states have enacted laws for the consolidation of county almshouses into district homes serving a larger area, and in the few states where this plan has been put in operation improved standards of care and financial economy have resulted. In Virginia the

saving has been over fifty percent. But merely increasing the size of the group will not remedy all present evils. Better and more general social welfare work and more efforts at prevention are needed. With all the best governmental machinery that can be devised, there will still remain the need of educated public opinion which shall demand that the almshouse be made exclusively a home for the aged and infirm.

ALEXANDER JOHNSON

See: POOR LAWS; POOR RELIEF; OLD AGE; DEPENDENCY; CHARITY; SOCIAL WORK; PUBLIC WELFARE; INSTITUTIONS, PUBLIC; CHILDREN, INSTITUTIONS FOR CARE OF.

Consult: Nicholls, George, *History of the English Poor Law*, 3 vols. (new ed. London 1898–99); Webb, Sidney and Beatrice, *The Break Up of the Poor Law* (London 1909); "The Village Almshouse" in *Spectator*, vol. xcvii (1906) 1071–72; "Almshouse No. 13" in *Contemporary Review*, vol. ci (1912) 433–38; "Story of a Workhouse" in *Contemporary Review*, vol. cxxx (1926) 223–30; Johnson, Alexander, *The Almshouse* (New York 1911); Breckinridge, Sophonisba P., *Public Welfare Administration* (Chicago 1927); Evans, Harry C., *The American Poorfarm and Its Inmates* (Mooschart, Ill. 1926); Stewart, Estelle M., *The Cost of American Almshouses*, U. S. Bureau of Labor Statistics, Bulletin no. 386 (Washington 1925); Lincoln, Alice N., "Firvale-Union Cottage Homes" in National Conference of Charities and Correction, *Proceedings*, vol. xxxii (1905) 403–10; Cooley, Harris R., "Organization and Development of Our City Infirmary Colony" in National Conference of Charities and Correction, *Proceedings*, vol. xxxix (1912) 437–39; Clark, Mary V., "The Passing of the County Farm" in *The Survey*, vol. xlii (1919) 624–25; Sellers, E., "Woeful Waste in Workhouses" in *Nineteenth Century*, vol. lxxxviii (1920) 707–15; Cummings, John, "Poor Laws of Massachusetts and New York" in American Economic Association, *Publications*, vol. x, pt. iv (1895); Kelso, R. W., *History of Public Poor Relief in Massachusetts* (Boston 1922); Frankel, Emil, *Poor Relief in Pennsylvania* (Harrisburg 1925); Gillin, J. L., *History of Poor Relief Legislation in Iowa* (Iowa City 1914); Brown, Roy M., *Public Poor Relief in North Carolina* (Chapel Hill 1928); Virginia, *Public Welfare and Juvenile Laws of Virginia* (Richmond 1926).

ALSACE-LORRAINE. For a thousand years or more Alsace-Lorraine has been a cause of controversy and war to the dwellers on both sides of the Rhine. By the division of Charlemagne's empire among his three grandsons at Verdun in 843, Alsace and Lorraine fell to Lothair, and were included in his kingdom of Lotharingia; this name, in its French form, Lorraine, has adhered ever since to a small part of Lothair's inheritance. During the Middle Ages Alsace-Lorraine formed part of the Holy Roman Empire and became split up into numerous small counties, bishopries and "free cities." The bishopric of Metz was conquered by Henry II of France in 1552, and formally ceded to France by the Treaty of Westphalia in 1648. Most of the surrounding Lorraine territory was transferred by its Hapsburg ruler to Louis XV's father-in-law in 1735, and joined to France in 1766. Alsace was acquired by Louis XIV, partly by French conquests in the Thirty Years' War and the ambiguous terms of the Treaty of Westphalia, partly by the forcible seizure of Strasbourg in 1681, and partly by claims and conquests which were confirmed by treaty in 1697.

At the time of their transfer to France the populations of Alsace and Lorraine were strongly bound by cultural ties to Germany, being German in habits, institutions, feeling, and almost wholly in language. This was especially true of Alsace where Strasbourg, Colmar and other towns had played a leading part in the literary and artistic life of Germany. But Louis XIV and his successors so respected the local rights and privileges of the inhabitants that the change in sovereigns was not greatly resented. Although the French language had to be used in the law courts and made progress among the upper classes in the towns, local affairs continued very much in the old way and in large measure in the German language. Thus the period from 1648 to 1789 was largely one of gradual and painless assimilation.

The French Revolution accelerated this assimilation process. It put an end to mediaeval German social and political conditions, reorganized Alsace and Lorraine into three new French departments, and introduced a democratic social and administrative system uniform with the rest of France. In spite of local resentment at the antireligious legislation of the government at Paris, Alsace and Lorraine in general welcomed and shared enthusiastically the work of the revolutionary and Napoleonic era. The *Marseillaise* was composed and first sung at Strasbourg, and Alsatians served in great numbers in Napoleon's victorious armies. Alsace-Lorraine became a living part of the French body politic, and so remained until the Franco-Prussian War.

Bismarck's annexation of the provinces in 1871 was dictated primarily by strategic considerations. His generals insisted that the German possession of Metz, and the establishment of the Vosges instead of the Rhine as the boundary, were necessary to the future safety

of the new German Empire against a possible French war of revenge. Bismarck openly stated that the region was to be a glacis against a possible French attack. His action was further justified on the ground that he was "liberating" territory which had been wrested from Germany by Louis XIV at a time when Germany was weak and divided against herself. But there was a vast difference between the French annexations in the seventeenth century and Bismarck's annexation in 1871. Between these two periods lay the French Revolution and the forces to which it had given rise. Nationalism, popular education, universal military service and the greater activity of the state in relation to the individual made a transfer of sovereignty a far more important matter for a people in the nineteenth than in the seventeenth century. Louis XIV in seizing Alsatian districts did not dismember Germany, because there was at that time no united German body politic—nothing but a conglomeration of mutually jealous German territories. The so-called Holy Roman Empire was "neither Holy, nor Roman nor an Empire," but, as the German Pufendorf said, "an irregular sort of body like a monster," incapable of feeling a wound. The French Revolution, however, in sweeping away provincial boundaries, had created a new self-conscious nation, "one and indivisible." France, including Alsace and Lorraine, had become one body, powerfully conscious of its unity and nationality; if one of its members suffered, all suffered together. Bismarck mutilated a living body, and the wound would not heal; it remained to threaten the peace of Europe for forty years. It also gave rise to the fatal system of alliances which came to divide the Great Powers of Europe into two hostile groups, and which was one of the main causes of the World War.

If Bismarck had immediately granted the annexed provinces, or "Reichsland," a large measure of autonomy, with careful regard for local privileges and feelings, it is possible that their resentment at being annexed might have gradually died away after a generation of material prosperity. If he had dignified their position by making them one of the component states of the empire, with a democratic legislature and representation in the Bundesrat, on equal terms for instance with Saxony or Baden, they might have become reconciled to the transfer of sovereignty. But, instead of this, Prussia imposed a military regime, which was regarded as severe and oppressive, and which fed the fire of discontent and protest both in Alsace-Lorraine and across the border in France.

Germany made many efforts to win the allegiance of the annexed provinces. Mediaeval castles were rebuilt to give employment and to flatter local pride. German immigrants took the place of natives who preferred to emigrate and live in France. Railways and factories were built. Potash deposits in southern Alsace were unearthed and developed to such an extent as to give Germany the leading world position in an industry of great importance for agricultural fertilizers and the chemical trades. Petroleum was tapped and exploited in considerable quantities at Pechelbronn in northern Alsace. In Lorraine the production of coal, and especially of iron, was accelerated to an astonishing degree; the iron of Lorraine and the coal, coke and steel mills of the Ruhr were rapidly developed as a natural and necessary economic unit. But in spite of these efforts the undercurrent of discontent flowed on. The grant of limited autonomy and representation in the Bundesrat, which was finally accorded to the Reichsland in 1911, came far too late, and did little to improve the situation.

The World War gave France her long awaited opportunity to recover the lost provinces. None of her responsible statesmen had seriously planned to provoke war simply to recover the territory lost in 1871; but, once the World War broke out, France instantly insisted on the restitution of Alsace-Lorraine as one of the absolute and unshakable conditions of peace. Germany's long continued refusal to consider such a condition wrecked various peace efforts, and tended to prolong the war. But finally Germany, defeated in the field, in order to secure an armistice had to accept President Wilson's Fourteen Points, one of which stated that "the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine . . . should be righted." Accordingly the Treaty of Versailles restored the two provinces to France as a matter of right. Elaborate provisions were made, however, to protect the interests of German immigrants and to prevent a too sudden rupture of the economic bonds which had gradually united Alsace-Lorraine to Germany.

The spontaneous enthusiasm which greeted French troops upon their entry into Alsace-Lorraine at the end of the war was eloquent

evidence of the French sympathies of the population. But in the decade 1919 to 1929 this enthusiasm waned. During the half century of German rule Alsace-Lorraine had grown accustomed to a decentralized administration and to being treated as a unit; the French have a highly centralized administration and again divided the region into three departments. The government at Paris has paid small heed to local prejudices and to the desires of the restored population. This is particularly true in religious, school and labor problems. Since 1905 France has been living under laws which separate church and state and which prohibit religious instruction in the schools, but Alsace-Lorraine still abides by Napoleon I's Concordat with the papacy (*see* ANTICLERICALISM). Nearly four fifths of the Alsatians are Roman Catholics, and for the most part devoutly religious. Communist propaganda has been carried on against Parisian capitalists. The situation is indicated in the paradoxical statement: "The Alsatian laborer is a Communist who attends mass every Sunday." Under these various influences a strong autonomist movement has developed in Alsace, signified by the arrest in December, 1927, of twenty-four Alsatians charged with conspiracy to overthrow the existing regime.

In view of the Locarno Treaties of 1925, guaranteeing the existing frontier between Germany and France, it is to be hoped that Alsace-Lorraine has at last ceased to be a cause of controversy and a danger to the peace of Europe.

SIDNEY B. FAY

See: NATIONALISM; ANNEXATION; AUTONOMY; BUFFER STATE; BOUNDARIES; WORLD WAR.

Consult: Haskins, C. H., and Lord, R. H., *Some Problems of the Peace Conference* (Cambridge, Mass. 1920) ch. iii, with brief bibliography; Phillipson, Coleman, *Alsace-Lorraine, Past, Present and Future* (London 1918); Cerf, B., *Alsace-Lorraine since 1870* (New York 1919), strongly pro-French; Pfister, C., *La Lorraine, Le Barrois et les Trois-Évêchés* (Paris 1912); Reuss, R. E., *Histoire d'Alsace* (11th ed. Paris 1916), *L'Alsace au XVIIe siècle*, 2 vols. (Paris 1897–98); Schäfer, D., *Das Reichsland* (Berlin 1915); Vidal de la Blache, P., *La France de l'est* (Paris 1917), an admirable study of the country, the people and their economic evolution; Hayes, Carlton J. H., *France: a Nation of Patriots* (New York 1930) ch. x.

ALTENSTEIN, KARL, FREIHERR VON STEIN ZUM (1770–1840), Prussian minister of education. After holding several political offices, including that of minister of finance (1808–10), he was placed in charge of the Ministry of Ecclesiastical, Educational and Medical Affairs in 1817, when it became an independent department separate from the Ministry of the Interior. His accession to this office coincided with the beginning of the reaction under Friedrich Wilhelm III. Although well intentioned, Altenstein lacked practical ability and was unable to put into effect the far sighted educational program drafted by Süvern in 1819. His period of office, which lasted until 1838, was marked by the consolidation of the school as a political agency and the establishment of a strong bureaucracy, possibly under the influence of his friend Hegel, who joined the University of Berlin in 1818. Largely through Johannes Schulze, who assumed charge of secondary and higher education in 1818, a return was made to the tradition of the sixteenth century with an emphasis on classics and religion, and the *gymnasium* was recognized as the only secondary institution preparing for the universities; all movements of a realistic or practical tendency were checked, and strict requirements were enforced for the certification of teachers and the control of their political views. Progress was made in the training of elementary teachers, mainly because the normal schools were left undisturbed until after the Revolution of 1848. In elementary education Altenstein adopted the view of Friedrich Wilhelm III that it must not raise the masses out of the sphere designed for them by God and society, but must make their lot happy and agreeable. Altenstein retired from the ministry two years before his death.

I. L. KANDEL

Consult: Paulsen, Fr., *Geschichte des gelehrten Unterrichts*, 2 vols. (3rd ed. Leipsic 1919–21) vol. ii, p. 316–18; Schmid, K. A., *Geschichte der Erziehung*, 5 vols. (Stuttgart 1884–1902) vol. v, pt. i, p. 258, pt. iii, p. 153.

ALTGELD, JOHN PETER (1847–1902), governor of Illinois from 1893 to 1897. He became nationally prominent because of his pardon of the three surviving "anarchists" convicted of complicity in the Haymarket bomb case, his protest to President Cleveland against the sending of federal troops to Chicago during the Pullman strike, and his part in the free silver campaigns of 1896 and 1900. For his pardon of the anarchists he was subjected to vilification and misrepresentation rarely, if ever, equaled in American public life.

Altgeld was born in Germany and brought to America as a child. After studying law and serving as county attorney in Savannah, Mis-

souri, he went to Chicago in 1875, made a fortune in real estate, and served from 1886 to 1891 as a judge of the Cook County Superior Court. As governor he was a pioneer in mild social and political reforms, vetoed bills giving long franchises to Chicago public utilities, suppressed graft and inefficiency in public offices, greatly improved the penal and charitable institutions of the state, and raised the University of Illinois from a comparatively insignificant small college to an honorable position among educational institutions. The reform measures passed during his administration and with his aid include a civil service law, an inheritance tax law, a law providing for indeterminate sentence, parole and probation for prisoners, another regulating the sweating system and child labor, limiting the hours of women workers to eight a day and providing for factory inspection, and still another establishing a state board of arbitration for industrial disputes. He was also a pioneer in appointing women to public offices.

HELEN SUMNER WOODBURY

Important works: *Our Penal Machinery and Its Victims* (Chicago 1884, reprinted Chicago 1890 as part of a volume entitled *Live Questions*, revised and greatly enlarged edition Chicago 1899); *Oratory, Its Requirements and Its Rewards* (Chicago 1901); *The Cost of Something for Nothing* (Chicago 1904).

Consult: Browne, Waldo, *Altgeld of Illinois: A Record of His Life and Work* (New York 1924); Masters, E. L., "John Peter Altgeld" in *American Mercury*, vol. iv (1925) 161–74.

ALTHUSIUS, JOHANNES (1557–1638), political theorist and jurist. After studying law and philosophy at Basel and possibly Geneva, he held a professorship (with minor interruptions) at Herborn in Nassau until 1604. In that year he became syndic of the town of Emden in eastern Friesland, a prosperous trading center. He was an ardent Calvinist. He wrote several works on legal matters, particularly a widely used general treatise on Roman law; he was the author also of a little tract in the humanistic tradition on polite manners.

His main work, however, is the *Politica methodice digesta atque exemplis sacris et profanis illustrata* (Herborn 1603, enlarged 2nd ed. Groningen 1610, still further enlarged 3rd ed. Herborn 1614). This is (according to Gierke) the first systematic treatise on politics since the ancients. Its express purpose is to bring political science into accord with Calvinist theology generally, and particularly to apply the teachings of the Old Testament to a further development of Aristotelian politics. Indeed his work may be considered as the most developed system of politics which Calvinism has produced. But if the general ideas are supplied by Calvinist theology, the context of experience is to be found in the complex life of central European political communities, woven into the tenuous pattern of the Holy Roman Empire of the German nation. In fact the *Politica* may from this point of view be described as a systematization of the political ambitions represented by the craft guilds throughout the preceding two centuries in their efforts to democratize the town government, as well as of the similar political ambitions of the towns themselves in their struggle with the territorial princes. Unlike the writings of the monarchomachs with which it is commonly classed, the work of Althusius is not propagandist in nature. Quite on the contrary, it was the doctrines expounded by him that drew him into practical politics. His reasoning is based upon a strong philosophical individualism tempered by a profound appreciation of the individual's dependence upon a variety of groups. He emphasizes time and again the fact that the justification of all groups is to be found in their ability to provide a *vita beata, commoda et felix* for its members. The repeated emphasis upon the *vita commoda* and the further elaboration of this idea foreshadows Bentham's pleasure calculus and the doctrine of the utilitarians. Nevertheless there is a strongly puritanical note in his concept of comfort. Within this limitation there is a spirit of distinct worldliness permeating the entire work, which becomes apparent, for example, in the author's reasoned preference for the *vita activa* as against the *vita contemplativa*.

Althusius' fundamental attitude toward life is in harmony with his exposition of popular sovereignty as a desideratum. But his theoretical genius appears in the way he deals with Bodin's doctrine of sovereignty. He accepts Bodin's theory that sovereignty is in its nature indivisible; but for precisely the same reason he claims that sovereignty is an essential condition of the existence of the political community and therefore cannot be surrendered by the people to anyone. As Gierke has pointed out, Althusius clearly produces the argument with which Rousseau almost two hundred years later set the world on fire. Similarly Althusius develops a complete theory of the social contract. Popular representation is also a well defined part of his system, but he insists upon the superiority of

the primary assembly. In order to overcome the difficulties which such a preference for direct democracy involves, he introduces the concept of a complex federalization and integration of the several smaller units into a manifold hierarchy of authorities. The component corporate units are supposed to have a life of their own of which they transmit to the higher unit only enough to enable it to fulfil its specific purposes, all of which are dictated by the interests of these smaller units. This aspect of his thought has made a particular appeal to the modern pluralists, who are inclined to consider him as one of their forerunners.

Althusius aroused much interest during his lifetime and in the decades following, and his doctrines were widely discussed, praised and condemned. But with the ascendancy of absolutism on the continent interest in them waned. It was left to Gierke to rediscover him in connection with his extensive researches into the nature of the corporation and what he termed the Germanic concept of corporation.

CARL JOACHIM FRIEDRICH

Consult: Gierke, Otto von, *Johannes Althusius und die Entwicklung der naturrechtlichen Staatstheorien* (3rd ed. Breslau 1913); Wolzendorff, Kurt, *Staatsrecht und Naturrecht in der Lehre vom Widerstandsrecht des Volkes gegen rechtswidrige Ausubung der Staatsgewalt* (Breslau 1916) p. 198–247.

ALTRUISM AND EGOISM. The term altruism, in its psychological sense, means the disposition of an individual to further the welfare or happiness of other individuals or groups. Egoism is the contrary disposition to further one's own welfare or happiness. The ethical theory of altruism assumes that the altruistic disposition is at least of coordinate psychological standing with egoism and that as a matter of ethics it should prevail over egoism in cases of conflict. Ethical egoism reverses the second part of this statement and is inclined on the whole to deny the indicated psychological assumption also.

Seventeenth and eighteenth century British moralists argued at length the psychological genuineness of altruism or benevolence. The religious and civil disturbances of the seventeenth century had brought to definition the self-conscious individual as the unit of social grouping and organization. In England, as on the continent, though with a different emphasis, the basic characters, the powers, rights and possibilities of the individual were the themes of political and moral philosophy. Much as Hobbes (*Leviathan*, 1651) deprecated the insubordinate excesses of individualism, he never questioned the standing of the isolated individual as the true unit of political organization. For Hobbes the individual is fundamentally egoistic. Pity, he declares, is nothing but "imagination or fiction of future calamity to ourselves, proceeding from the sense of another man's calamity," and love, good will or charity, a mere pleased conceit of one's power to "assist other men in their desires." Mandeville (*Fable of the Bees*, 1723) held that only by artfully "extolling the excellency of our nature above other animals" had law givers been able to "persuade mankind to disapprove of their natural inclinations or prefer the good of others to their own." In opposition to this egoistic conception of the individual, British moralists, from the seventeenth century to J. S. Mill and Sidgwick, were essentially agreed that there are in human nature disinterested benevolent impulses and social sympathies as certainly genuine and native as the self-regarding.

The right relation of these two groups of impulses was, however, a perennial problem. For Joseph Butler (*Fifteen Sermons*, London 1726, no. iii) self-love must be held in check by conscience in order that a right balance of self-interest and the welfare of others may be assured. "In the common course of life there is seldom any inconsistency between our duty and what is called interest." When there is such inconsistency, conscience must prevail. For Sidgwick, (*Methods of Ethics*, London 1874, bk. iii, ch. xiii) what Butler calls conscience becomes a rational intuition to the effect that "the good of any one individual is of no more importance from the point of view of the universe than the good of any other," and that "as a rational being, I am bound to aim at good generally, not merely at a particular part of it." Neither Butler nor Sidgwick, in this reliance on a transcendental factor, has Bentham's faith in the adequacy of mundane or supernatural penalties and rewards to make socially expedient behavior appear to the intelligent individual a good bargain (*Introduction to the Principles of Morals and Legislation*, London 1789, ch. iii), or Mill's assurance that "the deep rooted feeling which every individual even now has of himself as a social being" must of itself make it impossible for those whose minds are not "a moral blank" to "lay out their course of life on the plan of paying no regard to others except so far as their own private interest compels" (*Utilitarianism*, London 1864, ch. iii).

So long as the problem is stated in the traditional terms of separate groups of impulses set side by side in rivalry in human nature, solutions must, as history shows, be ambiguous and inconclusive. However, a strictly self-seeking egoist, with no disinterested thought whatever for any other persons besides himself, is a monstrosity. So-called selfish persons commonly if not always include within the scope of the "social self" (William James, *Psychology*, 2 vols., New York 1890, vol. i, ch. x) a considerable number of other persons—parents, children, relatives, friends, compatriots—whose interests they put above those of the larger body of society. The perfect egoist is at best the limiting case, seldom if ever actually encountered. Egoism is in fact not so much the preferring of one's own well-being to that of others as refusing to widen the scope of one's interest in other persons in order to include claimants who think themselves wrongfully ignored. A man may deal hardly with others in trade or as an employer and yet very probably expend his gains for the pleasure of his family or friends with little or no direct participation on his own account. He deserves to be called an egoist, but chiefly because of the unimaginative inertia with which he resists any change in a way of living to which he has become accustomed. The egoist habitually cleaves fast to his established and congenial manner of life or system of values as against appeals made in behalf of others to change it. The altruist is normally or characteristically responsive to such appeals. The ultimate aim of both may be "happiness," but the difference between the ways by which egoists and altruists seek ultimate happiness loses nothing whatever of its social importance, even on such a showing (*cf.* Sidgwick, *Methods of Ethics*, bk. ii, ch. i).

Egoism has been widely if not generally believed to be the foundation postulate of economics. Economic theory has been regarded as essentially an account of egoism in action, with altruism playing the part of a more or less stubborn and disturbing intruder. This view seems confused and unnecessary. The analysis of the situation defining the market price of a commodity, for example, need take no account of the reasons lying behind the personal demand prices and supply prices of the commodity. All manner of aspirations, ambitions, curiosities, inhibitions, darings, cautions, stupidities, egoisms and altruisms are overtly expressed in the valuations of the several participants in the market equilibrium. On these valuations the eventual market price depends. If, now, an analysis in terms of the participating valuations is deemed worth while, it is because, on the whole, the situation is not expected to change in respect of them within a measurable period. It is assumed merely that buyers and sellers know their minds, by whatever logic and psychology made up, and that, apart from influences looking to the alteration of their motives, few if any of them will find it expedient, from their points of view, to change their valuations. In all this there is no implication of the priority or predominance of egoism over altruism in human nature. The theoretical analysis is the same, whether philanthropists, self-seekers or persons combining both qualities make up the market. Perturbations of the ideal smoothness and symmetry of market adjustment come not from irruptions of altruism as such, but from guess work, blundering and indecision.

As Locke sought to vindicate the immunity of the individual, in natural right, from civil and religious tyranny, so the British economists of the next century sought to justify the individual's freedom from governmental interference with his gainful pursuits. The economic man was the free citizen of Locke entering upon the affirmative exercise and enjoyment of his freedom (*cf. Robinson Crusoe*, 1719), not essentially or necessarily an egoist. His determination to make his way in the world has exposed him to some misrepresentation at the hands of both his abettors and his critics. It is not this determination that makes him egoistic when he is so, but a too lively fear of changes in law and social conditions that may put him to the cost and trouble of redefining it.

Thus the definition of egoism (and of altruism) given at the outset represents the point of view of an outside observer, not that of the agent himself. When other individuals or classes of individuals are adversely affected by my "unimaginative inertia," the fact is outwardly patent. I shall be reproached with "selfishness," whereas from my own point of view my shortcoming is not different in kind from falling into a rut in any other respect, as, for example, in my intellectual or aesthetic interests or in my friendly associations. Conversely my life may be freshened and invigorated not only by diversifying my privately personal interests (about which no one else has much reason for concern) but by actively interesting myself in the welfare of other persons (who are quite likely to notice the fact and to pass judgment on the

measure of my success). Thus the old problem of the genuineness of altruism and its ability to withstand or right to put down egoism becomes obsolete today. The real problem is the balancing of habit and initiative in the individual's conduct. Thus the supposed psychological priority of egoism over altruism disappears.

HENRY W. STUART

See: HUMAN NATURE; ETHICS; HEDONISM; UTILITARIANISM; INDIVIDUALISM; ECONOMIC INCENTIVES.

Consult: Tufts, J. H., and Thompson, H. B., *The Individual and his Relation to Society as Reflected in British Ethics* (Chicago 1904); Comte, A., "Discours préliminaire," pt. ii, *Système de politique positive*, 4 vols. (3rd ed. Paris 1890–95), English tr. (London 1875–77); Darwin, C., *The Descent of Man* (new ed. London 1901) chs. iv–v; Spencer, H., *The Data of Ethics* (New York 1894) chs. xi–xiii; Taylor, A. E., *The Problem of Conduct* (London 1901); Fite, W., *Individualism* (New York 1911); Scheler, M., *Wesen und Formen der Sympathie* (2nd ed. Bonn 1923); Stuart, H. W., "The Phases of the Economic Interest" in Dewey, J., and others, *Creative Intelligence* (New York 1917) p. 332–35.

ALVAREZ, AGUSTIN (1857–1914), Argentine political ethicist and sociologist. He was graduated from the national military college in 1878 and received his doctorate in law from the University of Buenos Aires in 1888. He saw military service on the frontiers, rose to the rank of brigadier general and was secretary of the supreme council of the army and marine (1896–1906). He taught international law in the national military college (1904–14) and was professor, vice president and acting president in the University of La Plata at various times after 1906. His chief work, however, was that of critic of Latin American institutions. A disciple of Emerson and Sarmiento, he applied the penetrating social criticism of the former and the energetic analysis of the latter, reenforced by his own sterling independence and honesty of character, to an evaluation of the social inheritance of the Spanish American civilization, particularly with respect to religion and politics. He held up always to the view of his fellow countrymen the example of Anglo-Saxon institutions, which he greatly admired. But his criticism was meant to cure rather than to wound, and his teachings have been greatly admired by his fellow Argentines.

L. L. BERNARD

Important works: *South America* (Buenos Aires 1894); *Manual de patología política* (Buenos Aires 1899); *Ensayo sobre educación* (Buenos Aires 1901); *Adonde vamos?* (Buenos Aires 1904); *La transformación de las razas en América* (Buenos Aires 1908); *Historia de las instituciones libres* (Buenos Aires 1909); *La creación del mundo moral* (Buenos Aires 1912).

Consult: Colmo, Alfredo, *Principios sociológicos* (Buenos Aires 1905); also the biographical introductions to Alvarez' works in La Cultura Argentina edition.

ALVORD, CLARENCE WALWORTH (1868–1928), American historian. He was born in Massachusetts and received his advanced training at Berlin and at the University of Chicago. He taught history at the University of Illinois, 1897–1920, and the University of Minnesota, 1920–23. Having discovered and edited the *Cahokia Records* (Springfield 1906), relating to a French settlement in Illinois during the American Revolution, he was made general editor of the *Collections* of the Illinois State Historical Library; and the fourteen volumes of the series issued (1907–20) under his editorship set a new standard for state historical publications, as did also the *Centennial History of Illinois* (5 vols., Springfield 1918–20), of which he was the editor. He was influential in shaping the policies of the Mississippi Valley Historical Association, brought about the establishment under its auspices of the *Mississippi Valley Historical Review* in 1914, and served as its editor until 1923. His most important writings are *The Illinois Country* (Springfield 1920) (vol. i of the *Centennial History*) and *The Mississippi Valley in British Politics* (2 vols., Cleveland 1917), which received the first Loubat prize. Alvord's work is notable for its thoroughness, accuracy, objectivity and literary quality. Its importance is not to be gauged by the fact that most of it was in the field of state history; it did much toward a reorientation of emphasis upon the mid-western aspects of American history. The last four years of his life were spent largely in England, where he was honored with important lectureships.

SOLON J. BUCK

Consult: Buck, S. J., "Clarence Walworth Alvord, Historian," with a bibliography of his published works, in *Mississippi Valley Historical Review*, vol. xv (1928) 309–20, 385–90.

AMALGAMATION is the biological union of previously distinct racial groups. There are three major stages in the process: first, cross breeding of divergent stocks to the production of a mixed-blood population; second, isolation and selective adaptation of the hybridized stock; and third, the ultimate establishment of a distinctive racial strain.

The contact of racial groups seems everywhere to result in some degree of amalgamation. The skeletal remains of early man show unmistakable evidence of racial intermixture. The populations of the modern European nations are in every case composed of diverse and incompletely fused ethnic elements. In the recent centuries, as a secondary consequence of world commerce and colonial policy, there has been an extensive crossing of racial stocks previously little in contact. Typical of these are the mulattoes in the United States, Brazil and South Africa; the Indian-white and Indian-Negro mixtures of both Americas; and the Eurasians of the Asiatic coast cities.

The biological effects of race crossing are difficult to determine because of the multiplicity and complexity of human characters and because of the hybridity of the modern races. In general the results are in accord with genetic principles that prevail in the hybridization of other forms of life. Certain traits are transmitted in accordance with a simple Mendelian formula. But the great majority of human characters are the result of multiple genetic factors. Consequently, there is a marked tendency toward blending, and the hybrid offspring approximate an intermediate type with, however, the reappearance in successive hybrid generations of certain ancestral traits. The Darwinian belief that race crossing leads to increased vitality and fertility and the opposed belief that it results in sterility and racial degeneration appear, in the light of modern knowledge, to be equally unfounded. Each rests upon partial data and upon the failure to disengage the exact cause or causes of the superiorities or inferiorities observed. The biological effects of racial crossing depend upon the hereditary constitution of the individuals generating the cross breeds, and are quite independent of the racial stock.

Racial amalgamation is related as both cause and effect to social assimilation. Biological intermixture, by increasing the number and intimacy of social contacts, promotes the fusion of social heritages and the diffusion and blending of cultures. On the other hand the social and psychological similarity resulting from cultural assimilation favors intermarriage through increasing mutual understanding and personal appreciation.

The crossing of races has other sociological consequences of far reaching significance. The hybrids may be identified with either parent race or form an intermediate caste; the specific adjustment depends upon the race and caste prejudice of the culturally dominant group. In any case they occupy a strategic position: they function as a buffer between the racial extremes and play the role of cultural mediators and interpreters. The mixed-blood individuals are often cultural as well as racial hybrids. They stand between two civilizations without being fully incorporated into either, and manifest in their personality characteristics the same fundamental cultural conflict that characterizes the bi-racial situation.

E. B. REUTER

See: RACE; HEREDITY; BIOLOGY; RACE MIXTURE; MISCEGENATION; NEGRO PROBLEM; MIGRATION; ASSIMILATION, SOCIAL.

Consult: Castle, W. E., "Biological and Social Consequences of Race-Crossings" in *American Journal of Physical Anthropology*, vol. ix (1926) 145–56; Davenport, C. B., "The Effects of Race Intermingling" in *Proceedings of the American Philosophical Society*, vol. lvi (1917) 364–68; Fischer, Eugen, *Die Rehobother Bastards und das Bastardierungsproblem beim Menschen* (Jena 1913); Boas, Franz, "The Half-blood Indian" in *Popular Science Monthly*, vol. xlv (1894) 761–70.

AMANA SOCIETY. *See* COMMUNISTIC SETTLEMENTS.

AMARI, MICHELE (1806–89), Sicilian patriot and historian. His early education and preparation reflect the peculiar political conditions of Sicily, where the struggle for liberty took the form of an endeavor to reestablish a separate kingdom. Amari espoused this cause and contributed to its furtherance by publishing in 1842 *Un periodo delle istorie siciliane del secolo XIII* (8th ed. Florence 1876). This innocent title masked a powerful arraignment of the Neapolitan rule and of its basis in the claim of the historic unity of the Two Sicilies.

The publication of this book forced him to leave Sicily. He took refuge in Paris, where he remained until 1859, except for the year he dedicated to active and courageous participation in the Sicilian revolution of 1848. At Paris he made himself a master of Arabic language and culture, published many scholarly articles, edited and translated important works and gathered material for his great work on the mediaeval history of Sicily. The nature and extent of his researches can be seen in the scholarly and comprehensive collection which bears the name of *Biblioteca Arabo-Sicula* (2

vols., Leipsic 1851–75), published by the Oriental Society of Germany; they constitute the foundation of his monumental work, *Storia dei Musulmani in Sicilia* (3 vols., Florence 1854–72). This work gives a documented description of the civilization which the Moslems created in Sicily, of the conditions that preceded it, and of its persistence in later times. It appraises the contributions of the Normans and proves how in reality it was "Italy that under their leadership took possession of the island." It is a classically written and scientifically motivated description of the converging results of four civilizations and of the interaction of their arts, sciences, traditions and religions.

In 1859 Amari returned to Sicily, took part in the Garibaldi government and, no longer a Sicilian separatist or a federalist or even an Italian republican, he became a senator of the kingdom, minister of public instruction (1862–65), and professor of Arabic language and history at Florence. Amari's writings mark the transition from controversial and patriotic historiography to purely scientific inquiry. He never lost his patriotic passion, but his scientific instinct enabled him to discover the proper object for his political ardor. No one in the nineteenth century had more influence than he in founding in Italy a school of historiography based on original documents and on the criticism of sources.

DINO BIGONGIARI

Consult: D'Ancona, A., "Elogio di Michele Amari" in Amari's *Carteggio*, 2 vols. (Turin 1896) vol. ii, p. 315–97; Derenbourg, Hartwig, "Carteggio di Michele Amari" in *Journal des Savants* (1902) 209–22, 486–98, 608–22; Croce, Benedetto, *Storia della storiografia italiana*, 2 vols. (Bari 1921) vol. ii, p. 28. A complete bibliography of Amari's works is to be found in the *Centenario della nàscita di Michele Amari*, 2 vols. (Palermo 1910) vol. i, p. xlv–cviii.

AMATEUR. The amateur is one without professional training or experience who engages in something solely because he enjoys doing it. In an evaluation of his status in society he must be understood not as the opposite of the professional but as his complement. There cannot always be a tenable distinction between amateur and professional since the latter's position itself is usually undefined; it may rest on such tenuous considerations as the conventions of the period, the quality of his work, his measure of success, or his estimate of himself, and he may be equaled by the amateur in some of these respects. Nevertheless amateurism in general may be said to mean the pursuit of a subsidiary interest, not primarily for a livelihood, in imitation or appreciation of something already done by a skilled worker.

There are many activities which are not to be classed as either amateur or professional. They derive from impulses and necessities that are everywhere existent, and are the origins from which professionalism, and ultimately the amateur's imitation, develop. When such pursuits are professionalized they are still not by any means given over entirely to specialists. Though there are professional cooks and entertainers, the housewife and the hostess are not thereby rendered amateurs. They are rather the precursors of both.

The appearance of the amateur is necessarily preceded by specialization and the recognition of specialists. Primitive and folk arts cannot be considered amateur activities. Specialization often exists in primitive communities, but only in certain activities, such as blacksmithing or carpentry or priestcraft, and these are recognized as the province only of certain persons. The economic organization does not permit of imitation merely for the sake of personal pleasure. Where the arts are participated in by the entire community, where each man fends for himself or all share alike in the provision of shelter, food and recreation, the results may appear amateurish in relation to other standards, but in that community the distinction does not exist.

Amateurism holds a different emphasis according to the group or period in which it appears, and its extent and direction depend on many variables. Until modern times the privilege of leisure time interests has been limited to the aristocracy. Since activities essential only for self-satisfaction and not for livelihood are something of a luxury, the amateur cannot appear in periods or classes where maintenance dominates life. Hard working communities have their recreations, but when time is short these are likely to take the easier, less intellectual form of games or entertainments provided by others instead of the more deliberate individual effort which amateurism involves. Moreover some educational background is necessary—a recognition of those things that exist beyond the daily routine of experience. Some appreciation of arts and of crafts is necessary to inspire imitation of them; knowledge and developed sensibilities are necessary to permit appreciation.

The leisured classes, therefore, have con-

tained the amateurs. The later days of the Roman Empire, the Italian Renaissance, Elizabethan and Caroline England, the court of Louis XIV, were vibrant with a polite imitation of the arts which was often amateurism of the finest kind. The lack of respect for the professions made amateurs of a great many persons of talent who today would candidly follow their interests as occupations. The tradition of aristocracy that its members shall not earn a living by their own efforts puts in bad repute, as long as aristocracies set the fashion, any pursuit that is followed professionally. A nobleman poet, therefore, who writes apparently only for his own pleasure and to follow the vogue of the time, denying even that he is the author of his verses, may rightly be considered an amateur, but if he prove to be a Philip Sidney it is apparent that he is an amateur only because of the conventions of the time.

By the eighteenth century the ideals of aristocracy had largely lost their hold, and professions had begun to be acknowledged as desirable. The artist was released from the rigors of patronage and the man of talent was able to follow his interests with independence and respect. The elegant amateurism of the nobility, which had not only resulted from leisure and fashion but had also contained the professional interests of the upper classes, gave way therefore to forms at once more imitative and more democratic. This shift in emphasis entailed a closer definition of occupations. New knowledge began to convert eclecticism into neat professional patterns. Instead of a Francis Bacon, with a knowledge of all fields, there appeared the chemist, the physicist, the mechanic, the physician, the man of letters, each a professional in his own field and an amateur outside it. Enthusiasm was high for the new ideas and discoveries, and in a period of such stimulation amateurism is one of its expressions. Social intercourse rested largely on an interplay of minds, and institutions arose which fostered this ideal. The salons of the eighteenth century, the coffee clubs, the earnest Bluestockings, bred by the score amateur writers and critics, philosophers and political theorists. A stimulus and a focus were offered for the expression of interests which would not, or could not, be followed professionally and which were given birth by the increased opportunities for knowledge and thought, for comfort and leisure. The amateur had his pleasure and his benefit in keeping in motion the current streams of thought.

As "cultural" advantages spread to the masses of the people, however, an adjustment had to be made to a new scheme of values. An appreciation of music and painting and singing, as represented by the professional artist, became a desirable mark of distinction as well as a thing to be developed for its own sake, and accordingly imitation of the arts was considered correct. The Victorian generations that were taught to play the piano and sing songs for assembled guests, to paint in water color with proud determination, represent a kind of amateurism which is an adaptation to a new social order. New found money, leisure and opportunities gave to the common man a wider acquaintance with the arts than he had ever had before. He was not always able to appreciate his opportunities as he felt he should, but he realized their value as an indication of position and knowledge, as an index of the gentility he considered desirable. This was amateurism which resulted from fashion and a desire for at least the outward and impressive qualities of aristocracy, but it did more than lectures could to lay the basis among the people for an understanding of the arts.

As the masses of the people have reached financial ease and social security, their amateur activities have again changed in emphasis. Professional delineation, which is necessary to the recognition of amateurism, has become so sharply accentuated that it tends to be esteemed as an end in itself. An attitude is thus set up which is inimical to the amateur and ultimately impoverishing to the expert. When recreation is systematized and made commercial without the vigor of individual enterprise, the personal effort which is indispensable to amateurism is likely to be chilled. The radio and moving pictures, social intercourse based on objective amusement, have made the individual of the present generation very largely a recipient rather than a communicant. He is more inclined to pay for his recreation than to supply it through his own efforts. The desire for economic position represents a ceaseless striving which is not easily discarded at will. It carries over beyond the working day and makes real leisure a thing to be shunned or, if imposed, a thing to be got rid of.

At the present time, therefore, there are more amateurs among women than ever before. The relaxation of their conventional duties has given them time for broader interests, while men are becoming more restricted and more converted

to the dogma of energetic money making and easy recreation. Women's clubs' activities may be largely the result of boredom, of superficial curiosity, of social competition, but they represent a kind of amateurism which is typical of the period that produces it and which has a considerable formative influence. They are an example of the tendency toward organization even in presumably individual activities. The little theater in fact is an amateur movement so well organized that it is often practically professional. Sports have clearly marked professional boundaries, but the division is entirely arbitrary. It is based on commercial considerations and also on the lingering feeling that sports are the province of the gentleman. The amateur status is therefore jealously preserved, but it is often similar to the position of the nobleman poet who is an amateur merely by convention. The influence of contemporary ideals of organization has extended even to the individual layman who enjoys his sketch block and water colors, his basement carpentry bench, his piano, for the very commercialism that makes him so formally an amateur contributes all its ingenuity to his convenience. Amateurs have never been so unanimously classified, but neither have they ever been so well served. Their work is given little consideration in a professionally paced society, but their whims are recognized as a profitable indulgence.

It is not for the quality of his work, however, that the amateur is significant. His activities are designed for his own pleasure, and as a means of expression for interests and talents which circumstances have made subsidiary they are of as much value as any other kind of educative recreation. To millions of persons they give that consciousness of creation which is a desire perhaps even more prevalent than the desire to enjoy and which, though it may be an illusion, is as necessary a one as that of achievement. Moreover the amateur, in following his interests, trains himself inevitably for a better appreciation of the kind of work he does, and is therefore an important influence in maintaining professional standards. An amateur painter is better equipped to understand the work of the trained artist because he realizes more intimately the problems that must be met. In this way also he serves, perhaps unwittingly, the function of a medium. By his appreciation and emulation of the achievements of others he is able to give them the homely qualities of recognition which make them intelligible. The artist paints his picture and leaves it to the world, but if the public that receives it knows nothing of the process of its creation, response finds form in catchword criticism and superficial and irrelevant analysis, in pretentious praise or smug damnation. Also, by the very nature of his purpose, the amateur is little bound by the restrictions of tradition and competition and is therefore free to innovate what the professional often recognizes ultimately as desirable. The ideals of the little theater, for example, were made commercially safe by amateurs. It is not entirely true that an uncreative age produces few artists. Rather should it be said that an uncreative age cannot nurture its artists. Not even a specialist can work in isolation. He needs an interpreter and it is this that the amateur becomes.

ELIZABETH TODD

See: PROFESSIONALISM; ART; LEISURE; PLAY; AMUSEMENTS, PUBLIC; ARISTOCRACY; SALON; CLUBS; SPECIALIZATION; COMMERCIALISM; INDUSTRIAL ARTS; DANCE; DRAMA; MUSIC; ATHLETICS.

Consult: Perry, Bliss, *The Amateur Spirit* (Boston 1904); Tinker, Chauncey Brewster, *The Salon and English Letters* (New York 1915); Stephen, Leslie, *English Literature and Society in the Eighteenth Century* (New York 1904); Chase, Stuart, "Play" in *Whither Mankind*, ed. by Charles A. Beard (New York 1928) p. 332–53; Rogers, F. R., *The Amateur Spirit in Scholastic Games and Sports* (Albany 1929).

AMBROSE (*c.* 340–97), church father. He was born in Trèves, the son of a Roman officer of high rank. He was educated at Rome in the humanistic tradition of the age of Constantine, and entered first upon the career of a high Roman official. In 370 he became consular prefect of northern Italy, with headquarters in Milan. When urged by the people he accepted the office of bishop, although he had not been ordained or even baptized. He held it until his death, achieving such distinction that Milan, like Rome and Carthage, became an important center in the formation of Latin Christianity.

Ambrose was unlike Augustine in that his lasting influence was due to his personality rather than to his writings. The nobility of his character, which had captivated the populace, was largely instrumental in converting Augustine to the church. His native capacity to rule enabled him, as a representative of the church, to reject successfully the claims of the empire for the first time in history and, with no other weapon at his disposal than the strength of his faith, to subordinate the acts of the Christian

emperor to the moral dictates of the Gospels. As scion and conqueror of the Roman nobility Ambrose assumed leadership of the Milan church and became the venerable prototype of church princes throughout Catholic history.

Ambrose originated Latin church singing and composed some of the most beautiful of the Catholic hymns. The quality of his writing became less distinguished, however, as its character became more impersonal. Accordingly a descending line can be traced from his poetry through his letters, orations and sermons to the larger theological-scientific treatises.

The importance of Ambrose as a scholar and theologian rests chiefly on his work in Christianizing and Latinizing the pagan heritage in education and theology. He made excerpts from Philo and Origen; he made available to Roman Catholicism the works of the Greek church fathers and of the Alexandrian philosophers; and he adapted to the uses of Christianity Cicero's work, *De officiis*. In his own *De officiis ministrorum*, with its carrying over of the stoic doctrine of duty, he produced the model for all homiletic ethics and at the same time furnished authoritative support for such specific doctrines as that private property is not in accord with natural law. His letters and orations have been frequently cited to prove that, while palaces may be subordinate to the emperor, churches are subordinate to the bishop (*Epistola 20* in Migne, vol. xvi, col. 999), or that in matters of faith emperors are not the judges of bishops but bishops the judges of Christian emperors (*Epistola 21* in Migne, vol. xvi, col. 1004).

EDGAR SALIN

Works: St. Ambrosii, *Opera omnia* (the Maurine is the best of the earliest editions, 2 vols., Paris 1686–90); this has been reprinted in Migne, J. P., *Patrologia latina*, 221 vols. (Paris 1844–65) vols. xiv–xvii; a modern edition is being issued in the *Corpus scriptorum ecclesiasticorum latinorum*, vols. i–lxvi (Vienna 1866–) vols. xxxii, lxii, lxiv.

Consult: Carlyle, R. W., and A. J., *A History of Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–28) vol. i, pt. iii; Salin, Edgar, *Civitas Dei* (Tübingen 1926); Troeltsch, E. D., *Gesammelte Schriften*, vols. i–iv (Tübingen 1926–) vol. i, p. 83–178.

AMENDMENTS, CONSTITUTIONAL. An adequate provision for amendment is implicit in the very nature of a constitution. Not only must it be possible to adapt the fundamental law to changing conditions, but any government founded on the democratic principle of popular sovereignty must make possible the fresh assertion of the popular will as that will changes. For these reasons most modern constitutions either contain specific machinery for their own amendment or are recognized as changeable in some less formal manner.

The term "amendment" connotes a definite and formal process of constitutional change. Used in this narrower sense it describes but one of the methods by which constitutions are altered. This formal method is supplemented by the force of tradition and custom which may vitally alter the constitution, by judicial interpretation and by the enactment of statutes which affect the organic structure of the state. All of these processes of change are discernible in the evolution of the Constitution of the United States and of those of the several states.

Bryce classified constitutions as "flexible" and "rigid" according to whether they can or cannot be changed by the same process by which ordinary laws are made. There are, however, many degrees of flexibility and a wide variety of methods for effecting the revision or amendment of fundamental law. The British constitution, often loosely described as "unwritten" since custom and common law enter so largely into its make-up, may be modified by Parliament by the procedure used in passing an ordinary law. But there is a fairly well solidified tradition that constitutional changes shall be made only after a general election which affords opportunity for a popular mandate on the change. The written constitution of France may be amended by a joint assembly of the two houses of Parliament meeting at Versailles after they have separately declared in Paris in favor of the change. The constitution of Switzerland can be amended only by a majority vote of the people, which must also be a favorable vote in a majority of the cantons. Proposals for such amendments may come either from the federal congress or in the form of an initiative petition signed by 50,000 voters. The new German constitution may be amended by a two-thirds vote of both houses of parliament. If the upper house (Reichsrat) rejects a proposed amendment it becomes valid in two weeks unless the objecting chamber demands a popular referendum. Amendments may also be proposed by popular initiative and adopted at a referendum election. A proposal voted upon in referendum must be approved by a majority of the registered voters. In most of the new states of Europe constitu-

tions set up since the World War are easily amendable by legislative action alone.

The Constitution of the United States is of the rigid type, though less so than its predecessor, the Articles of Confederation, which could be amended only by a unanimous action of the states in Congress voting as units. Article 5 of the constitution sets forth the procedure for amendment. Amendments may be proposed in two ways: by a two-thirds vote of both houses of Congress (i. e. two thirds of a quorum); or by a convention called by Congress upon petition of two thirds of the states. No such convention has ever been called. Amendments may be ratified either by the legislatures of three fourths of the states or by conventions in three fourths of the states, as Congress may determine. Congress has always designated the former method.

Through July, 1926 (the last official compilation), nearly 2500 resolutions had been introduced into Congress proposing, it is estimated, over 3000 changes in the constitution. Of these Congress adopted and submitted to the states for ratification only twenty-four, nineteen of which have been ratified. Those failing of ratification are two amendments submitted in 1789 with the first ten, one of which related to apportionment in Congress and the other to the pay of members of Congress, one in 1810 forbidding acceptance of titles of nobility, one in 1861 prohibiting interference with slavery, and one in 1924 authorizing federal child labor legislation.

In view of these facts it was natural that the opinion should spread that the constitution was too difficult of amendment. Writing in 1885 (*Congressional Government*, Boston 1885, p. 242) Woodrow Wilson observed: "It would seem that no impulse short of the impulse of self-preservation, no force less than the force of revolution, can nowadays be expected to move the cumbrous machinery of formal amendment erected in Article Five." Proposals of easier methods of amendment were urged in the nineties by the scholars John W. Burgess and Munroe Smith (see Burgess's *Political Science and Comparative Constitutional Law*, 2 vols., Boston 1890–91, vol. i, p. 150–54, and Smith's "Shall We Make Our Constitutions Flexible?" in *North American Review*, vol. cxciv, 1911, p. 657–73). Their suggestions included proposals of amendments by bare majorities in two successive congresses and reduction in the majority of states necessary to ratification. Proposals in Congress for an easier amendment process became both frequent and varied. These usually included a method of proposing amendments by petition of a certain number of state legislatures or by a petition signed by a certain percentage of voters in a definite number of states, and a form of ratification by popular vote either in the states or the nation at large. The details of the proposals may be studied in H. V. Ames' monographs.

An interesting change of attitude with regard to the amending process has been discernible since the adoption of the Prohibition Amendment in 1919 and the Woman Suffrage Amendment in 1920. These were ratified in the legislatures of certain states in which the proposals would have been defeated in popular referenda. Thus many who had regarded the referendum as a dangerously radical device now advocated it as a conservative check which ought to be included in the process of ratification of amendments, and numerous proposals to that end have been made in Congress. These proposals have frequently specified also that where ratification is to be by state legislatures, such action may not be taken until after a legislative election in which the people may give their representatives a mandate on the proposed amendment.

Amendments to the forty-eight state constitutions are made by highly diversified methods. Every state constitution sets up some procedure for its own change or revision. These methods are of three general types. The first is by constitutional convention which is used for more or less thoroughgoing revision. Such conventions may be called in every state except Rhode Island. In the second place every state constitution, except that of New Hampshire, may be amended by the process of legislative proposal and popular ratification. This is the method followed for making isolated changes in the constitution or additions to it. In more than a dozen states (thirteen in 1928) a third procedure obtains whereby amendments may be proposed by popular initiative by means of a petition signed by a definite percentage of the qualified voters. These proposals must be ratified in the usual way. The varied details of these methods may be studied in W. F. Dodd's book on the subject, and more briefly in the recent treatises on state government.

The question of how difficult or easy of amendment a constitution should be is not a simple one. The answer to it should depend largely upon what the constitution contains.

If its provisions, like those of the federal constitution, are all of fundamental import, then a method of amendment or revision is desirable which is sufficiently deliberate and restrictive to assure the most careful and mature consideration of the fundamental law. Our state constitutions, however, all contain many provisions of temporary or relatively trivial import, placed there frequently as a result of popular distrust of our state legislatures. It seems clear that constitutions containing clauses of this character should be easier to amend than those which contain only fundamental law. Otherwise these transitory and detailed provisions cannot be kept adequately adjusted to the changing demands of public policy. It has been suggested that parts of the same constitution might be amended by different methods. Thus a fairly difficult method might be made applicable to the fundamental parts of the constitution, while an easier procedure could be used to change those provisions of the constitution which are essentially legislative in character. Oklahoma and Virginia have applied this principle in a minor way by setting up a fairly rigid method of amendment for general use but providing that certain detailed sections might be altered by the legislature alone after the lapse of a certain length of time. The problem of the degree of flexibility of constitutions may ultimately be solved along these lines.

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See: CONSTITUTIONS; CONSTITUTIONAL LAW; CONSTITUTIONALISM; JUDICIAL REVIEW; CONSTITUTIONAL CONVENTIONS; ARTICLES OF CONFEDERATION; BILLS OF RIGHTS. See also other articles relating to specific amendments to the American constitution, or articles dealing with the subjects of the amendments.

Consult: Bryce, James, *Studies in History and Jurisprudence*, 2 vols. (London 1901) vol. i, ch. iii; Horwill, H. W., *The Usages of the American Constitution* (London 1925); Ames, H. V., "Proposed Amendments to the Constitution during the First Century of Its History" in American Historical Association, *Annual Report 1896*, vol. ii, and "The Amending Provision of the Federal Constitution in Practice" in American Philosophical Society, *Proceedings*, vol. lxiii (1924) 62–75; "Proposed Amendments to Constitution of United States, 1889–1926," ed. by C. C. Tansill, in U. S. Senate, 69th Cong., 1st sess., *Senate Documents*, vol. viii; Jameson, J. H., *The Constitutional Convention* (New York 1867); Dodd, W. F., *The Revision and Amendment of State Constitutions* (Baltimore 1910); Hoar, R. S., *Constitutional Conventions* (Boston 1917); Borgeaud, Charles, *Établissement et revision des constitutions en Amérique et en Europe* (Paris 1893), tr. by C. D. Hazen (New York 1895); McBain, H. L., and Rogers, L., *The New Constitutions of Europe* (New York 1922).

AMERICAN FEDERATION OF LABOR is the experimental outcome of labor movements in America, Germany, Great Britain and France. Here in North America the two nations of Canada and the United States, the continental variety of economic conditions, the mixed sovereignty of forty-eight states and one federal government, the domination of local politicians combined in two national parties, the successive waves of immigration from all lands and a remarkable mobility of labor, have afforded the scope and imposed the necessity of bringing together in one federation over an entire continent as many varieties of unionism as may be found in other lands more limited and uniform in their circumstances. The leading originators of the federation, in 1886, had previously, in 1881, taken over, almost verbatim, the constitution of the British Trades Union Congress, and that imported form of organization is perpetuated in forty-eight state federations of labor. Other originators of the federation had participated in or struggled against three preceding strictly American organizations—the National Labor Union, the Greenback Labor party and the Knights of Labor—each of them a product of the deflation of prices after the Civil War. The federation had to adapt itself to the individualistic psychology of these American movements unknown to other countries. Still other originators had participated in the American trade unions which began or expanded in the Civil War under American, British, Scotch and latterly Irish leaders.

The anarchistic exiles from the Paris Commune of 1871 and the communistic exiles from Germany's attempted suppression of socialism furnished, during the miserable decade of the seventies, leaders of desperate strikes, of street demonstrations, and finally the "Ten Philosophers" from whose eager deliberations the American Federation of Labor derived its first organization in the cigar shops of New York, 1879.

From the National Labor Union (1866–72) and the Greenback Labor party (1874–80) the men who later organized the American Federation of Labor learned a painful lesson: the futility of a labor party which had necessarily to be founded on alliances with frantic farmers and small business men against their organized opponents, the bankers and big business men under the guidance of expert managers of American machine politics. Such alliances could last

only while the slump in business continued.

From the Knights of Labor (1869–86) they learned that miscellaneous organized labor was incompetent to manage productive cooperation with the purpose of displacing capitalism by a voluntary cooperative commonwealth; and they learned that this same miscellaneous labor, while it might win sudden mass strikes, could not keep the winnings.

From the French exiles they learned that street demonstrations brought to the front the facile intellectual agitator against whom the workers in the shops were helpless and by whom they were misled; the American leaders could not even share the French anarchists' glorification of street barricades.

From the German communists and the teachings of Marx they learned that their immediate opponents were the employers who owned the shops, and that their enduring alliances must therefore be not with farmers and small business men, since these included their own employers, but with other wage earners in the shops of competing employers. But they had also learned from the National Labor Union and the Greenback Labor party that a labor party in America must include these same farmers and business men against whom, as employers, they must proceed, as communists, by confiscating their shops and usurping their management.

From the British and American unionists and from the Knights of Labor they learned that labor could not be lifted as a mass, nor business and banking defeated as a mass, and that sporadic organizations in single shops could not accomplish improvement; that their immediate opponents were the competing employers in the same line of business, and their organizations of labor must be separated along competitive lines so as to extend to these competing employers and no further. They learned, too, from the British unionists, but not the American, that they must build for permanent organization which could withstand the cycles of business depression and unemployment.

This learning by experience was the outcome of the deliberations of the "Ten Philosophers," about whom Gompers writes in his autobiography. Gompers, the Jewish cigar maker from London, and Strasser, the German cigar maker, proceeded to organize on the British model first the New York and then the national cigar makers and later the whole labor movement. This last organization was known as the Federation of Organized Trades and Labor Unions of the United States and Canada.

It was found after five years' experiment with this British model (1881–86) that it really concealed two different functions—legislation and organization—which had to be separated, intensified and subdivided in order to fit the variety of American conditions. Out of the reorganization based on these discoveries came the American Federation of Labor, in 1886. Legislation had to be split into federal, state, municipal, Canadian and provincial. So the new organization, for legislative purposes, split the Trades Union Congress eventually into forty-eight state congresses and the Canadian Trades and Labor Congress with federations for the provinces of Canada, in order to fit the political divisions of the whole North American continent, and changed "United States and Canada" in its name to "American." Several of the trade unions similarly prefixed the word "international" to their names, meaning thereby "North American." While the British organization had its one parliamentary committee and its annual congress of all the unions, which eventually became, by alliance with the socialists, the British Labor party, the American federation has its executive committee and congressional lobbyists at Washington, affiliated with an independent congress at Ottawa for the Dominion of Canada, but supreme over the federations of the states and Porto Rico.

Like the British organization, and also like the Knights of Labor, the federation has its city central federations, which in Russia became the Soviets. These local federations in America are also linked up with municipal politics, and have even conducted independent municipal campaigns, the most notable being the unsuccessful Henry George campaign of 1886 in New York, conducted by the Central Labor Union in alliance with socialists and single taxers, and the successful McCarthy campaign of 1909 in San Francisco.

The second function, separated from the other functions and immensely emphasized in America, is organization of the unorganized into local unions, their allocation to membership in the several national and international unions, and mutual support among all the unions in offense and defense on the economic field. The American Federation of Labor has as high as a thousand diminutive "federal labor unions" directly under control of headquarters at Washington. These are always in process of

formation and dissolution as recruiting stations for existing or new national unions. The federation supports from its own funds from twenty to fifty general organizers in various localities, who give their assistance to incipient unions and older unions. It appoints special organizers for concerted action or sympathetic strikes, as in the case of the steel strike of 300,000 workers in 1919, or in the organization of the 35,000 Italian subway workers in 1902 in New York. The strikes themselves are conducted by the affiliated unions; but the federation officials and organizers lend their aid, and at times are a means of collecting large sums of money as their substitute of "moral and economic force" for the sympathetic strike.

The union label, an American invention first adopted in California to exclude Chinese workers from the shops and then copied wherever the consuming power of union labor could help, has been, for unions like brewery workers, cigar makers, employees on workingmen's garments and others, an instrument of importance in the program of mutual support. The label is organized labor's trade mark, protected against infringement by state and federal legislation, like the trade marks of capitalism.

Thus the economic problem of organization became the decisive point in the reorganization of 1886. The experience of five years with the British model showed that nothing could be done with the national political parties. The letters of the federation were unanswered and its agents unheard. Besides, at that time Congress had not undertaken labor legislation, the federal courts had not begun to use the injunction against labor unions or to declare unconstitutional the labor laws of the states. There were very few such laws anyhow, and they were state laws, since the states were then deemed to be sovereign in such matters. Hence the reorganization of 1886 provided for state federations whose main purpose should be legislation, while the national federation specialized on the expansion of economic organization in all the states. Its headquarters were established in Indianapolis, a thousand miles from Washington but a convenient railroad center for reaching all parts of the country. Not until 1896, after federal injunctions and judicial unconstitutionality had nationalized labor legislation, were headquarters moved to Washington, where the executive committee could reach the Congress, the president and the departments. Federal labor legislation eventually became equal and even superior in importance to widespread organization, for the federal injunction challenged the right of unions to exist except on paper, and unconstitutionality challenged the usefulness of state federations of labor.

But in 1886 the problem of organization was supreme. The contest with the Knights was approaching its climax. The legislative constitution of the preceding five years was not fitted to this task. It provided only for a legislative committee without executive power between sessions. Nor were the trade unions of the country interested in national legislation—they were interested in defending themselves against the Knights, who in that year had reached the height of their power. Hence at a national conference of the officials of twenty-five unions and the legislative committee of the Organized Trades and Labor Unions, the latter disbanded and the national unions formed the American Federation of Labor. Samuel Gompers, secretary of the former legislative committee, was made president, and was reelected to this position every year, except one, until his death in 1924.

The federation proceeded, in 1887, to strengthen the voting power of the national unions. Delegates from national and international unions were given one vote for each one hundred members, leaving the delegates from city and state federations with only one vote. Thus in the convention of 1924 the eight carpenters' delegates cast 3152 votes and the one delegate from the central union of New York City cast one vote.

This method of voting, it will be seen, makes the American Federation of Labor not a popular representative assembly for legislative or political purposes, like the former British or German or French conferences, or like the former General Assembly of the Knights of Labor, or the former National Labor Union, but makes it a congress of ambassadors from sovereign unions, "weighted" according to the size of the union. The delegates from the unions are usually the national presidents and executive officers of the unions.

Thus no individual workingman is a "member" of the American Federation of Labor. He is a member only of his union, and it is his national union that is the member of the federation. There is even no dual citizenship, as there has been since the Civil War under the political constitution of the United States,

where every citizen owes allegiance both to the federal union and to the state of his residence. Each workingman is a "citizen" only of his own union, and gets representation in the federation only through the executive officers of his national union. Consequently the federation has no jurisdiction over individuals (except in the small federal labor unions above mentioned). Furthermore, since the federation has no funds of its own except the meager fund of one cent per member per month which the national unions each contribute in a lump sum, the federation remains with only "moral" jurisdiction over its constituent unions. It is a loose confederacy—not a federal union.

The result is that no "left wing" or "anti-administration" movement within any national union can get representation, or even a vote, in the federation convention, except as it comes from a city or state federation where the voting is legislative, democratic and equal for each local union, no matter how weak or strong it may be. As a matter of fact nearly all of the socialistic or communistic resolutions offered in the conventions of the American Federation of Labor have come from these local delegates, occasionally from a socialistic or politically minded national union, and then, after speeches, they are voted down ninety-nine to one. They have freedom of speech but no weight.

No wonder that the dissatisfied and sometimes revolutionary elements in this country and in others criticize the federation bitterly as "a machine," "boss ridden," "reactionary," even "a corrupt conspiracy of tyrants." The federation was organized and has been maintained expressly for organization purposes and to keep out disunion. Like the American political parties it is a "machine"—indeed its principle of organization has been named "business unionism" by Hoxie, a discriminating student of labor movements. In the American conflict of races and religions and of geographical sections, in a system of machine politics and highly efficient mechanized capitalism, and in the absence of any "class consciousness" or "solidarity" of labor, which in other countries is the heritage of centuries of military suppression, the American federation has just one "pure and simple" business—how to create a united front which is able to deal as one man with any situation regarding higher wages, shorter hours, slower speed, stricter shop control of jobs and permanence of unionism. The federation was created not as a political movement to overthrow capitalism or get control of government, but as a movement within the ranks of labor to bring about permanent organization over a continent where everything conspired against both organization and permanence.

Hence when it came to dealing in 1895 with the Socialist Trade and Labor Alliance, or in 1905 with the syndicalistic Industrial Workers of the World, or in 1923 with the Communists, whose movements threatened to disrupt some of the unions, the federation was in a position to take drastic united action, expelling and suppressing them. The federation is truly a militant organization, but in a country where there is no class consciousness that unites labor regardless of organization, its militancy runs sidewise against disruptive labor movements even more uncompromisingly than frontwise against employing capitalists.

This lateral and frontal militancy within a disruptive environment affords an explanation of several peculiarities either wholly absent or unobtrusive in other countries and at former times in America. These are the small proportions of organized to unorganized labor, the wide spread of wages between high paid and low paid labor, dual unions, jurisdictional strikes, trade agreements and strict shop rules.

American industrial labor is much less extensively organized than the labor of other countries. While Germany, in 1924, was about 75 percent organized, England 65 percent, and Australia 60 percent, American labor was only 15 percent organized, including the relatively small numbers outside the federation. The percentages were larger in all of these countries at the peak in 1920. It may be estimated that in a city like Philadelphia a larger percentage was organized in 1835, when the ten-hour day strikes were first successful, than at any subsequent time. But those organizations lasted less than a year. In contrast with this and other similar disruptions, Gompers was able to report in 1897 that the unions of the federation had been able—for the first time in America—to maintain their organizations during a period of business depression. While only 15 percent of "organizable" labor is organized, this is an average of figures ranging from 100 percent organization in a few trades down to zero organization in the bulk of the industries.

Paralleling this diversity of organization is the diversity of wages and hours. Skilled labor in some of the organizations gets as high as $1.75

per hour, six or seven times as much as the pay obtained by the lowest unskilled and unorganized in others, which falls to twenty cents an hour or less. Contrasted with this, formerly in America and now in other countries, the highest skilled labor obtained no more than twice or thrice the wage that went to the lowest unskilled labor. Hours of labor, too, run from thirty-five per week to seventy-five per week, while in other countries, as formerly in America, they are much more nearly uniform. Thus the diversity of American political and economic conditions is paralleled by the diversity of organization, of wages and of hours. The spread is more extreme than the difference between the building trades of London and the textile mills of Bombay. The former, transported to New York, are highly organized with high wages and short hours; the latter, to North Carolina, seem unorganizable with low wages and long hours. In some industries "industrial" unions, including the unskilled, have reduced the differentials formerly resulting from "craft" unionism.

These differential high wages are obtained largely by relentless prohibition of dual unions. The form of organization of the federation is designed for this purpose. If it is a congress of ambassadors rather than a house of representatives, then it follows that no territorial or occupational infringement will be permitted over the boundaries of each autonomous organization. England has 1100 independent unions, largely sectional rather than national—the American Federation of Labor has only 106 national unions, each dominating its local and sectional branches. Organized unions in Germany seem indifferent as to whose members get the jobs. It is enough that they are "organized," but not important to which union they belong. Perhaps this indifference is owing to class consciousness, equal wages and immobility. The American federation, instead of permitting different organizations to do the same work, is based on the principle of only one union for one kind of work throughout North America. This was its foundation from the start in 1881 and is even more solidly its foundation today. It means a federation of sovereign trade unions determined on mutual protection from dual unionism. Differential high wages, scarcity of high wage jobs, prohibition of dual unions and the absence of class consciousness, make the American federation a league of independent allies, not one big union.

But this independence has its weakness—jurisdictional disputes and jurisdictional strikes. The carpenters have conducted twenty contests with other unions on matters of jurisdiction. They have defied the federation, have been expelled from the Building Trades Department, have withdrawn, have conquered, have been taken back. Nearly all unions have had similar contests, but none so many. Jurisdiction means the power to make rules governing individuals respecting the materials, or tools, or kinds of work. The federation, when admitting a union, carefully and minutely describes its jurisdiction. If the claim of the union covers the total jurisdiction of a member union, it is a dual union and is excluded. But if it claims only a part jurisdiction, the highly technical problem must be agreed upon as to the lines of demarcation. This must be done over and over again, when new materials, new tools, new kinds of work, are introduced. But, even so, no method has been discovered by which jurisdictional disputes can be handled in such a way as to avoid jurisdictional strikes. Such strikes, especially in the building trades, have at times cost large losses in wages, in profits and in public sympathy. They damage friendly employers, but non-union employers escape. Leaders of the federation for more than thirty years have looked with dismay upon these disputes as a serious menace. The federation has tried all remedies except the compulsion which its constitution prohibits by denying jurisdiction over individuals. Hence the strength of the federation, its use of "moral force," is its weakness.

To the jurisdictional dispute must be added jurisdictional jealousy. When twenty-four different national unions had to unite in conducting the national strike of 1919 against the United States Steel Corporation for the eight-hour day in place of the twelve-hour day, the question as to which unions should have the thousands of new recruits from the previously unorganized brought forth internal dissensions and indifference to further organization, against which the federation was powerless and the corporation victorious.

However, its greatest achievement, and the one of which the federation is proudest, is the trade agreement. Often misinterpreted and misapplied, the trade agreement is the outcome of a constitutional convention of capital and labor for the economic government of competing establishments in an entire industry. It is a

flat denial of the communistic and syndicalist doctrine of an irrepressible conflict between "capital" and "labor." Historically it has usually followed a severe conflict extending throughout an entire industry. The first national trade agreement, originating in this way, was made for the iron and steel industry, 1866. The next was in the stove foundry industry, 1891. The latter became the model toward which federation policy focussed after the notable agreement in bituminous coal mining, 1898. The trade agreement means what the name indicates, an agreement between competing employers and competing laborers, throughout the competitive area and through their representatives, to stop their conflict by laying down shop rules for the regulation of the labor contract in all individual transactions.

The trade agreement is also a denial of the antimonopoly policy that culminated in the federal antitrust act of 1890, after centuries of insistence in legislation and in common-law decisions of the courts. But the trade agreement means not only acquiescence in but also advocacy of comprehensive organizations of capital, provided they are confronted by similar organizations of labor.

The trade agreement is not an agreement to prevent competition but one to regulate competition through uniform shop rules. It reduces "free" competition by introducing "fair" competition, as far as conditions permit. The American federation is a confederacy of unions each attempting to set up its own shop rules in its own industry. If the union is powerful enough, like the printers on daily newspapers, its rules are made not by trade agreement but by labor dictatorship. If the union is weak or non-existent, the rules are made by capital dictatorship. Between these extremes the rules are of great variety. Their purpose is evidently not the political or class conscious purpose of improving the condition of labor as a mass, but the individualistic purpose of affording greater liberty, equality and security for individual members within the competitive area. They cover such items as hours, speed, transfers, promotions, seniority, "hiring and firing," piece-work, discrimination, "victimization" of leaders, and they provide in various ways for interpretation, decision and appeal on individual disputes.

Shop rules, it is plain, are restrictions upon the common-law rights of the employer to manage his own business as he sees fit. Their first tendency is to restrict output. But the fact that the trade agreement policy of the federation for forty years had looked to collaboration with employers, in place of conflict, led to the formal declaration of the convention in 1925, already put into practise by several unions, favorable to cooperation with management in eliminating waste and increasing efficiency for the mutual benefit of employers and employed. Thus the trade agreement is the federation's assertion that there is a conflict of capital and labor, but it is not irrepressible; that the evils are not in the capitalist system but in free competition; that competition can be made "fair" by shop rules under joint jurisdiction of organized capital and labor; and that this joint jurisdiction leads to cooperation with management in increasing the efficiency of industry.

The federation has been from the start antipolitical and antilegislative. The trade agreement is evidently economic legislation, not political legislation. In this respect the policy of the federation fits the political system. American political parties are not founded on "principles"—they are business organizations of local professional politicians offering such promises, often different in different parts of the country, as they think will capture the voters. This means that they always take over from an independent "third party" whatever platform promises they think will dissolve that party and win its votes, if it appears to hold the balance of power. In the hope of this result the federation has always opposed a labor party and has always presented its legislative demands to the two dominant parties and to individual candidates, with recommendations that union members should vote for friendly candidates regardless of parties. This method is patently the only thing to do for an organization of only 15 percent of the voters. Sometimes the method gets results where strikes fail. After the federated unions lost the eight-hour strike in the steel industry in 1919, the Republican party leaders were reported to have induced the Steel Corporation to grant the demand voluntarily, which the corporation did in order to relieve the party of the incubus created by its victory over 300,000 workers. Similar paradoxes have occurred in the federation's history. The fact that administrative officers of government are usually elected by popular vote, whereas in other countries they are appointed by a legislative committee in control of the government, makes it even more

important for the federation's executives to use their influence with the administration rather than the legislature. It is in the administration of laws—local, state and federal—that the organizations both of labor and of capital accomplish their aims of nullifying objectionable laws, enforcing favorable laws, or interpreting colorless laws. This process does not require a political party.

But the method is precarious. Consistently, therefore, the federation's policy is anti-legislative. The primary reasons advanced against such legislation as that dealing with social insurance, hours of labor, minimum wage and the like are rooted in fear of government interference with the liberties of wage earners, thus reducing them to a "status." The "self-help" of laborers organized in unions, by which is meant the establishment of shop rules, enlarges the liberties of the individual workers. Yet the federation's policy calls for legislation in cases where laborers, like children, are too weak to organize and, in less degree, where women are involved.

Its position on these points is peculiar and baffled by the judiciary. Under the American constitutional system the judiciary is a third independent branch of government, having even superior power over legislatures and executives in the interpretation of an elastic constitution entrusted solely to the judiciary. For more than thirty years the federation has worked for what proved ineffective legislation intended to curb the judiciary in the issue of injunctions, whether in labor disputes or in the nullification of state and federal statutes. The political parties have repeatedly promised relief. But federal courts, especially, continue to extend their reach and to clip off one by one the instruments of organized action. The state courts then perforce follow the federal courts. The goal of the trade agreement, which is usually reached only after the destructive consequences of several years of aggressive organization, is thus deferred, perhaps demolished.

Even more baffling than the judiciary are the new tactics of many capitalistic concerns. The largest concerns, most vulnerable to public opinion and least pressed by competition, refrain from seeking injunctions, and direct their energies toward planning far in advance their own systems of shop rules taken over from the union schedule and designed to accomplish for their employees as much as, or even more than, organized labor can obtain. The astonishing growth, during the past ten years, of "scientific management," "personnel administration" and "welfare capitalism," under the administration of experienced and well trained professionals who already have their professional associations and periodicals, along with the policy of paying higher wages for the increasing proportion of unskilled labor brought in by technological progress than labor unionism has been able to obtain, and in addition the restriction of immigration which the federation has always advocated, deprive the unions of the federation of most of their appeals to the unorganized. These workers, numbering about 1,700,000 employees as contrasted with 4,000,000 members of the federation unions, have been denounced by the spokesmen of the federation for their "yellow unionism" and "company unionism." Nevertheless they clearly show the need for new policies on the part of the federation if union organization is to continue and enlarge. These new policies are already taking shape, and experiments are being made. The federation has the beginnings of a research bureau; individual unions have even employed professional technicians to deal with employers in connection with matters which affect the welfare of the industry and of the workers; training schools have been set up for union members and apprentices; the federation supports a Workers' Educational Bureau; high officers of the federation and its unions participate in meetings with the professional managerial experts of non-union establishments; publicity is widely given to comparative statements intended to show that the policy of collaboration with employers is bringing more economies, greater profits and higher wages than the corresponding employee-representation plans of employers. Just as the leaders of the federation forty years ago started to turn the energies of organization from politics and socialism toward shop rules intended to stabilize small scale competitive capitalism, so now they begin to turn their energies toward collaboration with the new large scale stabilized capitalism.

JOHN R. COMMONS

See: LABOR MOVEMENT; TRADE UNIONS; TRADE AGREEMENTS; UNION LABEL; DUAL UNIONISM; LEFT WING MOVEMENTS, LABOR; BUSINESS AGENT; COMPANY UNIONS; PARTIES, POLITICAL.

Consult: Commons, J. R., and associates, *History of Labour in the United States*, 2 vols. (New York 1921); Perlman, Selig, *A History of Trade Unionism in the United States* (New York 1922), and *A Theory*

of the Labor Movement (New York 1928); Hoxie, Robert F., *Trade Unionism in the United States* (New York 1923); Kirk, Wm., *National Labor Federations in the United States* (Baltimore 1906); Gompers, Samuel, *Seventy Years of Life and Labor*, 2 vols. (New York 1925); Ware, Norman J., *The Labor Movement in the United States, 1860–1895* (New York 1929); *American Federationist*, official organ of the American Federation of Labor, published since March, 1894.

AMERICAN LAW INSTITUTE, an incorporated organization of judges, practising lawyers and law teachers, "to promote the clarification and simplification of the law and its better adaptation to social needs, to secure the better administration of justice, and to encourage and carry on scholarly and scientific legal work," had its inception in an undertaking of the Association of American Law Schools. That association had been considering a project for a "juristic center" which should "direct the attention of law schools toward the improvement of the law." A special committee had this project before it and determined that cooperation of courts, bar associations, law schools and learned societies was desirable. Accordingly, at the annual meeting in December, 1921, a committee was appointed to bring about such cooperation. The result was a meeting in May, 1922, which formed a "Committee on the Establishment of a Permanent Organization for the Improvement of the Law." That committee (of forty, judges, practising lawyers and law teachers, headed by Elihu Root) prepared an elaborate report, setting forth the defects in American substantive law, the need for restatement, the form which a restatement should take, a project for organization of an American Law Institute and for a restatement of the law under its auspices, and an estimate of the time and money required. The expense of the preliminary investigation leading up to this report was borne by the Carnegie Corporation, which subsequently gave $1,075,000 to finance the institute for ten years. The formal organization of the institute was completed in 1923, comprising the foremost judges, practitioners and legal scholars in the country. George W. Wickersham was elected president. At a subsequent meeting William Draper Lewis, former dean of the University of Pennsylvania Law School, was made director.

The work planned by the American Law Institute gives it a position of public importance and of significance for the future of American law. Two main projects have been undertaken: a restatement of the substantive law and a model code of criminal procedure. The restatement was begun by taking up four subjects: contracts, torts, conflict of laws and agency. Property and business associations were later added to this group. Each study is in charge of a reporter who has working with him a number of advisers, chiefly law teachers, and of assistants. Frequent conferences are held and the drafts as they progress are submitted to discussion and criticism at the annual meetings and by the council. Thus the views of judges and practitioners from all parts of the country are brought to bear on the drafts, which themselves represent the study and judgment of law teachers from all the more important law schools. In addition state bar associations through cooperating committees have begun to annotate the drafts for each jurisdiction, stating and discussing the pertinent local decisions and statutes, if any, or noting that there are none, and pointing out the relation of the restatement of the general law to local peculiarities.

The process of restatement is a method peculiarly in accord with the spirit of the common law. Restatement is not codification although it is hoped that the authority of the institute will result in some of the benefits of codification. It is not directly unification although it is probable that it will act as a force in this direction. In the restatements the aim is to formulate the existing common law at its best in the form of succinct propositions with a commentary setting forth divergent views, reasons for the choice of one rather than another, general considerations bearing on the text and illustrations of the application of the propositions to concrete cases. This aim may be contrasted with that of the project for the model code of criminal procedure, where the purpose is not merely to restate but to furnish a model for legislative improvement of the existing practise.

While the restatement proceeds entirely on the basis of the authoritative legal materials, making no attempt to refashion them with the aid of the social sciences and in the light of demands other than those of legal theory, it is a necessary forerunner of any effective refashioning. We must first master the authoritative legal materials which are to be reshaped. In doing this preliminary work thoroughly and in unifying the body of substantive law at a time when the economic situation of the country calls for a giving up of local legal provincialism, the

institute is doing a conspicuous service to American administration of justice.

ROSCOE POUND

See: LAW REFORM; CODIFICATION; COMMON LAW; JUDICIAL PROCESS; LEGAL PROFESSION.

Consult: American Law Institute, *An Account of the Proceedings at the Organization of the Institute at Washington, D. C., on February 23, 1923* (Philadelphia 1923); American Law Institute, *Report of the Committee on the Establishment of a Permanent Organization for Improvement of the Law* (Philadelphia 1923); American Law Institute, *Proceedings*, published annually in Philadelphia since 1923; Lewis, William D., Oliphant, Herman, Llewellyn, Karl N., and Parkinson, Thomas I., in Academy of Political Science, *Proceedings*, vol. x (1922–24) 313–52.

AMERICAN LEGION is an organization of persons who served in the United States forces between April 5, 1917, and November 11, 1918, the period of American participation in the European War. Unlike other veterans' organizations the legion admits women to membership since yeomen in the navy and nurses in the army were permitted military rank. The membership in 1918 was approximately 750,000; it was probably not more than 850,000 at the high point in 1922, although at one time a membership of 2,000,000 was claimed.

Organization of the American veterans of the World War was proposed by Colonel Theodore Roosevelt, Jr., in February, 1917, at a dinner of staff officers in Paris. Later (March 15–17, 1919) a caucus of one thousand representatives of various units of the Expeditionary Force was held in Paris from which was selected a committee of organization. A convention was called at St. Louis (May 8, 1919). The name "American Legion" was selected, and a constitution was adopted.

It was provided that the organization must not be allied to any political party; that the national commander should be elected at each annual convention for a period of one year and should not be eligible to reelection, and that no salaried elective officer should hold office in the legion. A tentative program for assistance to returned soldiers (government grants of land, rehabilitation of disabled veterans, improved administration of government insurance for veterans) was worked out. Posts ranging from fifty members upwards were chartered throughout the country, which was divided into departments usually following state boundaries; and the national headquarters was established at Indianapolis.

The object of the organization was stated to be "to uphold and defend the Constitution of the United States of America; to maintain law and order; to foster and perpetuate 100 percent Americanism; to preserve the memories and incidents of our association in the Great War; . . . to combat the autocracy of both the classes and the masses; to make right the master of might. . . ." Antiradical trends were further emphasized by the adoption of resolutions attacking the pardon or honorable discharge by the War Department of conscientious objectors, and condemning the Industrial Workers of the World, anarchists and international socialists. Peculiar conditions prevailed at the time of the organizing convention. A large section of public opinion greatly feared the extension of communist and radical activities in the United States. A political group desired to put forward Major General Leonard Wood as candidate for president in 1920. The problem of employment of returned soldiers was beginning to be acute.

With the tacit consent of the national organization many individual posts at once emphasized the radical issue and, officially or unofficially, took active part against the liberal side. Several hundred incidents are on record in which, following the policy of 100 percent Americanism, legionnaires were active in breaking up radical or socialist meetings, stopping concerts of German music, etc. In this and in the violence of expression often found in official legion publications and reports the legion merely reflected the wave of intolerance which was then passing over the country.

The most disastrous clash occurred between the legion and the Industrial Workers of the World at Centralia, Washington, on November 11, 1919. During the Armistice Day parade shots fired from a building occupied by the Industrial Workers of the World killed several legionnaires. The legion maintained that this was an unprovoked attack. The I. W. W. insisted that the legion parade had paused in its march to attack the I. W. W. headquarters, and that the shots were fired in self-defense. At the resulting trial of a number of members of the Industrial Workers of the World for murder, some were acquitted; others were convicted and sentenced to prison for murder in the second degree. The case remains an issue to date (July 1, 1930), there being considerable evidence to support the contention that the legion in Washington had taken sides in the struggle then existing between the I. W. W. and the lumber

interests with a view to eliminating the I. W. W. from Centralia, as well as to support the self-defense theory. Conflict resulting between the legion and labor organizations led to conferences (1922) between the commander of the legion, Franklin D'Olier, and Samuel Gompers, president of the American Federation of Labor, which brought about the establishment of an understanding between the legion and the right wing forces in the American labor movement.

The legion has often taken active part in projecting legislation, and has often been the beneficiary of minor legislative appropriations either directly by grant or indirectly by having extended to it the free use of government buildings or services. The great legislative issue of the legion has been the soldiers' bonus, or "adjusted compensation," the theory being that the returned soldiers should receive government grants equalizing their pay with that of laborers in civil life during the war. The question divided the country. A national campaign was instituted by the legion calling for grants by way of cash and paid up insurance, but it was opposed, especially in the East, by a large section of the public headed by Andrew Mellon, secretary of the treasury. Some sentiment in the legion likewise opposed it, e.g. the Willard Straight Post (New York); but the national organization was decisively for the measure. Proposals for a bonus in cash proved unacceptable, and a bill requiring grants by way of paid up insurance was introduced and passed in 1922 but vetoed by President Harding. In 1923 the bill was reintroduced with amendments. It was vetoed by President Coolidge but passed over his veto in 1924. At the same time the legion both nationally and in the various states conducted campaigns of varying success to give veterans preference in all civil service appointments and to place under legion supervision the operations of the Veterans' Bureau in Washington. A campaign for universal military training, although endorsed by the national convention of the legion, found legion sentiment divided and proved abortive.

On the humanitarian side the legion's activities, although less spectacular, have been more fruitful. In 1919–21 an extensive campaign, especially in the East, for reemployment of returned soldiers proved fairly effective. Individual departments of posts provided hospitals for disabled and tubercular veterans, cared for dependent children of the legion, located missing soldiers and gave assistance to veterans who desired to obtain or collect insurance or to secure other aid from the government. As the war receded, individual posts, through their club activities, have entered more generally into the life of their various communities, so that at present the legion forms one of the many national fraternal organizations whose individual units are a part of the social framework of many communities.

Politically the legion has to a considerable extent avoided the charge of creating an office seeking group. But the organization has nationally or locally supported or opposed individuals in public life. Men prominent in legion affairs have frequently entered political life, notably Theodore Roosevelt, Jr. (assistant secretary of the navy, candidate for governor of New York in the election of 1926, governor of Porto Rico) and Hanford MacNider (formerly national commander of the legion and subsequently assistant secretary of war); and the legion has continuously been a factor in local politics, especially west of the Mississippi River. A considerable number of posts supported the candidacy of General Wood for the Republican nomination for president in 1920. Legion sympathies were enlisted against the activity of the Non-Partisan League, the Farmer-Labor party and the La Follette candidacy in 1924. Although political activity was a factor in the 1928 election in Iowa and Nebraska, it has tended to diminish in recent years. In 1927 the legion received a great deal of public attention because of the trip of 20,000 legionnaires to Paris under semi-official government auspices. At present its national policies are largely concerned with the administration of the Veterans' Bureau and of the War Department, although it has also objected to diminishing the navy program. It continues to some extent its propaganda for Americanism and has never abandoned the welfare and relief work commenced in 1919.

A. A. BERLE, JR.

See: VETERANS; REHABILITATION; PATRIOTISM; MILITARISM; AMERICANIZATION; MILITARY TRAINING; ANTIRADICALISM.

Consult: James, Marquis, *A History of the American Legion* (New York 1923); American Legion, *Proceedings of the National Convention* (published in St. Louis annually for 1919–24; since 1925 printed in *House of Representatives Documents*); *American Legion Weekly*, published in New York since July 4, 1919; O'Connell, F. B., *History of Nebraska American Legion* (Lincoln, Neb. 1922); Fuess, C. M., *Brief History of the American Legion in Massachusetts* (Boston 1925); De Nys, R., "Qu'est-ce que l' 'American Legion'?" in *La revue hebdomadaire*, année xxxvi

(1927) vol. ix, 453–64; various reports of the American Civil Liberties Union; Warner, Arthur, "The Truth About the American Legion" in *The Nation* (New York) vol. cxiii (1921) 7–10, 35–36, 65–66, 89–91; Warr, O. L., "The Heroes' Union" in *The American Mercury*, vol. xiii (1928) 169–77.

AMERICAN PARTY. *See* PARTIES, POLITICAL, section on *United States*.

AMERICAN PROTECTIVE ASSOCIATION. *See* PARTIES, POLITICAL, section on *United States*.

AMERICANIZATION involves the social adjustment of the immigrant to the American environment—the processes of social assimilation by which immigrants in the United States come to participate in the common life of the nation and to identify themselves with it in thought and feeling. It is a slow and organic process which cannot be isolated from the totality of the immigrant's experiences and relationships in the United States. Fundamentally the problem of Americanization is the problem involved in any migration from one social group to another, the bringing together of the traditions of the immigrant's old and of his new community.

As it is commonly used at present Americanization suggests something other than the play of natural social forces. While the word has been employed for years, it was not until the World War that it gained wide currency. It was then that the heterogeneous character of our American population first became a matter of serious national concern. Prior to that time it had been generally assumed, except for anti-foreign outbursts among certain groups in the 1850's and again in the 1880's, that the American environment would of itself exert those pressures upon the immigrant which would make him an integral part of the American community. But when the war revealed many groups of immigrants voicing the national aspirations of their kin in Europe, war time efforts to arouse American national sentiments and weld national interests resulted in a formal movement of "Americanization" designed to supplement the play of natural social forces.

In most quarters this Americanization movement concentrated on teaching English to the immigrant and stimulating his naturalization. In many states the teaching of common school subjects in any language other than English was prohibited by law. This emphasis on the learning of English and on naturalization, together with the unfortunate atmosphere of coercion and condescension in which so many war time Americanization efforts were conceived, had the effect of bringing the word into a disrepute from which it has never fully recovered. Contributing to the same result, in the period following the war, were the widely expressed fear and suspicion of the immigrant, his frequent indictment as a radical, attempts to suppress his newspapers and organizations, the ignoring of his own culture and aspirations, the charge that certain nationalities and races were inferior and unassimilable, and the use of intimidating slogans. Americanization work too frequently made the assumption that American culture was something already complete which the newcomer must adopt in its entirety. Such attitudes and activities were important factors in promoting restriction of immigration, but they did not advance the assimilation of the immigrants who were already in America.

The principal agencies now doing Americanization work, in the more limited meaning of the word, include our public schools, religious and patriotic societies and a large number of independent and miscellaneous organizations, supported for the most part by voluntary contributions. Industries employing foreign born workers, chambers of commerce and women's clubs have frequently undertaken or sponsored Americanization work.

Evening schools for adult immigrants, maintained by most cities, are the chief governmental Americanization activity. For the most part instruction is limited to English and the elements of American history and civics required of candidates for naturalization. While many state governments make it compulsory for local boards of education to organize such classes, only a few share in their expense and the main burden of immigrant education rests on local communities. As a rule the state departments of education organize teacher training classes, develop methods of instruction and stimulate or supervise the activities of local school boards. In some cities, in addition to the evening schools, foreign born mothers are reached through home teachers and neighborhood classes.

Various states, conspicuously California and Massachusetts, have in addition to educational activities created special departments to protect the immigrant, investigate and adjust his complaints, promote better housing and inspect

labor camps. Among other government Americanization activities should be mentioned the work of the public libraries, many of which provide special facilities for immigrant readers. The United States Bureau of Naturalization formerly did extensive citizenship training work but at present this organization limits its activities to administering the naturalization law.

Equally important and extensive is the Americanization work of private organizations throughout the country. In almost every large city there is at least one citizens' bureau, Americanization committee or similar organization, designed to encourage naturalization, prepare the candidate for citizenship and assist the immigrant in adjusting some naturalization or other difficulty. Many large religious organizations, Protestant, Catholic and Jewish, maintain special immigration or Americanization divisions which meet or assist the newly arrived immigrant, help him with his personal problems of adjustment and carry on extensive educational activities in his behalf. Similar aid is extended by the travelers' aid societies and other nonsectarian agencies. Social settlements, the international institutes maintained by the Y. W. C. A., and many community centers, churches and welfare organizations are not only doing social service work for the foreign born but are also trying to establish friendly relations between individual immigrants and the native born.

Another important type of work is that which is being carried on among immigrant groups by their own organizations, national societies, parochial schools, educational institutes, mutual benefit and welfare associations. These organizations bind together national groups and seek to make their Americanization a process of amalgamation, not of substitution. Instead of treating the individual as a unit, assuming that he can be transformed, they work upon the group, thus relieving the strain which adaptation places upon the unsupported individual.

Important as these conscious efforts are toward Americanization, they represent only a part of the social forces which play continuously upon the immigrant and determine the degree and rapidity of his assimilation. A conspicuous force which makes for adjustment is the urge to achieve material success, which makes the immigrant adapt himself to American ways of work and business. This usually involves learning the English language as quickly as possible. Standardizing forces such as national advertising, ten-cent store products, movies, radio and the tabloid press play also upon the immigrant. An American neighborhood which receives the immigrant on a footing of social equality with the native born, American schools which give him an opportunity to educate his children, and industrial concerns which grant him good working conditions, a decent standard of living and a chance to advance act as agencies for Americanization. Assimilation is also facilitated by English or foreign language newspapers which furnish the immigrant much of his information about American laws and institutions, communities which provide for adequate housing, recreation and playgrounds, and political organizations which initiate him as a participant in American democracy.

These influences work with varying force upon individuals in small or large immigrant groups, agricultural or urban communities. Their effect is largely determined by the individual's own experience of prolonged unemployment, poverty, exploitation, separation from wife and family, inability to find redress for his grievances, isolation in overcrowded or squalid immigrant quarters, social discriminations, or by his acceptance into a community with adequate housing and recreation facilities and into an industry with good working conditions. Immigrant adaptation is further complicated by such problems as those arising from the transplanting of the land conscious peasant to a restless industrial community and by industrial dislocation in periods of unemployment or depression. However, an unsophisticated group whose chief fund of culture consists in a store of folk customs and folk wisdom necessarily enlarges its horizon chiefly in American terms rather than in those of its fellow countrymen. On the other hand those immigrants whose home experience is broader and whose own cultural background is richer have more to contribute to the making of American culture.

READ LEWIS

See: IMMIGRATION; NATURALIZATION; ALIEN; CIVIC EDUCATION; ASSIMILATION, SOCIAL; CONFORMITY; ADULT EDUCATION; PUBLIC EDUCATION; PATRIOTIC SOCIETIES.

Consult: *Americanization Studies* prepared under the direction of Allen T. Burns, 10 vols. (New York 1920–24); Abbott, Grace, *The Immigrant and the Community* (New York 1917); Wood, A. M., *Community Problems* (New York 1928) pt. v; Carpenter, Niles, *Immigrants and Their Children*, Census Mono-

graphs no. vii (Washington 1927); Drachsler, J., *Democracy and Assimilation* (New York 1920); Aronovici, Carol, "Americanization: Its Meaning and Function" in *American Journal of Sociology*, vol. xxv (1919–20) 695–730; Kallen, Horace M., *Culture and Democracy in the United States* (New York 1924); Fairchild, H. P., *The Melting-Pot Mistake* (Boston 1926); Thomas, W. I., and Znaniecki, Florian, *The Polish Peasant in Europe and America*, 2 vols. (2nd ed. New York 1927); Addams, Jane, *Twenty Years at Hull House* (New York 1910); *The Immigrant Portrayed in Biography and Story* (bibliography published by the Foreign Language Information Service) (New York 1925).

AMES, FISHER (1758–1808), American political writer and publicist. Ames was born in Dedham, Massachusetts; was graduated from Harvard College, a precocious and delicate youth, in 1774; read widely at home during the war; and was admitted to the bar in 1781. His newspaper essays during Shays' rebellion and speeches in the Massachusetts convention of 1788 gave him a reputation as publicist and orator. He served in the first four Congresses (1789–97) as a staunch Federalist, and his speech on Jay's Treaty was the greatest of that generation. In a series of essays in Boston newspapers between 1798 and 1808, he provided a philosophic basis for New England Federalism. In ancient history, from which most Americans read the lesson of tyranny, Fisher Ames found a warning against democracy. Starting with the premise that men are naturally evil and are influenced only by a desire for wealth or fame, he deduced that democracy must be a government of the worst and end in anarchy or despotism. Regarding England as a bulwark of religion and rational liberty, and Napoleon as the incarnation of the revolutionary spirit, he devoted much of his writing to the European war, and to denouncing the foreign policy of Jefferson and Madison. His classical allusions and crisp, nervous style gave his essays wide vogue among educated people, although they passed over the heads of the public; and among the ruling class of New England his position was analogous to that of Calhoun in the South of 1850. A collection of his essays was published posthumously in Boston in 1809 and partially reprinted in England in 1835 as a warning against democracy. His *Works*, edited by Seth Ames (2 vols., Boston 1854), contain a biographical sketch.

S. E. MORISON

Consult: Morison, S. E., "Squire Ames and Doctor Ames" in *New England Quarterly*, vol. i (1928) 5–31.

AMES, JAMES BARR (1846–1910), American law teacher and jurist. In 1873, shortly after his graduation from Harvard Law School, he was made assistant professor; in 1877 he became professor and in 1895 dean. His whole career was at Harvard. As a student he came under the influence of Christopher C. Langdell, recently appointed dean of the law school. The latter's ideas regarding methods of legal teaching were original and radical. Law was to be studied from first hand material in reported decisions of courts. The student was to employ the inductive process and to make his own syntheses. The opposition to Langdell, aroused by his radical theories, was not lessened when his disciple Ames, a young man without experience in the practise of the profession, was appointed to a professorship in the school. But the latter's genius as a teacher perfected the method which Langdell originated, and before Ames' death the case method, as it was called, was almost universally employed in the law schools of the United States. Through the preparation of a series of annotated case books and through his extraordinary power as a teacher he deeply influenced the legal thinking of a generation of practitioners, judges and law teachers. A few essays, particularly in the field of legal history, constitute very important contributions to juristic science. His "Disseisin of Chattels" and lectures on the history of assumpsit, in *Lectures on Legal History*, are legal classics.

Ames confined his researches rather strictly to the legal system of England and its development in the United States. He made little attempt to consider other systems, or to take account of social or economic elements, and almost entirely excluded legislation from his investigations. In short, he carefully marked off the province of law from that of other social sciences. Essentially his method consisted in the careful analysis of the reported cases, from the year books to the latest current report, with a view to discovering general concepts underlying the mass of judicial pronouncements. Although he studied case law as probably no other man of his generation, he was ready to reject precedent, to declare a result wrong, if it conflicted with principle.

In his later years an ethical tinge became more evident in his juristic thinking, especially in his treatment of equity, trusts and torts. Notwithstanding his devotion to the common law, he did not scorn the law of nature. It is

perhaps not so convincing today as it was in 1891 to describe as a "far-reaching principle of natural justice" the doctrine that "as between two persons having equal equities, one of whom must suffer, the legal title shall prevail" (*Lectures on Legal History*, p. 272). But Ames was able to make such a formula useful in producing harmony between apparently conflicting decisions in widely different parts of the law. His great service was the restatement of a large part of the common law in broader generalizations and clearer outlines.

ORRIN K. MCMURRAY

Consult: Eliot, C. W., and others, "James Barr Ames" in *Harvard Law Review*, vol. xxiii (1909–10) 321–38; "Memoir of James Barr Ames" in Ames, J. B., *Lectures on Legal History and Miscellaneous Legal Essays* (Cambridge, Mass. 1913) p. 3–26.

AMMON, ALFRED OTTO (1842–1916), German anthropometrist and one of the founders of the anthropo-social school in sociology. His anthropometric measurements of recruits and students in Baden, Karlsruhe and Freiburg showed that city born people were more dolichocephalic than country born people; that migrants from the country to the city were more dolichocephalic than those who remained in the country; and that the upper classes were more dolichocephalic than the lower classes. Such facts were due, in Ammon's view, to the selection of the dolichocephals by the city and by the upper classes. On the basis of these findings he posited a correlation between dolichocephaly and migratoriness, and likewise between dolichocephaly and intellectual capacity.

Later on, by combining the Darwinian principles of heredity, selection, variation, struggle for existence and survival of the fittest, Ammon gave a systematic theory of the social order and evolution of society. The essentials of this theory are as follows: first, the basic characteristics of the social order and social evolution are determined by the above Darwinian factors; second, any society progresses as long as the proportion of the innately talented persons (dolichocephals) of its members does not decrease; third, the existence of social inequality and stratification is a natural result of the innate inequality of individuals; fourth, the upper classes are much richer in talented dolichocephals than the lower classes; fifth, the existing forms of social selection in western society are unfavorable for the survival of these upper classes and they tend to decrease. At the present time many of Ammon's generalizations are known to be invalid.

P. A. SOROKIN

Important works: *Anthropologische Untersuchungen der Wehrpflichtigen in Baden* (Hamburg 1890); *Die natürliche Auslese beim Menschen* (Jena 1893); *Die Gesellschaftsordnung und ihre natürlichen Grundlagen* (Jena 1895, 3rd ed. Jena 1900). A short summary of Ammon's theories is given in his article, "Histoire d'une idée. L'Anthroposociologie" in *Revue internationale de sociologie*, vol. vi (1898) 145–81.

Consult: Berblinger-Ammon, Berta, *Otto Ammon. Das Lebensbild eines Rasseforschers* (Halle 1925); Kovalevsky, M., *Sovremennie sotsiologi* (Contemporary Sociologists) (St. Petersburg 1905) p. 339–51; Sorokin, P., *Contemporary Sociological Theories* (New York 1928) p. 244–51.

AMNESTY, a concept of public law, comes from the Greek ἀμνηστία, which means forgetfulness or oblivion and implies an act of the legal sovereign conceding, from grace, a voluntary extinction from memory of certain crimes committed against the state. It is a legal oblivion, usually of political offenses. However, only the criminal consequences of the absolved act are destroyed. Civil recourse to reparation for damages to third parties still remains, unless the amnesty has been made by its terms to cover exemption from all legal recourse.

Amnesty is usually held to be juridically different from pardon in that it involves no nullification of a penalty already judicially determined in particular cases, but is a general determination that whole classes of offenses and offenders will not be prosecuted. Normally amnesty is carried into effect by statute rather than by executive order, unless a devolution of the power upon the executive has been granted, under a survival of executive prerogative such as exists in England and Italy and, perhaps one may say, in the United States. Joseph Barthélemy almost alone believes that amnesty, because it involves discretion, is an executive act and for that reason, under the French system, ought to be accorded by the parliament (not as a legislative power but as representative of the nation) but on the exclusive initiation of the government ("L'amnistie," p. 281–84). Others have held that it proceeds ultimately from the highest source of legislative authority, existing in the crown under constitutional monarchies, in the representative body under parliamentary republics. Owing to a refusal on the part of American courts to differentiate amnesty from pardon, the power is found both in presiden

and in Congress under the constitutional allocation of powers in the United States.

For purposes of formal classification amnesties may be said to be: first, general or particular, that is, they may cover all classes of political offenders or may be limited to special groups, with specific exceptions; and second, absolute or conditional, that is, they may impose no conditions or they may demand the performance of certain conditions before their provisions enter into legal effect.

Such a formal classification, however, oversimplifies the difficulties involved in an analysis of the concept. In Roman law it was extremely difficult to distinguish between amnesty and pardon. In continental law, with its Romanist traditions, the distinction between them is more finely drawn in theory than in practise. The amnesties granted often involve, in fact, commutation of sentences, as well as blanket indulgences.

American law, as well as English, possibly because of shared common law traditions, has been even less rigorous in the separation of amnesty from pardon. To be sure, American courts recognize a distinction between the two (U. S. *v.* Bassett, 13 Pac. 237, 239; 5 Utah 131; and U. S. *v.* Wilson, 7 Peters 160) and, although they take no notice of pardon unless it is pleaded, they apply amnesty as part of the law proceeding from the legislature (State *v.* Blalock, 61 N. C. 242, 247; State ex rel. Anheuser-Busch Brewing Ass'n. et al *v.* Eby, 71 S. W. 52, 61; 170 Mo. 497). Nevertheless some courts have held that "amnesty is included within the word 'pardon' which is generic, and includes every character of pardon" (Davies *v.* McKeeby, 5 Nev. 304–09; U. S. *v.* Klein, 13 Wall 128). The usual juristic distinction between amnesty and pardon is "not recognized in the law and, except that the term 'amnesty' is generally employed in pardons extending to whole classes and communities instead of to individuals, the distinction between 'pardon' and 'amnesty' is merely philological rather than legal" (Knote *v.* U. S., 95 U. S. 149, 152–53; this case finally determined that amnesty was not a grant and did not entitle to recovery of property previously condemned and sold). It is on this reasoning that the courts have held that a general amnesty may proceed from an executive proclamation; this executive power, however, does not destroy the power of Congress to pass an act of general amnesty. Here is possibility for confusion, yet this deduction, in spite of congressional resistance to President Johnson, appears to be sustained both by the practise of the presidents and by the courts (see, for an extended discussion, 8 *American Law Register* n. s. 513–32, 577–89; and Brown *v.* Walker, 161 U. S. 591–638).

Some courts have further held that "the term properly belongs to international law . . . and has no technical meaning in the common law," on the ground, it would seem, that it often "is applied to rebellions which by their magnitude are brought within the rules of international law" (Knote *v.* U. S., 10 Ct. of Cl. 397–407). It is hardly possible, in the light of political practise, to defend this contention merely on such a ground. Acts of amnesty have been applied to desertion and petty offenses. It is true, however, that amnesties of a general nature usually follow civil disturbances which have threatened the government, and that the granting of an amnesty is nearly always a sign that the government feels its position secure from violent overthrow, and that having disarmed its enemies in the field, it may proceed with the attempt at disarming hatred and resentment by an act of grace.

The first historical instance of an amnesty that shows a clear concept of its nature was the act by which Thrasybulus in 403 B.C., after the expulsion of the Thirty Tyrants from Athens, forbade the further persecution of citizens for their past political acts and exacted an oath of amnesty in an effort to erase civil strife from memory by the imposition of legal oblivion. In Roman law the *restitutio in integrum* was a rehabilitation amounting in practise to an amnesty. Every great civil struggle in which the victor has not pursued the defeated to complete extermination has of necessity been followed by an amnesty, tacit or legal.

French history, full of civil strife as it is, abounds in amnesties, first known as *lettres de rémission générale*. The *lettres d'abolition* in 1413 which accompanied the truce between the Armagnacs and the Burgundians were really an amnesty. Similarly in 1549 civil riots in Bordeaux were amnestied. The Edict of Nantes was partly an amnesty; and the whole nineteenth century was a long train of them, from Napoleon's imperial decree of 1802 to the successive amnesties up to 1881 following the civil disturbances of 1871 and the Paris Commune. Amnesties in favor of war time deserters, of communist agitators and of the Alsatian "Autonomists" have formed stormy subjects of debate since 1919.

In England the most famous amnesties include those after the Civil War in 1651 and that of Charles II in 1660. It is noteworthy that the latter excepted from the terms of the amnesty the judges who condemned Charles I to the block, though this was done by vote of a Parliament more vengeful than the king himself. The Fenians Act of 1873 and the amnesty to the Boers in 1903 are other typical amnesties.

The chief interest in amnesties granted by the federal government in the United States centers in the reconstruction period after the Civil War. Lincoln's Amnesty Proclamation of December 8, 1863, had been authorized by Act of Congress, July 17, 1862. It offered full pardon to those who took a prescribed oath, excepting certain classes of rebels. President Johnson's struggle with Congress grew in some measure out of his liberal Amnesty Proclamation of March 29, 1865, and from the congressional repeal on January 7, 1867, of the Act of 1862, by the authority of which Lincoln had proceeded. Johnson treated this repeal as a nullity and went about extending the provisions for amnesty in proclamations of September 7, 1867, July 4, 1868, and December 25, 1868, this last granting amnesty without the formality of oath. The question whether he was justified in subsuming amnesty under the executive's legal power of pardon has been disputed. Certainly he had precedents for his action in the presidential amnesty proclamations by Washington, Adams and Lincoln. (On the whole Johnson controversy see Edward MacPherson, *Political History of the United States of America during the Period of the Reconstruction*, Washington 1880, and *Political History of the United States of America during the Great Rebellion*, Washington 1876; also 12–17 *U. S. Statutes at Large*, appendices. For the legal effects of these acts see Brown *v.* Walker, 161 U. S. 591–638).

After the Great War the nationalistic settlements forced the incorporation of amnesty provisions in the armistice and the peace treaties. Amnesties became necessary also as a means of easing the bitterness which grew out of the post-war struggles of classes and minorities. Deserters of certain categories, those who had taken part in unsuccessful revolts and political offenders generally were amnestied. Because of the revolutionary and dictatorial character of their governments Italy and Russia furnish the most interesting illustrations since the war of strictly political amnesties.

In Italy the pre-Fascist governments were notoriously lenient to deserters. When the Fascists came into power the tables were turned. Blanket extinction of Fascist offenses of violence (and of non-Fascist offenses where they did not arise from "purely personal motives") were brought under a royal decree of December 22, 1922, that included "crimes committed in agitation, strife, tumults or conflicts arising from economic-social causes" up to a certain degree of seriousness (*Racc. di leggi e decreti*, vol. vi, 1922, p. 5022). Later amnesties permitted the escape of certain enemies of the regime who were being detained, although the decrees were aimed primarily at absolving Fascists. Amnesty in Italy hardly affords protection from Black Shirt terrorism or from subsequent arrest by the political courts.

Not only post-war Russian experience but the experience under the czarist regime as well furnishes many instances of failure to execute amnesties in strict good faith. The fate of some of the mutineers of the Russian war vessel *Potemkin* will be recalled, particularly that of Matushenko who was condemned to death in 1907 despite the amnesty of October 21, 1905. The reckless disregard of their own promises by Denikin, Kolchak and other White Guard leaders after the revolution was quite in tradition. One need not be surprised, therefore, at the failure of the Soviet government to carry out with complete good faith the amnesty offered by the Presidium of the All Russian Central Executive Committee (decree of December 16, 1921, to all enlisted men of the White Guard military organizations, and a later partial amnesty to White Guard officers as well). The secret Cheka left no one in safety who had been or might be suspected as a counter-revolutionist.

It is clear, therefore, that amnesties are effective as legal protection only in constitutional states under the rule of law which courts can enforce, or in absolute monarchies or dictatorships where the ruler is of tried good faith. Wherever the government feels itself insecure they are of doubtful worth. In fact, from the standpoint of the group in power, amnesties are politically expedient only when the regime is safe from further violence, and when clemency may not be mistaken for weakness.

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See: PARDON; POLITICAL OFFENDERS; CIVIL WAR; REVOLUTION.

Consult: Gagliardi, Elia, "Amnesty" in *Enciclopedia*

giuridica italiana, vol. i (Milan 1884) 2011–20 (the best analytical-juridical article); Cabat, L., *De l'amnistie* (Paris 1904); Joseph-Barthélemy, "L'amnistie" in *Revue du droit public et de la science politique en France et à l'étranger*, vol. xxxvii (1920) 260–313; Vrabiesco, G. C., *Contribution à l'étude critique du droit de grâce* (Paris 1921); Husson, P., *La réserve des droits des tiers dans les lois d'amnistie* (Lille 1922); *L'amnistie dans le traité de Versailles et dans d'autres traités de paix*, documents (Amsterdam, no date); Schäfer, L., *Die Londoner Amnestievereinbarungen* (Mannheim 1925); Prignon, P., and Barret, Jules, *La nouvelle amnistie, les incapacités électorales et la réhabilitation de droit* (Montreuil, Seine 1920); Alsberg, Max, *Die Reichs-Amnestiegesetze* (Berlin 1919).

AMOS, SHELDON (1835–86), English jurist and law teacher. Amos carried on the Bentham-Austin tradition in jurisprudence. In common with that school he regarded law and legislation as synonymous, and continued to emphasize the idea that law is a command issued by the governing body to the governed. Austin's penchant for distinguishing law from morality is reiterated in Amos. Yet Amos outsteps his master by recognizing the existence of international law, to which Austin had denied the title of law "properly so called." But the concept of international law which Amos developed was made to fit in with the general theory of law as a command. To him international law consists only of such rules as have a positive sanction either in the local courts of the various states or by some other force, such as war. Between the periods of Austin and Amos, Sir Henry Maine had written his epochal treatises on ancient law; the influence of these works is discernible in the writings of Amos even while he verbally continues strictly to adhere to the Austinian doctrines. Without accepting Maine's view of law as evolving custom he recognizes the utility and validity of many of Maine's tenets and concludes: "History, descriptive sociology, Roman law, foreign law and international law, logic, ethics and politics, are none of them alien, are most of them essential, and are all of them helpful to the fit furnishing of the student of legal sciences."

MAURICE FINKELSTEIN

Important works: *Systematic View of the Science of Jurisprudence* (London 1872); *The Primer of English Constitution and Government* (1st ed. London 1873, 7th ed. London 1895); *An English Code* (London 1873); *The Science of Law* (London 1874); *Lectures on International Law* (London 1874); *Comparative Survey of Laws in Force for the Prohibition, Regulation, and Licencing of Vice* (London 1877); *Fifty Years of the English Constitution* (London 1880); *The Science of Politics* (1st ed. London 1883, 3rd ed. London 1906); *History and Principles of the Civil Law of Rome* (London 1883).

AMUSEMENTS, PUBLIC. Literally, an amusement is something at which one gazes or stares; and public amusements are characteristically spectacles, but there are few forms of amusement which have not originally involved the active participation of every member of a group, whether as contestant in a game or as one of a chorus in a dramatic ritual. Most amusements have been group activities before they became mass spectacles. The commonly accepted distinction between amusement and recreation, which would limit the former to activities that divert without requiring any effort, is too narrowly drawn to the forms of an industrial civilization. The games and play to which modern man turns in a self-conscious attempt to regain strength and vigor, and which he calls recreation, have been among the important forms of amusement to people of other times. Even the most mechanized amusement retains something of the recreative value of the diverting; the recreative and the amusing are always intermingling. But amusements are primary; they are the spontaneous play patterns; in particular forms they may become cheap and repetitive and distorted, but they never lose the impress of activities which men have passionately enjoyed.

It is because one can best define amusements by reference to this emotional factor, to the attitudes which men have had toward certain occupations, that one must recognize as amusements a whole fringe of activities designed primarily for other ends. Thus one of the favorite amusements of the citizen of Athens was attendance at the speeches of the great orators; while the Roman found a similar pleasure in the debates of the Forum; and for the contemporary American the recurrent election campaigns are among the most popular of national sports. In the process of such transformation necessary activities are often elaborated that they may better serve as diversions. The pomp and splendor of the autocratic ruler, secular or priestly, ministers not only to his sense of greatness but furnishes all of the drama and pageantry that may come to large groups of his subjects. Even the execution of the criminal has been furbished out as the most entertaining of spectacles. And there is a pathology of cultural as well as of individual pleasure, which takes the form now of an Inquisition, now of a Cromwellian regime.

The actually existing variety of amusements

within any particular culture is determined by its economic resources, its social cohesiveness, its political structure, its relative isolation, its prevailing morality. But all the bewildering diversity of amusements which men of different civilizations and periods have known have been but variations of a few basic forms and patterns. Devotees of particular games and sports are fond of tracing their origins to remote and distant places—games of ball to Egypt, cock fighting to India or the court of the Great Khan, certain forms of athletic contest to Japan. But the relationship between modern amusements and those of Egypt is more fundamental than that of mere historical continuity; it is a functional similarity based on the shaping and reshaping of certain common elements into variant forms. Thus music and dance and the drama of religious ritual are universal; games and athletic contests find their place in modern recreational programs as they found a place in primitive life; exhibitions of strange beasts and men charmed the ancient Egyptian as they charm the modern circus goer or the courts of the native princes of India. There has never been a civilization without its individual mimics or clowns, its jugglers and performers of tricks. The strolling player and comedian wandered among the crowd at the Olympic games, initiated the literary drama in Rome, set up his stall in the fairs of mediaeval Europe as of old Japan, joined the great band of Elizabethan vagabonds, occasionally created a *commedia dell' arte* and finds shelter today in the circus or on the vaudeville stage. To the many whose daily occupations are more serious the masquerade has offered again and again a temporary escape from the bonds of personal consistency or of ordinary social standards. The element of masquerade was present in the earliest ritual dances; in the Roman Saturnalia or the mediaeval All Souls' Day it became the justification of a sudden wild escape into licentiousness; in pageant and carnival it heightened the merrymaking of aristocrat and of peasant. An equally persistent form of diversion has been gambling. The most primitive peoples have their games of chance, while from India and China, as from England or America, come records of long series of protests against the evils of organized gambling. And in every age betting has attached itself symbiotically to almost every available form of contest. Standards of taste and literateness bring now one, now another, amusement to the fore, but the materials of which public amusements have been formed remain the same. Science and machinery, though increasing their range and specific shape, have hardly added to their number.

Most civilizations have harbored some form of each of these diverse types of amusement, but with varying emphasis. Some amusements are dependent on the cultural situation for their quality or existence, while others have flourished at all times. Empires and despotisms have usually been accompanied by spectacular displays for the lower classes and the restriction of music or literary drama to a small class. A cosmopolitan population gives a touch of exoticism to amusements. Military peoples have emphasized horse races or tourneys and the ideals of physical health. In times of social change amusements take on a restless, shifting, roistering character. There has probably never been a time without its cruel amusements, but excesses of blood lust seem to occur most frequently in societies which are frankly organized on a basis of arbitrary power.

More significant than the coexistence of particular forms of amusement is the place of all amusements in the composition of different cultures. One of the primary changes in the position of amusements occurs in the transition from a simple, well integrated community to a protean, loosely grouped society, urban or rural under urban domination. In the former, amusements rise directly and with spontaneity from everyday activities. They involve the same personal contacts as work or religion. The distinction between work and release from work is thoroughly well recognized in a primitive community, but one activity may serve both purposes. The rhythmic cooperative effort of canoe building partakes of the nature of play; hunting is not only work but sport; the spring earth festival is a serious duty, but its color and fire afford to participant and spectator a sense of moving drama. Athletic contest, games or feast are set apart by a holiday spirit, not by contrast with ordinary forms of activity. All are held together and shot through by religion. One can hardly speak of a social function of amusements in a primitive community. Games may serve as a training for the youth and be caught up into the ritual of initiation; contest and drama help to strengthen group loyalties, to build about the individual a wall of human associations that protect him from the terror of natural forces; but such is also a function of religion and of all the institutional regulations of the community. For the individual amusements have a distinct psychological place;

for the community they are inextricably woven into one pattern of social life.

Most rural communities have preserved something of this closeness of the texture of living. They have generally had neither the leisure nor the wealth to support elaborate entertainments. It is around the wedding or the funeral that such a community creates its celebrations; the husking bee and the quilting bee or the barn raising are important forms of amusement. Even when the merchant has come, bringing with him all the diversions of the fair, or the traveling singer or the Chautauqua makes an annual visit, these but supplement the more essential community amusements. The class privileges or tastes in amusements that always develop in a city are of little importance in such a community. Economic status affects power, of course; but everyone within the community has some share in its festivities. Something of the mutuality of relationship between religion and amusements is usually preserved in such a community. For the peasant of Europe, Eastertide and Christmas with their candles and flowers; for the villages of Japan, the Feast of the Dead when every little stream is gay with its tiny lighted boats floating to the sea; for the American in the small community, the church sociable with its cakes and amateur fortune teller—for each in a different way religion and amusements are associated.

This clustering of amusements about vital community activities has been one of the most enduring patterns for their organization. It appears in East and West alike, among peoples who have never known urban civilization and among groups who have left large cities to establish themselves in new continents. Although it is suffering disintegration throughout most of the Occident by the scattering of communities and the introduction of city amusements into the most remote districts, it can never entirely disappear and must regain its importance with every dissolution of an urban civilization. It is even making its way in an attenuated form into our present industrial society: the community as the social unit for work and play and worship having disappeared, the neighborhood has come to take its place. But the modern self-conscious organized "community," relying upon drama or festival to develop a sense of cohesiveness, can never restore amusements to their original place. Not only does the community movement itself restlessly organize on an international scale, but its very existence depends upon a setting apart of amusements from the rest of life that gives them a social position very different from that which they had in the older type of community.

It is not, however, only in the primitive or the rural society that amusements develop in intimate association with other forms of activity. The amusements of an aristocratic class are essentially of this nature. The once necessary hunt becomes the sport reserved to the privileged class; out of the preparation for war is developed the tourney; while old and simple games are elaborated for the better diversion of a group with wealth and leisure. But the most characteristic amusements of aristocracies have been those which centered around and developed out of private social gatherings. In China and in India, in Homeric Greece and in imperial Rome, in Renaissance Italy and in eighteenth century France, the feast has been the occasion for elaborate dances, for music, for brief dramatic entertainments, for exhibitions of physical skill by the slaves or retainers of the host. Not infrequently have the members of an aristocratic class been themselves the most accomplished musicians or painters; and, always preserving an elegant air of amateurism, a whole court may devote itself to the writing of poetry or to the half drama of the masque. When a Leonardo turns naturally from the painting of the Last Supper to the designing of costumes and machinery for a court carnival, when that carnival combines drama and fireworks, dances and contests between philosophers, there is reproduced in a highly sophisticated form that closeness of contact of amusements with other activities that is characteristic of simpler communities. The amusements of such an aristocratic group may have a perfection of finish and an intimacy of tone that can be developed on a large scale under no other conditions. But it is also under such conditions that diversion is most apt to defeat its own ends through becoming all absorbing.

Not all of the amusements of an aristocracy remain exclusive; the mediaeval tourneys made place for contests by archers or rural athletes; the English gentleman permitted his private prize fighters to give public performances; the Renaissance nobles vied with one another in the richness of the floats they furnished for the great city pageants. Such provision for the pleasures of the people may be the result of political expediency; it may indicate the beginning of a development of municipal or national rather than class pride. For at some period in its history

almost every aristocracy has turned for fresh diversion to the amusements which have grown up among the other classes. In a society definitely organized on caste lines such a whim may endanger the whole social structure. In seventeenth century Japan, for instance, the increase of popular plays threatened to break down the hard lines of class; the emperor hastily prohibited what plays he could, relegated others to disreputable quarters of the city and forbade the samurai to attend them. But in the more loosely organized societies of western Europe nobleman and lady had always frequented to some extent the arena or the public theater. Indeed it is difficult to tell whether such diversions as bear baiting, the favorite amusement of Queen Elizabeth, or prize fighting, popular with later English monarchs, were originally popular amusements taken over by the aristocracy or were imported from the East by the nobles and gradually spread in favor.

If an aristocracy is to preserve its own amusements and its aloofness to those of the people, it must live outside of the city. For the growth of urban civilization gives to amusements a new character and a new compulsion. City life involves a formalizing and separation of the spheres of activity that set amusements apart in time and space and function from other activities. City amusements are essentially mass amusements. The city regularizes the sporadic drama or festival; it gives the traveling player or clown a permanent stage; it brings together men of all tastes to form a large and restless audience eager for any diversion. The city furnishes the necessary conditions for professionalism. The priest who takes the important part in the religious drama or the traveling player who makes his few coins in remote rural districts is in a sense a professional; but it is only in the city that there develops a whole group of people dependent for their living on their success in entertaining others. In the city organized amusements increase in frequency and variety. The victor in the Olympic games of antiquity, no longer content with an appearance every four years, travels all over Greece competing before audiences well pleased with the increased opportunities to share in the excitement of an athletic contest. The politicians of Rome soon realize that the periodic religious festivals are too infrequent to satisfy the restless city group, and every victorious general takes the opportunity of his return to institute a new holiday with more elaborate processions and combats. Thus the city secularizes amusements, for although religious festivals never cease to be of importance the original holy day character of gladiatorial combat or chariot race is gradually lost sight of as these diversions become more frequently available. And the city sophisticates its amusements. The wild revel is refined and made subtle; the sun-burned, lee-reddened Dionysus becomes white and delicately beautiful; beside comedy grows up tragedy. But the comedy may also become burlesque. The simpler amusements may be penetrated and transformed by a more searching intelligence or they may be shot through with vulgarity. In the smaller humanized city one is most aware of the rationalization, perhaps the over-subtlety, of amusements; the metropolis, although it shelters all types of amusement, thrusts forward its coarser, strident, exaggerated diversions.

It is the amusements of the city which are characteristically spectacles, for whose presentation great masses of people can be gathered together in a relatively small space; spectacles for the enjoyment of which few common traditions are necessary, which are equally diverting to the man dulled by long hours of work or to the vagabond drifting idly and unattached through the streets. The city does not stifle amusements which require more active participation; it supplants them and relegates them to far corners. In every large city there are little islands of community life, racial groups preserving their pleasures with their traditions, professional groups creating their own amusements. The mediaeval guilds had their special holidays as they had their special saints; modern corporations try to foster a group feeling with an annual picnic or a baseball team. Moreover certain forms of amusement which are not spectacles never lose their popularity. The city furnishes new opportunities for games of chance; dancing on the green gives place to the public dance hall. The fair is in one sense a series of miniature spectacles, but at fair or circus the crowd laughs as heartily at itself as at clown or Punch and Judy show. The carnival too sweeps up into its rhythms every individual within reach. Less elaborate forms of amusement may acquire traditions and flourish. Throughout India and China every city becomes gay in the spring with the multicolored and many-shaped kites, not of the children, but of the elders, eagerly competing according to elaborate rules. Throughout other parts of the Orient the flying of pigeons is an equally popular diversion. Such amusements are overshadowed rather than supplanted by mass spectacles.

The character of urban amusements is to no small degree determined by the conditions of their maintenance. As soon as amusements cease to be community affairs their increasing costs can no longer be met by community contributions. In varying ways they have been met by individuals and groups who have become wealthy through the mechanisms of the social system. No matter what the form of support, the maxim of *panem et circenses* has dominated more frequently than is generally recognized. Monarchs have found circus or wild beast shows as effective as war in stilling unrest. The church has expended part of its tithes for the provision of amusements. And wealthy individuals, seeking favor or freedom from censure, have contributed largely, whether through the offering of prizes, through the erection of a stadium or odeum or by direct subsidy. Public officials have always been peculiarly susceptible to popular demand for amusements. For some hundreds of years the road to public office in Rome lay through lavish expenditures on the popular spectacles of the arena. Many a Roman used his whole fortune for the provision of amusements in the expectation of regaining with interest the sums thus spent when he should come to office. The modern politician contributes less directly, though none the less effectively for his purposes, to the staging of a prize fight or the continuance of illegal but popular diversions. Until recently state support of amusements has generally been thus indirect, the support of officials or members of the ruling classes, perhaps using public funds which they had appropriated. At times, however, the state has contributed more directly: the Greek cities in the fourth and third centuries B.C. supported the athletes who represented them in the intercity contests; the republic of Florence appropriated moneys from the treasury for the city carnival. Somewhat different was the method by which the Tudor government provided for the popular sport of bear baiting. A special tax for the maintenance of the bears was laid on the peasants, who were then admitted to the baitings free of charge.

Whether it be king, politician or wealthy citizen who thus provides for public amusements, it is usually the most popular diversions, those which appeal to the largest number of people, which are supported. Thus it is that city pleasures tend to be rough and spectacular, suited to the understanding of the most illiterate. The greatest common denominator of appeal is seldom very refined in taste. Literary amusements must find refuge in the privacy of small gatherings, while the physical contest and the crude pantomime gain popular attention. It is only in rare moments of culture, such as that of Athens of the fifth century B.C., or in times when the more popular amusements are supplied by other means, that the donor will support a theater or an orchestra.

Although the compulsion of the tastes of the great masses of people is not lessened when amusements come to be organized on a commercial basis, it is offset by other factors. Not only is the wealthy individual more likely to support the less popular amusements, but the mechanism of business can itself make possible the existence of diversions whose appeal is limited. While it is true that most commercial amusements reach out for ever larger audiences, within the same system the experimental theater, the classical ballet, the string quartet, can exist, not for a small wealthy group alone, but for every person in a city.

The commercial element has for long been of some importance in the organization of amusements. In Rome there arose rival entrepreneurs, owners of great numbers of performers, who bid for the privilege of providing the public spectacles. The amusements of fair and market place have always and everywhere been on a commercial basis. But it is only since the eighteenth century and the establishment of business as the dominant mechanism for the organization of society that one form of amusement after another has taken on its mantle. And as petty commerce has developed into big business, the most typical amusement industries have organized on an increasingly large scale. In the United States there is the industry of baseball, dominated by the major leagues, financial concerns which buy and sell players with a view to success and profits. The manager of a prize fight is a genuine entrepreneur. The sport of racing is financed by the use of the stock exchanges of the world. As a result of successive consolidations there is now but one big circus in the United States. The theatrical industry remains primarily a small scale business; but vaudeville and movie are fast being concentrated in the hands of a few corporations.

Modern invention aids modern business methods in the extension of the scope of amusements. The movie, the one totally new art form or amusement which modern civilization has produced, circles the world in a single stride. It finds its way into the most remote rural districts,

and so long as it remains silent it overcomes all language barriers. Radio and new methods of television indicate the possibility of the penetration of this new dramatic form into the individual home or room. The older forms of amusements too have become international. Baseball has become popular in Japan. No longer are we satisfied with local contests; intercity and interstate games and races must all culminate in international contests.

This internationalism of amusements is fostered by the newspaper and the printing press. Perhaps the most important part of a modern newspaper is its sporting section. Popular international heroes of sport are made by these pages. International contests become front page news throughout the world. In addition many amusements have their special magazines. The existence of such a vast literature of amusements is a new phenomenon. Specific amusements have in other ages developed an extensive preceptorial literature. Late in the Middle Ages the rules of the tournament were written down and carefully formulated; the best methods of breeding cocks, of training falcons or bears, were recorded in lengthy treatises when those sports were old. And with the growth of antiquarianism specific sports and amusements have received their share of research. But modern athletics have developed international rules and traditions in the space of a few years; modern drama has its constant day by day criticism. This great body of comment, though it attempts little social criticism or evaluation, does exercise a directive influence on the development of amusements; it has the power to discourage or condone the worst abuses of professionalism; it may foster or hold back the radical and the new. But most important, it makes it possible for the man who cannot witness game or contest to read of it, talk its language and follow its development.

Thus in our modern civilization all the potentialities of urban amusements have been more completely realized than ever before. Amusements have been made an integral part of the economic system; as such they can be bought any day or night. While the need for diversion from routine is greater than it has ever been, amusements themselves have become part of the routine. Their vicarious character is increasingly emphasized. Indeed the spectator attitude has become so pervasive that it penetrates almost every form of activity. The dance marathon takes its place with the round-the-world race and the national marble contest as a form of diversion. Record breaking is not a new phenomenon. Plutarch protested against the false emphasis upon it in his time, but never has it been so prevalent as today.

Modern conditions emphasize above all the function of amusements as a stabilizing, unifying force in a society no longer held together by spiritual or community bonds. In earlier civilizations this stabilizing influence was sometimes offset by the danger to order which the gathering of crowds of people always represented. Theater and movie still play upon religious and racial animosities; indeed the potentialities for propaganda are greater than ever before, as chambers of commerce and communist or Fascist leaders well know. But as powerful as the propaganda of the newsreel is the propaganda of the love story. In the darkness of the movie palace political and national differences are forgotten. The very strength of amusements lies in the standardization of tastes which they can effect. Men of totally different racial and work backgrounds speak the common argot of baseball or the prize ring. The language of amusements becomes the truly international language; the assumptions and standards of amusements become the most effective bonds of social unity.

Churches have again and again opposed public amusements, perhaps because of a realization that these may become more important than religion in the setting of standards and the binding together of society. A religious group does not, however, oppose the amusements which it controls. The Catholic church fostered the miracle play at the same time that it was condemning the drama; the most important form of Japanese drama, the "No" plays, was entirely developed and performed by Buddhist monks in an attempt to inculcate moral principles. The great religions of the Orient seem never to have attacked amusements as such; but the Hebraic religions have been traditionally hostile to popular amusements. The early Jewish tribes, like other primitive peoples, had their games and dances and festivities; it was with the introduction of Graeco-Roman games into Palestine that the priests began to condemn as idolatrous and immoral these attractions which threatened to break down their racial exclusiveness. Tertullian in his *De spectaculis* attacks first not the obvious vulgarity and depravity of the gladiatorial combat and the popular farce, but their connection with idolatrous worship. Since they are in honor of pagan gods they become part of the pomp of the devil and so evil for Christians. This charge

of idolatry was repeated by Cyprian, by Chrysostom, even by Augustine, and left its traces on the canon law.

The members of a small sect might well keep themselves apart from the amusements of the world; but when Christianity was suddenly transformed into an imperial religion it became a church of nominal rather than of convinced members. Although at its instance a series of imperial edicts forbidding plays or spectacles on Sunday were promulgated, they were of limited effectiveness. Throughout the Middle Ages much of the wealth and talent of the church went into the support of every form of amusement. It remained for the reformed church to condemn once again; the English Puritan attack of the seventeenth century was carried on with an unequaled bitterness of invective. The hostility was not entirely moral; the extravagance and the foreign airs of the court enraged the honest Puritan as much as its revels; the popularity of masque and play with the prelates of the established church added fuel to his anger; and the general lawlessness of the strolling player increased the zeal for suppression. But it was the old charges of idolatry which were repeated by one of the outstanding critics, William Prynne, in his *Histriomastix*. The Puritan opposition forced James I to issue in 1618 his Declaration of Lawful Sports, the famous order which, while it sanctioned certain forms of amusement, forbade rude and disorderly pastimes on Sundays and holidays; an order which was copied by many of the colonial legislatures of America. With the triumph of Cromwell all plays were for a time suppressed, but even before the Restoration they had crept back, and Sunday prohibitions were never strictly enforced. The opposition to Sunday amusements has lasted longer in the United States than in any other country, and blue laws are by no means obsolete. But particularly in the cities one sect after another is giving up its opposition to dancing, to the theater, even to Sunday amusements. To an ever increasing extent the churches are directing their attention to the moral aspects of amusements, attempting to do away with specific abuses and to provide their own non-commercial diversions.

The state has always been the agency through which reform groups have had to work for the regulation of amusements. The modern state impinges upon amusements at an increasing number of points. Its law courts must settle disputes as to contract and property rights. Since the Middle Ages the governments of Europe have regulated amusements by means of the power of taxation. The *droit des pauvres*, a percentage tax on the price of admission to spectacles, the proceeds of which are devoted entirely to special funds for the relief of the poor, has been in existence in most European countries since the fourteenth and fifteenth centuries. This and more recent taxes are graduated according to the type of amusement, so that theater and opera are lightly taxed while the burden on public dance halls and race tracks becomes almost prohibitive. In the United States and England, on the other hand, taxation of amusements has been purely fiscal.

The most important form of modern regulation of amusements is municipal. In both Europe and the United States some division of the city government issues licenses for all theaters, motion pictures or dance halls, or amusement concessions; presumably it has the right to make periodic inspections, but except under the sporadic prodding of vice societies this involves little actual supervision. The responsibility of municipal police departments for the enforcement of ordinances and the preservation of public order and welfare is a legal power of far reaching extent; but its use depends upon the attitude of the police force, and in every city profitable and popular, though illegal, amusements continue to flourish. Such a situation is as old as organized government. Indeed no government has ever succeeded in suppressing or curbing really popular amusements. Gambling was forbidden in India as early as the second century B.C. by the Code of Manu, but it was never stamped out; the mime flourished in the latter days of Rome despite the prohibitions of church and emperor; the London corporation drove the theaters and bear dens outside the city limits in the eighteenth century but did not thereby control them; prize fighting occurs in New York City in spite of its illegality; those forms of amusement which are connected with organized vice are driven underground rather than eradicated.

Although the state may fail in suppression it can be more successful in fostering desirable forms of amusements. Most significant for the future development of amusements is the increasing interest which modern governments are taking in the provision of diversions which business has failed to supply. The democratic governments of Europe fell heir to a long tradition of the value of national and municipal opera and theater, and continued to subsidize institu-

tions first founded by the aristocracy as an outgrowth of their own diversions. In the United States and in England municipal drama and municipal concerts have been of slower growth and are still largely dependent on the gifts of philanthropists. But in the sphere known as recreation the modern state is providing public amusements on a large scale. The recreation movement has grown to importance in the past fifty years as part of a reaction to the standardized, mechanized, vicarious amusements of the city, and of a new emphasis on physical health. It has become world wide in scope and in every country is leading to the creation of municipal or national commissions of recreation, which build parks and playgrounds, support athletic clubs or subsidize public festivals and amateur drama leagues.

The characteristic amusements of a great city will always be vast and organized and spectacular. But recreation and community movements point the way to a new form of group activity which will give room for the expression of individual interests and talents. The machines about to be invented which shall produce color and music harmonies in new and gorgeous forms to become the amusements of the future present the same double possibility as that contained in all modern amusements: the most complete world domination of tastes and forms of activity, and the greatest variety of possible means of expression when men have learned to take advantage of them.

IDA CRAVEN

See: PLAY; RECREATION; ATHLETICS; SPORTS; GAMES; MUSIC; DANCE; FAIRS; FESTIVALS; CHAUTAUQUAS; GAMBLING; MOTION PICTURES; RADIO; THEATER; MUSEUMS AND EXHIBITIONS; LIBRARIES; PARKS; PLAYGROUNDS; CLUBS; COMMUNITY CENTERS; CHILD LABOR; POLICE POWER; CENSORSHIP; BLUE LAWS; PROFESSIONALISM; AMATEUR.

Consult: Gardiner, E. N., *Greek Athletic Sports and Festivals* (London 1910); Fowler, W. W., *Roman Festivals of the Period of the Republic* (London 1899); Strutt, Joseph, *The Sports and Pastimes of the People of England* (enlarged ed. by J. C. Cox, London 1801); Boulton, W. B., *The Amusements of Old London*, 2 vols. (London 1901); Ralph, James, *Taste of the Town* (London 1731); Ellis, Havelock, *The Dance of Life* (London 1923); Seldes, G. V., *Seven Lively Arts* (New York 1924); Chase, Stuart, "Play" in *Whither Mankind*, ed. by Charles A. Beard (New York 1928) p. 332–53; Martin, Lawrence, "The Common Man's Pleasure" in *Man and his World*, ed. by Baker Brownell, vol. viii (New York 1929); Addams, Jane, *The Spirit of Youth and the City Streets* (New York 1909) chs. i, iv; *International Labor Review*, vol. ix (1924) 815–938, a series on workers' leisure movements. In addition, references to histories of particular amusements may be found in the bibliographies of the appropriate articles. Descriptions or critical appraisals of amusements, except those scattered throughout histories, novels and essays, are rare.

ANABAPTISTS. *See* SECTS; COMMUNISTIC SETTLEMENTS; REFORMATION.

ANACHARSIS CLOOTS. *See* CLOOTS, JEAN BAPTISTE.

ANARCHISM. There is perhaps no other chapter in the history of social-political ideas which has caused so much confusion to the specialist as well as to the general public as the anarchist doctrine. Anarchism covers so many distinct conceptions and tendencies that it is difficult to reduce them all to a common denominator. Besides, it is not so much a definite scientific theory as a mass ideology colored by many emotional and religious elements. It can in general, however, be defined as an attempt to establish justice (that is, equality and reciprocity) in all human relations by the complete elimination of the state (or by the greatest possible minimization of its activity) and its replacement by an entirely free and spontaneous cooperation among individuals, groups, regions and nations. In addition there are certain general propositions and judgments of value with which all representatives of anarchist thought would probably agree. (1) Our unbearable social and moral evils cannot be cured, or even alleviated, by the state, which is necessarily an instrument of domination and exploitation. (2) Human nature is essentially good, if not corrupted by the state and its institutions. (3) All reforms from above are worthless and can only augment our present misfortune. Only the principle of federalism, beginning with the humblest of human relations and ascending to the highest international cooperation, can establish the new society. (4) This new society can only be the result of a revolutionary action (in the soul or in the social-political life) which will destroy the state. (5) Such a revolution, however, would be a complete failure if it built up a new government or any coercive system whatever. (6) The new society of anarchism will not be the product of an inevitable evolution (as is taught, for instance, by Marxist socialism) but will emanate from the natural tendencies of the human soul led by reason and justice and aided by scientific experimentation. (Most of these

principles were codified by the Pittsburg Congress of the American Anarchists in 1883.)

In tracing the origins of anarchist thought there are certain beliefs and doctrines which, though not strictly anarchist in the modern sense, have paved the way for more concise and self-conscious formulations. Many ancient myths of various peoples agree in the belief that a Golden Age preceded the hardships and injustices of the historical state. This conviction found historical expression in the Latin state festival called Saturnalia, which remained an established institution for many centuries and commemorated the old lost liberty and fraternity.

Zeno, the founder of the stoic school, is generally accepted as the first systematic exponent of anarchism. In conscious opposition to the state omnipotence and state communism of Plato, he advocated a stateless society in which perfect equality and freedom would restore the original good tendencies of human nature and establish universal harmony. Carpocrates, in the middle of the second century A.D., became founder of the communist type of anarchism. He believed that not only the state but also private property should be eliminated, and his doctrine combined an unlimited communism with extreme individualism which later developed into sexual libertinism.

In the feverish and exalted religious life of the second half of the Middle Ages, we meet many formulations of a purified Christianity with distinct anarchist tendencies. Especially the doctrine of an ecstatic subjectivism, the claim that the individual can enter into a direct mystic communion with God, by which every sin in him will be extirpated, assumed, in the sect of the Brothers and Sisters of the Free Spirit at the beginning of the thirteenth century, an anarchist tinge. Although this fraternity, denying all state and church institutions and proclaiming the lawless freedom of the divine individual, was cruelly persecuted, it reappeared again and again in the course of the thirteenth to fifteenth centuries and had many followers in France, Belgium, Germany and Switzerland.

Among the sectarians of the Middle Ages we find Johannes Spinner, an outspoken anarchist who advocated principles very much akin to the later doctrine of Max Stirner. There was also Peter Chelčický, a younger contemporary of John Huss and the spiritual forefather of Leo Tolstoy. Against his triumphant Hussite brothers, against the power of the emperor, against the dogmas of the official church, he tried to establish peace and the freedom and equality of the individual by denouncing bloodshed and repudiating the state as a pagan institution. His chief work, *Siet Wiery* (Net of the Faith), so admired by Tolstoy himself, remained a real Bible of religious anarchism.

Against the growing tendencies of absolutistic monarchy we find many protests, some of them of a distinctly anarchist color. Among the protestants one of the most daring, logical and penetrating, was Étienne de la Boétie who, in his famous discourse on voluntary servitude, attacked the very foundations of despotic power. "Be resolute. Serve no more and you will be free! I do not say that you should expel the tyrant, nor that you should throw him from his throne; only, do not support him and you will see how a colossus, deprived of his base, breaks down under his own weight and collapses. . . ." In the widely spread literature of the Monarchomachs similar ideas found emphatic expression at the end of the sixteenth and the beginning of the seventeenth centuries. Although the chief tendency of this group was not anarchism but a limitation of absolute power, the Protestant and the Jesuit promoters of the idea of tyrannicide approached the anarchist doctrine in making the moral conscience of the individual the supreme judge over the tyrant. It is evident that the psychology by which an individual feels himself authorized to kill the tyrant is not very different from the ideology which entitles the modern anarchist to kill the "bourgeois oppressor." The Digger Movement (*see* LEVELLERS) in England in the middle of the seventeenth century, led by Gerrard Winstanley, had also a somewhat anarchist character. By the end of the eighteenth century we find in all the leading countries a very rich literature which, though not anarchistic in a proper sense, was an enthusiastic vindication of freedom and the natural rights of the individual. This literature culminated in the writings of the brilliant circle of the French *Encyclopédie* whose editor, Diderot, often expressed definite anarchist ideas. His famous phrase, "Je ne veux ni donner, ni recevoir des lois," became one of the most quoted anarchist slogans.

Two later movements have considerably affected the development of anarchist thought. One was the liberal doctrine in its earlier form, especially as it appeared in the physiocratic school. Their belief in the invisible harmony of society, a brilliant effort to guarantee free com-

petition limited only by considerations of justice, exercised a powerful influence on anarchist thought; the *ordre naturel*, which they so strongly emphasized, and their attempts to liberate economic life from unnatural and unjust shackles, paved the way to Adam Smith and his followers. The liberal doctrine in its later form, through Herbert Spencer and his vehement attacks upon the state and the "coming slavery," also gave new arguments to the anarchist movement. The other force which aided anarchism was the philosophy of Ludwig Feuerbach and his followers, who attacked the accepted religious and metaphysical foundations of the state.

The first systematic exponent of anarchist doctrine was William Godwin, who believed that there are two great evils which cause the present distress and impede the natural perfectibility of our race. One is government, which is inevitably a form of tyranny; the other is accumulated property, which is a monstrous injustice because it constitutes a kind of "mouldy patent" enabling its possessor to exploit the work of other men. Godwin, however, did not reject all kinds of property, but only that originating through exploitation. For the realization of a better society he deprecated all revolutionary actions and did not even advise any kind of social-political reform. Only the propagation of the idea of justice could result in a general enlightenment which would induce the individuals to replace the state by a contractual arrangement of the parishes and to regard accumulated wealth as an unbearable injustice against their fellowmen. Another impetus to the anarchist movement was given by Max Stirner, from the group of the young Hegelians. He continued the revolutionary thought of Feuerbach and undertook the task of demolishing our moral ideas. Society is a pure chimera, and the only reality which can be known is one's own personality; all the rules which limit this individuality are only a fetter which frustrates the healthy development of the ego. The state would be replaced by an Association of Egoists. No economic exploitation would be tolerated any longer, and therefore the dominant type of production would become a free cooperation. Stirner was the first anarchist who advised violent means for the realization of individual rights. The entirely abstract and metaphysical trend of his argument made his influence a very limited one, however, in spite of the propagandistic efforts of John Henry Mackay. It is interesting to notice that the plan of economic cooperation elaborated by Stirner is very near to that which in the same year was practically realized by the Rochdale Pioneers.

The first man who made anarchism a conscious mass movement was Proudhon. It was even asserted that he was the first to use the word anarchism in our modern sense, but the recent studies of Nettlau have demonstrated that the term was already used in the present meaning in the middle of the eighteenth century. In one of his early works, *What is Property?* Proudhon answered the question with a slogan which became famous: Property is theft. This led to a good deal of misinterpretation, but he was in reality an ardent supporter of private property ("property is freedom") and attacked only usurpation and monopoly. His anarchy was not a contempt of laws but an almost religious attachment to eternal laws. The ideal society represents "freedom in order and independence in unity." To achieve this aim two fundamental revolutions are needed, one directed against the present economic order, the other against the present state. In neither direction was he a preacher of violent revolution, although he regarded such outbursts as inevitable. He believed not in a mass revolution but in a cellular revolution, the economic and moral emancipation of the individual. Proudhon did not attack capital, but only its power to exploit the workers. He saw the real evil of capitalistic society in the sphere of distribution rather than production, and advocated as the fundamental institution of a new order a special type of credit organization, the so-called Bank of Exchange (*see* LABOR EXCHANGE BANKS). He was convinced that the gratuitousness of credit and the strict mutuality of service provided by this institution would lead to the establishment of free associations of individuals having the same interests and organized on an entirely voluntary basis. Only such associations could eliminate the capitalist economic order and the exploiting state. In one of his later books, however, (*Du principe fédératif*, 1863) he admitted that a total elimination of the state could not be achieved in any conceivable future, and that the main claim of anarchism, therefore, should be restricted to the reduction of the compulsory functions of the state, as far as possible, by a growing decentralization and by a fostering of independent group life.

The influence of Proudhon was very great. The fact that Marxist socialism did not acquire

the same influence in France as in Germany and central Europe is to a large extent due to his gospel. In Germany Moses Hess and Karl Grün and later Gustav Landauer continued, not without success, the propagation of Proudhon's doctrines. The only kind of socialism and anarchism which seems to have had a genuine influence on the Americans of the older stock was a transplantation of the ideas of Proudhon based on freedom and mutual help. The teaching of Stephen Pearl Andrews, William Green and Lysander Spooner developed along the line of Proudhon, and Benjamin R. Tucker amplified his teaching and had a wide circle of followers. It would be interesting to inquire whether and how far the engaging personality of Josiah Warren was influenced by the work of Proudhon. He was the publisher of the first anarchist magazine of the world, and founded an Equity Store in Cincinnati which had a close resemblance to the Exchange Bank of Proudhon.

Modern anarchism assumed new tendencies in the pamphlets, speeches and propaganda of Michael Bakunin, with whom anarchism took a definitely collectivist form. He approved common ownership in land and in other means of production, but retained private ownership in consumption goods and repudiated emphatically the state socialism of Marx. Bakunin's system was based on a threefold foundation: anarchism, atheism and free cooperation of independent groups. Not the conquest but the destruction of the state was the chief aim of his "collectivistic anarchism." But how to build up this new society Bakunin never told. He even repudiated as reactionary all detailed speculation concerning the future. Only two things were perfectly clear in his conception. One was his deep belief in the instinct of solidarity, which led to the conviction that a mankind liberated from the superstition of God and from the corruption of the state will soon find the optimum form of its organization. Thus a hundred years before Bergson he advocated Bergsonian principles: "Only life creates. . . . Science does not create, but only states, describes, the creation of life. . . . Science is the sacrifice of life on the altar of abstraction." The other firm point in his thought was his conviction of the necessity of violence. The revolution, however, according to his point of view, should be a spontaneous work of the masses and not an instrument of political leaders or of disciplined military forces, since political and military domination, he held, would inevitably lead to a class dictatorship under an organized oligarchy, that is, merely to the formation of another state. His was a semi-mystical doctrine of violence which is similar to the later teachings of Georges Sorel. Although a man of warm heart, he introduced into the anarchist movement a terroristic conception which later more and more assumed the body of a system. His compatriot, disciple and emissary, Netchayev, transplanted the gospel into Russia where it found vehement echo in a soil already permeated by the propaganda of Nihilism. In his revolutionary catechism Netchayev brought the idea of his master to its fullest fruition. There is no crime or brutality which he did not explicitly recommend for the destruction of our corrupted society. Later the doctrine became very much rationalized, and in the theories of Kropotkin, Johann Most, Paul Brousse and others it found a more utilitarian explanation. They argued that the terroristic deed, both individual and collective, is of the greatest importance because it arouses the imagination of the passive masses and awakens the hope of those who suffer under the injustices of the present system.

Since the eighties of the last century anarchism has assumed a more and more rigid communistic form, probably as a result of the mighty growth of Marxist socialism, which appealed very much to the masses of industrial workers. The leader of this movement was Prince Kropotkin, who regarded as antiquated the former types of anarchism, both individualistic and collectivistic, and pleaded for a complete communism. At the same time, however, he rejected all types of authoritarian communism, holding that the state must be radically eliminated by a popular revolution. On its ruins the nucleus of the future society will become the free village community, the commune whose glorious achievements in mediaeval Europe were pictured by Kropotkin with a creative imagination. Each commune will be an independent economic and administrative organization possessing all the means of production and consumption. No system of representation (invention of the bourgeois class) will be necessary under this system. The extreme division of labor, "horrible and injurious to society and brutalizing for the individual," will disappear, giving place to the "integration of labor and production." No compulsory organization will be necessary for the maintenance of the new order, because it will be in perfect

accord with moral law and "free agreements need not be enforced." Among the followers of Kropotkin one of the most remarkable was the famous geographer Élisée Reclus.

Whereas most representatives of anarchist thought regarded religion and religious feeling as a chief impediment to the emancipation of mankind, Count Leo Tolstoy, the great Russian poet and philosopher, came to the opposite conclusion. True religion, as it is embodied in the gospel of Christ, is a complete negation of the state and all its institutions. Pure reason, as manifested in the doctrine of Christ, refuses to cooperate with the state, which is the very negation of love and is a product of egoism and violence. Tolstoy accepted all the main teachings of anarchism with two reservations. One is the unconditional rejection of communism, which would inevitably lead to a new system of state coercion. The other is the strict repudiation of all kinds of revolutionary action based on violence. Only a spiritual revolution, a perfect moral transformation, can make an end to the present system based on war, oppression and exploitation. No violent revolution is needed to achieve this supreme end. Do not cooperate with the state, he taught; refuse to pay taxes, to comply with military duties, to accept the tribunals and the administration of the state, and the whole present unjust society will immediately collapse.

Similar ideas, in conscious support of Tolstoy but founded independently on genuine Hindu religious thought, are propagated by Mahatma Gandhi, the Indian leader, whose doctrine, however, is largely colored by the national struggle of his people against British rule. It is his belief that only by an attitude of passivity towards political life, by civil disobedience, non-cooperation and economic boycott, and not by a violent revolution, can British domination be defeated. These and similar conceptions of religious anarchism are not purely individual interpretations of religious thought, but they seem deeply rooted in the religious convictions of the masses. There are dozens of religious sects all around the world (Doukhobors, Nazarenes, Mennonites) which advocate the same principles of passive resistance to military service.

At the end of the last century a revolutionary movement grew up among certain elements of Marxist socialism and trade union organizations which had many points in common with anarchist tendencies. It attacked the parliamentarian form of later Marxist socialism and tried to demonstrate that participation in bourgeois legislation, the system of cooperation with the capitalist state, corrupts the revolutionary spirit of the working classes. The movement found its philosopher in Georges Sorel, who elaborated a semi-mystical theory of revolutionary violence. Revolutionary syndicalism regards the trade unions as the real nucleus of the future society. They must be educated in such a way that some day they shall be able to take over all the functions of the capitalistic organization. At the same time they must become fighting organizations, saturated with the spirit of rebellion, in order to molest, to irritate and finally to overthrow the capitalist state. Hence antiparliamentarianism, antimilitarism (*q.v.*), direct action (*q.v.*), sabotage (*q.v.*), antipatriotism, "Ca' Canny," the extensive use of political strikes (strikes without economic motive). The latter are regarded as preparatory schools for the final general strike of all workers which will give the ultimate blow to the capitalist system. Revolutionary syndicalism had a strong influence in the Latin countries. At the same time, independently of it, there arose also in the United States a similar movement called Revolutionary Industrial Unionism (*see* INDUSTRIAL WORKERS OF THE WORLD).

This map of the various anarchist currents would not be complete without mention of a certain tendency which is more a moral and spiritual attitude in favor of anarchism than a coherent trend of thought. From the earliest times until the present day a very long list of eminent literary men could be traced who, though remote from political theories, have made acute and passionate statements against the state. The explanation is not difficult. A genuine poet, artist or philosopher will feel every pressure of whatever kind as an encroachment upon the natural rights of his personality, and he will be aware that most of our social pressures emanate from the coercion of the state as a machine. The list of such men, to mention only a few, would include Rabelais, Fénelon, Sylvain Maréchal, Diderot, Lessing, Fichte, Richard Wagner, Nietzsche, Multatuli, Edward Carpenter, Thoreau, Emerson, Walt Whitman, Ibsen. A no less enthusiastic support has been given to anarchism by many gifted cartoonists and caricaturists who denounced the present order of things with mordant satire. A type of anarchist caricature was created by Puget's magazine, *Père Peinard*, and George Adler is

perhaps not wrong when he attributes to this kind of propaganda a great influence on terroristic deeds.

Outside the field of actual anarchist thought there are two important intellectual movements which share the fundamental anarchist attitude to the state. One is the "Liberal Socialism" of Franz Oppenheimer, which would restrict the sphere of influence of the state to a minimum and give the largest opportunity to local autonomy, decentralization, federalism and to the spontaneous economic union of capitalist-producers, liberated from the yoke of capitalism by the elimination of monopolistic landed property. The other is the pluralist school of political thought, which endeavors to demonstrate that there are many associations anterior to the state; that above the law of the state there is the common moral conviction of the society; that the "supreme power" of the state is practically always limited by the power of other associations; that the whole trend of economic evolution tends to discard state sovereignty; that the unified centralized state will disappear and will give place to a cooperation of various economic, cultural and religious associations.

Even a very summary description of the historical development of practical anarchist policy is a matter of great difficulty. Anarchism never became an organized mass movement as socialism did, and there is not even a possibility for such a development. The very essence of anarchist thought precludes organization. The anarchist congress at St. Imier (1872) protested energetically against "the reactionary assumption" of giving to the proletariat a definite program and an authoritative guidance, although continuous persecution of the movement by state authorities often compelled the anarchists to an underground organization. A discussion of the mass movement, therefore, must restrict itself principally to the emphasis of certain important features or some rather typical traits that it displays.

The antagonism between anarchists and communists became an important force of differentiation in the proletarian movement. The first period of the International Workingmen's Association, called the Mutualist Period, was characterized by the predominance of the principles of Proudhon over the Marxist minority. The situation was slowly changed when in 1868 several organizations entered the association which previously belonged to the Alliance Internationale de la Démocratie Socialiste, founded by Bakunin on a strictly anarchist basis. This adherence led to a short collectivistic period of the International when the followers of Marx and Bakunin were successful in overruling the former Proudhonist attitude and in forcing an acceptance of the claim of nationalization of all landed property (Congress of Geneva, 1868, of Basel, 1869). By this the ice was broken for pure communism, and Marx attacked more and more violently the anarchist wing represented by Bakunin, who in his turn made a violent struggle against the authoritarian "German Communism." The end of the conflict was the expulsion of Bakunin from the International (Congress of The Hague, 1872), but the organization did not survive this amputation because this very congress decided the dissolution of the International, whose general council was removed to New York, where it died silently. Bakunin remained therefore undefeated and was successful in gathering the chief anarchist forces in the Fédération Jurassienne, which became the nucleus of anarchist revolutionary propaganda and regarded itself as the legitimate successor of the dissolved International. As a matter of fact, several congresses were held under the name of the International (the last in Vervier, 1877), but these congresses were not strictly anarchist in their character. Only the congress of London, 1881, and of Amsterdam, 1907, can be regarded as real anarchist congresses of an international character. The Federation of the Jura became a revolutionary center from which anarchist propaganda radiated into all parts of Europe, but it soon found a formidable enemy which checked its influence. This was the regalvanized International Workingmen's Association which, after its Congress of Paris (1889), carried on an embittered struggle against the anarchist movement until it broke with it entirely.

The only countries in which the anarchist movement assumed a certain mass importance were France, Italy and Spain, where the labor movement has shown anarchist color leading sometimes to violent excesses, and the state finally felt itself compelled to interfere and crush the agitation by brutal measures and Draconic exceptional legislation. In terroristic attempts against political figures the anarchists of the Latin race had an overwhelming part. Many attempts against the lives of sovereigns were successful, and the terroristic deeds aroused a wave of persecution against the

anarchist movement. This paramount participation of the Latins cannot be explained on purely racial grounds. The chief cause lies in a rigid system of centralization allied with excessive red tape and (at least in Spain and Italy) with a system of pseudo-constitutionalism. Besides, in Spain and Italy the feudal land system made social oppression still more conspicuous. This explanation is corroborated by the facts that under the Austrian absolutism there arose in Vienna a vehement anarchist movement (about 1880) which cost the lives of several government employees, but that later when more civil liberty was given, and especially when a powerful Social Democratic party was organized, the movement lost all its significance. It is manifestly not an accident that the terroristic theory of anarchism was born in Russia, the classic country of feudalism, despotism and bureaucratic abuses. It is an interesting fact that, although European anarchist thought was so conspicuously influenced by its Russian apostles, the movement itself never assumed a greater significance in Russia because other more rigid and centralized political associations, the Socialists, the Nihilists, the Social Revolutionists and the Bolsheviks, were more successful in uniting the revolutionary energies of the country. The anarchist organizations and papers have been completely suppressed by the Bolshevik government during recent years.

In all other countries where a sufficient amount of freedom and constitutional liberty has guaranteed an adequate share of activity and independence to the individual, anarchism never became a dangerous movement. The former extreme liberalism of England and Switzerland toward political refugees did not disturb, even in the most critical period of the anarchist tide, the calm of the citizens, who preferred "to cast ballots rather than to cast bullets." The story of American anarchism seems to corroborate these conclusions. Only the non-violent liberal individualistic type of anarchism had a deep influence on the genuinely American mind, whereas the violent communistic anarchism, transplanted by the German exile Johann Most, appealed rather to the immigrant proletariat. The vehement Haymarket Riot in Chicago (1886) caused the execution of several alleged anarchists, the imprisonment of Most, and the suppression of the anarchist organizations and papers. The murder of President McKinley in Buffalo in 1901 by an anarchist exasperated American public opinion so greatly that the next year a law was passed forbidding anarchists entrance into the United States. In spite of this prohibition, it is recent immigrants from the regions of the "highest social pressure" who seem to constitute the revolutionary ferment in the latest phase of anarchism, revolutionary trade unionism. Nothing demonstrates more clearly the extent to which terroristic anarchism has been repudiated by genuine American public opinion than the fact that even now, and even among intellectuals, the term anarchism is often indiscriminately used to indicate assassins and all kinds of disorganizing forces.

Critics of anarchism attack the theory generally from three points of view. First, they argue the absolute necessity of a coercive organization in any human community. Second, they undertake to show that without violence the destruction of the state is unimaginable, whereas with violence a new state would immediately follow the destroyed one. Third, they argue that the preaching of violence and the application of immoral means destroy those very human tendencies on which anarchism intends to build the new society. To these objections it might be added that the later communistic anarchism of Kropotkin and his followers is a manifest *contradictio in adjecto*. It is evidently a gratuitous assumption that every man will spontaneously renounce the advantages of private property. With this assumption repudiated, it becomes obvious that a communist society must be based on coercive organization.

These arguments, however, do not destroy the whole edifice of anarchist thought. The stateless society is only an ideal vision to the anarchists, and some of them have avowedly abandoned it. Moreover the doctrine of violence or passive resistance is not essential in the system. The fundamental element of anarchism is an extension of classic liberalism from the economic field into all other fields. It is a maximum of spontaneous cooperation based on equivalent exchange, measured on the scale of justice.

This emphasis on justice and liberty (if necessary, above practical efficiency) is surely an important admonition in a society which begins to lose the very meaning of these ideas. Anarchism is an emphatic assertion of the truth that our present mass democracy is not a definite solution of our deepest problems. It is a protest against the growing mechanization

of political life; against the worship of state institutions, which tend unavoidably to become aims in themselves; against the tendency of the increasingly centralized state to standardize all the activities of society and gradually transform not only material production but also art, science, literature and education into a state monopoly under which all minorities will be forced to accept the standards of the ruling group. Anarchism claims that every social relation must be measured by the individual needs involved. It asserts most emphatically that the state is only instrumental in the fulfilment of these needs, as measured on the scale of justice. It is a plea for all those tendencies which lead toward home rule, regionalism and federalism, to the subordination of the present nation states to a broader international unity. It is an apotheosis of the richness of individual and group life as against the growing uniformity and mechanization of our present state.

The ultimate feasibility of such a plan depends upon the answer which we give to the old dilemma so clearly stated by Bastiat: Is it true that the natural economic order is in its very essence antagonistic, that it must inevitably lead to a polarization of society between extreme wealth and extreme misery, or is it rather true that economic life could lead to harmony if liberated from certain artificial obstacles? If the first alternative is true the compulsory regulation of society becomes a moral imperative. If the second, the road is open toward a growing decentralization of the state and a growing intensification of autonomous group life.

OSCAR JÁSZI

See: INDIVIDUALISM; COLLECTIVISM; COMMUNISM; SOCIALISM; BOLSHEVISM; SYNDICALISM; NIHILISM; LIBERALISM; COOPERATION; FEDERALISM; PLURALISM; DECENTRALIZATION; AUTONOMY; STATE; SOCIETY; HUMAN NATURE; NATURAL ORDER; UTOPIAS; JUSTICE; LIBERTY; PROPERTY; REVOLUTION; ASSASSINATION; VIOLENCE; TERRORISM; GENERAL STRIKE; PASSIVE RESISTANCE; NON-RESISTANCE; COMMUNISTIC SETTLEMENTS; SECTS. See also biographies of anarchists mentioned in the text.

Consult: An authoritative bibliography is Max Nettlau's *Bibliographie de l'anarchie* (Brussels 1897).

WORKS OF A GENERAL CHARACTER: Rist, C., "Les anarchistes" in Gide, C., and Rist, C., *Histoire des doctrines économiques* (3rd ed. Paris 1920), tr. by R. Richards (Boston 1915) p. 614–42; Douglas, P. H., "Proletarian Political Theory" in Merriam, C. E., and Barnes, H. E., *History of Political Theories (Recent Times)* (New York 1924), p. 178–269; Nettlau, Max, *Der Vorfrühling der Anarchie, ihre historische Entwicklung von den Anfängen bis zum Jahre 1864* (Berlin 1925), and *Der Anarchismus von Proudhon zu Kropotkin* (Berlin 1927); Zoccoli, E., *L'anarchia* (Milan 1907); Eltzbacher, P., *Der Anarchismus* (Berlin 1900), tr. by Steven T. Byington (New York 1908); Diehl, Karl, *Über Sozialismus, Kommunismus, und Anarchismus* (4th ed. Jena 1922); Adler, Georg, *Geschichte des Sozialismus und Kommunismus* (Leipsic 1899); Zenker, E. V., *Der Anarchismus* (Jena 1895), English translation (New York 1897); Menger, Anton, *L'état socialiste* (Paris 1904); Stammler, R., *Die Theorie des Anarchismus* (Berlin 1894); Garin, J., *L'anarchie et les anarchistes* (Paris 1885); Dubois, Félix, *Le péril anarchiste* (Paris 1885), tr. by R. Derechef (London 1894); Plekhanov, G. V., *Sozialismus und Anarchismus* (Berlin 1894), tr. by E. M. Aveling (Chicago 1908); Shaw, G. B., *The Impossibilities of Anarchism* (Fabian Tracts no. 45) (London 1895); Wilson, C. M., "Anarchism" in *What Socialism Is* (Fabian Tracts no. 4) (London 1886) 9–12; Jászi, O., *A történelmi materializmus állambolcselete* (2nd ed. Budapest 1908).

WORKS ON DOCTRINES OF INDIVIDUAL ANARCHISTS: Vogl, C., *Peter Cheltschizki* (Zurich 1926); Bouglé, C. C. A., *La sociologie de Proudhon* (Paris 1911); Diehl, Karl, *P. J. Proudhon, seine Lehre, und sein Leben*, 3 vols. (Jena 1888–96); Bourguin, M., "Des rapports entre Proudhon et Karl Marx" in *Revue d'économie politique*, vol. vii (1893) 177–207; Huch, R. O., *Michael Bakunin und die Anarchie* (Leipsic 1923); Oppenheimer, F., "Fürst Kropotkin und der Anarchismus" in his *Gesammelte Reden und Aufsätze*, 2 vols. (Munich 1924–27) vol. ii, p. 142–58; Rocker, R., *Johann Most, das Leben eines Rebellen* (Berlin 1924).

WORKS ON THE ANARCHIST MOVEMENT: New York State, Joint Legislative Committee Investigating Seditious Activities, *Revolutionary Radicalism*, 4 vols. (Albany 1920) vol. i; Commons, J. R., and associates, *History of Labour in the United States*, 2 vols. (New York 1918) vol. ii; Brissenden, P. F., *The I. W. W., A Study of American Syndicalism* (2nd ed. New York 1920); Halévy, D., *Essais sur le mouvement ouvrier en France* (Paris 1901); Michels, R., *Il proletariato e la borghesia nel movimento socialista italiano* (Turin 1908); Langhard, J., *Die anarchistische Bewegung in der Schweiz* (Berlin 1903); Thun, A., *Geschichte der revolutionären Bewegungen in Russland* (Leipsic 1883); Kreal, A., *Blätter aus der Geschichte der Arbeiterbewegung Oesterreichs (1867–94)* (Zurich 1913).

ANCESTOR WORSHIP is a term which is still vaguely defined, despite its prominence in all evolutionary schemes since Herbert Spencer. This confusion is to some extent due to the tendency on the part of most sociological theorists to approach the subject with definite presuppositions concerning its origin and development. In fact there are those who maintain that ancestor worship is a stage in the evolution of all religions—that it has been retained in some cases, notably the religions of the Chinese and Japanese; superseded, as in the Semitic, Greek and Roman religions; or not yet attained,

as in the case of many primitive religions. In all these essentially evolutionary schemes of thought ancestor worship is supposed to have developed out of the cult of the dead and the propitiation of their ghosts, particularly the propitiation of the ghosts of deceased members of the family. To understand the nature and the rather peculiar distribution of ancestor worship, however, all such developmental schemes should be kept in the background, if not disregarded.

We may define ancestor worship as the equation of one's ancestors, both remote and immediate, or of persons standing in the place of ancestor or titular household head, with spirits and gods, and the transference to them of all specifically religious acts and attitudes which are usually associated with the worship of the spirits and gods. This would definitely exclude the cult of heroes, whether semi-historical or mythical, among the Greeks and among numerous primitive peoples, particularly the American Indian. Where remote ancestors or kings are regarded as gods, we may or may not have an instance of true ancestor worship. The question turns on the historicity of the deified person and the quality of transference of religious attitudes.

Ancestor worship today has a very specific distribution. It is to be found in marked development among primitive peoples only in certain regions. It characterizes the religion of the Bantu Negroes and of many of the Melanesian tribes, and it is also to be found in certain parts of Asia. With the possible exception of the ancient Peruvians and of the Pueblo Indians in the southwest of the United States, it can hardly be found in aboriginal America at all. Among the Australian natives a strangely confused situation exists because of the peculiar development of their belief in reincarnation. Among civilized peoples the Chinese and Japanese are of course the classic examples of ancestor worshipers. Historically, however, Japanese ancestor worship is an importation from China. True ancestor worship seems therefore to have developed in but few areas and, far from being a universal phenomenon in the history of religions, it seems comparatively rare. This should dispose at once of the numerous attempts made to correlate it with certain types of economic organization, particularly with an agricultural community, or with certain forms of family life.

Among the Bantu peoples we may find the best illustration of ancestor worship in all its manifestations. Contrary to most theories of the development of religion, the ancestor worship of the Bantu has no connection with festivities associated with the dead, which are so common among many civilized peoples. When an individual dies he joins the family gods and is worshiped as one of them. An ox is immolated over his grave, as is customary when an oblation is made to the gods. The deceased must now be worshiped even by his brother, who may remember all his faults; the dead man has become an ancestor god who must be propitiated and prayed to for protection. Although death has worked no change in his character, his former human attributes in no way detract from the new ancestor's godhead. Like a god he reveals himself to his former relatives through dreams, ecstasy, trance, possession, prophecy and reincarnation. He may assume the form of an animal or be actually reborn in one of his descendants. In the latter case it would appear that no belief in the divinity of such a person exists, for when he ceases to be dead he is no longer divine.

It is characteristic of all forms of polytheism or daimonism that specific functions and benefits are associated with particular gods or spirits. Among the Bantu this role is immediately extended to new ancestor gods. There are two forms of such gods, those connected with public and those connected with private worship. When it is a question of prayers for rain, for the fertility of the land or for that of the herds, prayers are addressed to the ancestors of the ruling dynasty. For specifically private boons, for protection or deliverance from private ills, prayers are addressed to the spirits of more immediate ancestors. There is a point-to-point correspondence between the deceased who have become gods and the older gods of the community Strangely enough, images of dead ancestors are, on the whole, rare, despite the fact that idols were by no means uncommon in the Bantu area.

Although the ancestor worship of the Bantu is perhaps the most thoroughgoing example of this faith that we possess that of the Chinese is almost as marked and is of course on a much higher ethical level. But because of this ethical reinterpretation and because since Confucius it has become a sophisticated and officially accepted faith, ancestor worship in China does not give us the same insight into the workings of such a religion as is revealed by the Bantu.

If there were any truth in the widely accepted belief that one type of religion displaces another among primitive people, we should expect to find among the Bantu no other gods than ancestor gods. But even here numerous other gods, obviously older, are duly worshiped.

All the facts at our disposal indicate, therefore, that ancestor worship is essentially of a transitory and unstable nature. The older polytheistic nature worship and animism were always making inroads upon it. Perhaps it is also well to remember that where men can become gods so easily and mechanically these same gods may likewise become men, particularly when we bear in mind the marked association of ancestor worship with the belief in reincarnation in Africa, Melanesia and Japan.

Whether ancestor worship has any marked influence on so-called progress and whether it in any way circumscribes thought and action and makes for rigid conformity, is more than doubtful. The stagnation of Chinese civilization has always been cited as an example of its deleterious effects. But this can be explained far more adequately in other ways. If the customary explanation were indeed a true one, the Japanese and the Bantu civilizations should exhibit the same traits as the Chinese. Yet emphatically they do not. The deification and the milder form of this same phenomenon, the veneration of one's ancestors, are recurrent phases of religious life intimately bound up with specific psychological tendencies of the human race that are called forth by certain social and economic situations.

PAUL RADIN

See: RELIGION; POLYTHEISM; KINSHIP; DEIFICATION; HERO WORSHIP; DEATH CUSTOMS.

Consult: Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927–28) vol. ii, p. 941–46, vol. iv, p. 412–17, where the older discussions of the subject are well summarized; Hopkins, E. Washburn, *Origin and Evolution of Religion* (New Haven 1923) ch. vii; Groot, J. J. M. de, *The Religious System of China*, 6 vols. (Leyden 1892–1910) vols. iv–vi; Granet, M., *La religion des Chinois* (Paris 1922); Florenz, K., "Die Japaner" in *Lehrbuch der Religionsgeschichte*, ed. by P. D. Chantepie de la Saussaye, 2 vols. (4th ed. Tübingen 1925) vol. i, p. 262–422. For the Bantu ancestor worship the best accounts are Willoughby, W. C., *The Soul of the Bantu* (Garden City 1928), and the famous work of Canon Henry Callaway, *The Religious System of the Amazulu* (Natal 1870).

ANDERSON, ELIZABETH GARRETT (1836–1917), English feminist and a pioneer in opening the medical profession to women. In the late fifties, when the small group of English feminists divided among themselves the tasks of enlarging the economic, social and political opportunities of women, Elizabeth Garrett chose to make the initial attempt to obtain a medical degree. Dr. Elizabeth Blackwell's London lectures of 1859 and the counsel of Emily Davies helped her in this decision. Admitted to some medical lectures through the roundabout method of service as a nurse she showed unexpected proficiency in preliminary examinations only to find herself confronted by the refusal of all medical colleges to permit her to matriculate. The charter of the Society of Apothecaries, however, made her exclusion impossible. In 1866, equipped with an apothecary's license, her name placed on the British medical register, she founded in a working class district the first woman-staffed dispensary for women. This was later known as the New Hospital for Women and after her death was called the Elizabeth Garrett Anderson Hospital. In 1870 it was through the help of her patients' husbands that she was elected as the first woman member of the London School Board. By this time she had obtained in Paris the medical degree denied women in England. For many years she and Dr. Blackwell remained the only women on the British medical register, and it was not until after a widespread agitation in which they both participated that some of the obstacles to the medical education of women in Great Britain were removed. She aided in establishing the London School of Medicine for Women in 1874 and was on its staff as teacher and dean for almost thirty years, serving at the same time as senior physician of the New Hospital. In 1908 she became England's first woman mayor, holding office in that capacity in Aldeburgh, Suffolk. In an age which not only doubted women's capacities but frowned on higher education for women as interfering with their "natural functions," Dr. Anderson's marriage (1871) and children may perhaps have been as important factors in her influence as her high professional repute.

ELSIE GLÜCK

Consult: Fawcett, Millicent G., *What I Remember* (London 1925); Stephen, B. N., *Emily Davies and Girton College* (London 1927).

ANDERSON, JAMES (1739–1808), a pioneer in scientific agriculture. Anderson was a native of Hermiston, near Edinburgh, and the son of a farmer. Both his parents died while he was young, leaving him a holding which he

worked for some time with successful results, thanks to his diligent study of agricultural chemistry and the employment of improved methods and implements. Later he removed to Aberdeenshire, where he earned fame as a ready writer on high farming, but in 1783 he retired from practical agriculture and settled in Edinburgh. He devoted many books and pamphlets, as well as a great deal of magazine and newspaper writing, to agricultural questions, including leases and land tenure generally, the Corn Laws, emigration, the drainage of bogs, the construction of dairies, etc. He also took great interest in the Scottish fisheries, and made a survey of them at the request of Pitt. Although in general favoring free trade, he advocated state protection for the national fisheries. He may claim to have laid the foundations on which Malthus and Ricardo built their doctrines of rent. In one of his earliest writings he speaks of rent as a premium for the cultivation of the richer soils, reducing the profits of the cultivators to an equality with those of the cultivators of the poorer.

W. H. DAWSON

Important works: *Observations on the Means of exciting a Spirit of National Industry* (Edinburgh 1777); *An Inquiry into the Nature of the Corn Laws, with a view to the new Corn Bill proposed for Scotland* (Edinburgh 1777), in which he anticipated Ricardo's doctrine of rent; *An Inquiry into the Causes that have hitherto retarded the Advancement of Agriculture in Europe* (Edinburgh 1779); *An Account of the present state of the Hebrides and Western Coasts of Scotland* (Edinburgh 1785); *Observations on Slavery, with a view to its effects on the British Colonies in the West Indies* (Manchester 1789); *A Calm Investigation of the Circumstances that have led to the Present Scarcity of Grain in Britain* (London 1801).

Consult: Brentano, Lujo, Introduction in Anderson, James, *Drei Schriften über Korngesetze und Grundrente* (Leipsic 1893) p. iii–xxxvi.

ANDERSON, WILLIAM C. (1878–1919), British labor leader. The son of a Banffshire blacksmith and apprenticed to a chemist, Anderson was one of the younger members of the group of self-educated working class intellectuals associated with Keir Hardie and Ramsay MacDonald in the inner councils of the Independent Labour party. As national organizer for the Shop Assistants' Union he brought it close to other elements in the labor movement. It was in connection with his work for the union that he met Mary Macarthur, whom he married in 1911 and whose work for the Women's Trade Union League he aided with his executive and literary abilities. Anderson's eloquence as a speaker and his skill in debate made a parliamentary career inevitable and, after unsuccessfully contesting two elections, he became M. P. for Attercliffe in 1914. At the same time he was chairman of the executive committee of the Labour party. His excellent judgment, executive ability and personal popularity helped him to steer the Labour party through the difficult years of 1914–16, and marked him as a promising candidate for the leadership of the political labor movement. He opposed the entrance of labor into the coalition government in 1915 and loyally supported the "international" policy of the I. L. P. during the war. He fought to preserve civil liberties, to abolish military conscription and to save the workers from industrial conscription under the Munitions Acts. Together with the other pacifist leaders he was deprived of his seat in Parliament by the "khaki election" of 1918.

GLADYS BOONE

Consult: *The Labour Leader* (Manchester, Eng.) Feb. 27, March 6, March 13, 1919; Labour Party (Great Britain), *Report of the Annual Conference of the Labour Party*, for the years 1914–19, of which the last contains an obituary notice; Independent Labour Party (Great Britain), *Report of the Annual Conference*, for the years 1908–19.

ANDLO, PETER OF (Andlau, Petrus de) (*c.* 1425–80), jurist and political theorist. He was born in Alsace, studied at Heidelberg and Pavia, and became cleric and professor of canon law at the university in Basel, which was founded with his cooperation. His chief work is the *Libellus de caesarea monarchia*, or *De imperio romano-germanico libri duo* (ms. *circa* 1460, published Strasbourg 1603), the first exposition of German imperial law. The first part, which is a historico-philosophical treatise, begins with political doctrine, discusses the question "republic or monarchy?" and explains the transition from the Roman to the German *imperium*. The second part deals with the German public law of his time, with princes and the king, with the nobility and the Reichstag. Peter of Andelo built on the doctrines of Thomas Aquinas, Aeneas Silvius, Landulph de Columna, Lupold von Bebenburg, Jordanus von Osnabrück and Felix Hammerlin. In the struggle between emperor and pope he acknowledged the pope's as the superior right; he also still believed in the Donation of Constantine, but he tried to reconcile the two powers. As a loyal adherent of the imperial idea he dedicated

his book to the emperor. His is a work of reform, full of ethical pathos, which urges especially the acceptance of the Roman law. He wrote (1471–78) a second book, advocating moral reform of the clergy, *Tractatus de canonica clericorum secularium vita*, printed as appendix ix in Hürbin's biography of Andelo.

EBERHARD VON KÜNSSBERG

Consult: Hürbin, Josef, *Peter von Andlau* (Strasbourg 1897).

ANDRÁSSY, GYULA, GRÓF (1823–90), Hungarian statesman. As a young man Andrássy was an enthusiastic supporter of Louis Kossuth, in opposition to the interest of his own class, and took an active part in the Hungarian War of Independence of 1848–49. After the disaster of Világos he escaped from the Austrian authorities and was hanged in effigy. As a political *émigré* he lived mostly in Paris and London, where he familiarized himself with the workings of the modern state. After his return to Hungary in 1858 he assisted Ferenc Deák in preparing the way for the solution of the Hungarian question. In 1866, appointed president of the parliamentary subcommittee in charge of the elaboration of the Compromise (*Ausgleich*) with Austria, he conceived the idea of the "delegations," a quasi-legislative organ of control set up to supervise the administration of the joint affairs of the monarchy.

Andrássy was appointed the first Hungarian constitutional prime minister in 1867, and he carried on a spirited campaign against the centralizing policy of Hohenwart's Austrian government. On the resignation of Chancellor Beust in 1871, Andrássy became minister of foreign affairs. He was opposed to Count Beust's anti-German policy and frustrated the proposed *démarche* of the powers in 1875, which was to be addressed to Berlin on behalf of France. He made the monarchy adhere to the Alliance of the Three Emperors of Austria-Hungary, Germany and Russia, and was chief plenipotentiary at the Berlin Congress, where he received the authorization of the powers for the occupation of Bosnia-Herzegovina by the Austro-Hungarian army. The policy there pursued necessitated the reorientation of his attitude toward Russia. He signed the Austro-German defensive-offensive alliance on October 7, 1879, and resigned the following day. His book *Az 1867-iki Kiegyezésröl* (The Compromise of 1867) (2nd ed. Budapest 1896) is the most significant commentary on that much discussed document. To Andrássy's Near Eastern policy (expressed in the famous "Andrássy Note") and his anti-Russian orientation consequent upon the Bosnian crisis, recent historical criticism assigns a part of the responsibility for the complications leading to the World War.

The speeches of Andrássy were collected by Béla Lederer in *Grof Andrássy Gyula beszédei* (2 vols., Budapest 1891–93).

EMIL LENGYEL

Consult: Wertheimer, Eduard von, *Graf Julius Andrássy; sein Leben und seine Zeit*, 3 vols. (Stuttgart 1910–13); Andrássy, Gyula, *Bismarck, Andrássy és Kortársai* (Budapest 1913), tr. as *Bismarck, Andrássy and Their Successors* (London 1927).

ANDREAE, JOHANN VALENTIN (1586–1654), German humanist, clergyman, educator and philanthropist. He is chiefly significant for his *Reipublicae christianopolitanae descriptio* (Strasbourg 1619, Leipsic 1706, tr. by F. E. Held, New York 1916). The most outstanding features of this work are his scheme for an artisan democracy; his project for a system of education run as a miniature republic and manned by instructors who are "the choice of all the citizens," the child to be taken from the age of six to early maturity and the instruction to be carefully graded in eight departments; his emphasis upon religion; his complete dependence on widespread investigation and on scientific laboratories; and his desire for "light" on the part of the citizens. Andreae's *Christianopolis* considerably influenced the utopias and other literature of his century. His educational ideas resulted in agitation for better educational systems both on the continent and in England; and his outline of a plan for a "college" or society of fellows for scientific investigation, combined with his emphasis upon laboratories and investigation, was the germinal idea that developed eventually into the Royal Society.

Andreae has also been credited with exerting a great influence on the development of Rosicrucianism and through it on Freemasonry. The *Fama fraternitatis R. C., das ist, Bericht der Brüderschaft des hochlöblichen Ordens R. C.*, which appeared anonymously in Cassel in 1614, has been attributed to Andreae. With its admixture of pseudo-science, Christian piety, mysticism and anti-orthodoxy, and motivated as it was by the desire for a general reformation of the whole world, this book attained a wide circulation, especially among the followers of

Paracelsus, Böhme and Valentin Weigel, and created a sensation throughout all Europe.

J. O. HERTZLER

Consult: Glöckler, Johann Philipp, *Johann Valentin Andreae, ein Lebensbild* (Stuttgart 1886); Held, Felix Emil, *Johann Valentin Andreae's Christianopolis: An Ideal State of the Seventeenth Century* (New York 1916), containing also the translation cited above; Prys, J., *Der Staatsroman des 16. und 17. Jahrhunderts und sein Erziehungsideal* (Würzburg 1913); Mumford, Lewis, *The Story of Utopias* (New York 1922) p. 81–99; Kvačala, J., "J. V. Andrea's Antheil an geheimen Gesellschaften" in University of Yuriev, *Acta et commentationes*, vol. vii (1899) no. 2; Schneider, F. J., *Die Freimaurerei* (Prague 1909) p. 85–102.

ANDREAE, JOHANNES (*c.* 1270–1348), the most influential canon law writer of the fourteenth century. He became a professor at Bologna about 1303. His tenure of this influential chair for almost half a century gave him a post of vantage which he used so effectively that he came to be known as *fons et tuba juris*. Andreae's talents were especially fitted to the stage of development which the canon law had reached. He had neither constructive originality nor interest in the philosophic aspects of law, but was gifted with enormous industry, remarkable power of assimilation and facility in writing. Although the formative stage in the development of the canon law had passed, no one had yet reduced to order the mass of new juristic material which had accumulated in the half century since the *Aurea summa* of Hostiensis. This was the life work of Andreae, which he accomplished in his four principal works. His *Novella . . . in decretales Gregorii IX* supplanted the treatise of Hostiensis as the definitive commentary on the Decretals. His two glosses on the "Sext" and the "Clementines" became the authoritative interpretations, the *glossa ordinaria*, for those enactments. Finally in his *Additiones ad speculum Gulielmi Durantis* he brought that great work on procedure down to date and filled in the gaps with new matter. Andreae's method was essentially one of balancing all the existing authorities. He displays an unquestioning respect for the authority of the legislator, which made him an extreme champion of the claims of the papal power.

JOHN DICKINSON

Works: For a list of the numerous editions of Andreae's works, see the catalogue of the Bibliothèque Nationale.

Consult: Savigny, F. C. von, *Geschichte des römischen Rechts im Mittelalter*, 7 vols. (2nd ed. Heidelberg 1834–51) vol. vi, p. 98–125; Schulte, J. F. von, *Geschichte der Quellen und Litteratur des canonischen Rechts*, 3 vols. (Stuttgart 1875–80) vol. ii, p. 205–30; Gillmann, Franz, "Zur Frage der Abfassungszeit der Novelle des Johannes Andreä, zu den Dekretalen Gregors IX" in *Archiv für katholisches Kirchenrecht*, vol. civ (1924) 261–75.

ANDRÉE, RICHARD (1853–1912), German geographer, folklorist and comparative anthropologist. He was the son of Karl Andrée, founder of the geographical-anthropological weekly *Globus* (published 1862–1910). In 1873 Richard Andrée founded the geographical establishment of Velhagen and Klasing in Leipsic, and from 1891 to 1903 he edited the *Globus*. Even before Ratzel, Andrée devoted himself to comparative ethnological studies. Impressed by the similarities which he observed in the traditions and usages of geographically distinct peoples, Andrée juxtaposed in a number of series certain cultural phenomena such as the lucky day, the evil eye, mourning mutilations, names of persons, standards of value. He was not dismayed by the fact that the cultures he thus compared were sometimes located on different continents and were on the whole dissimilar. The diffusionist theory had not yet been developed, so Andrée was forced to conclude, although not without some misgivings, the independent origin of similar cultural traits. He subscribed to the theory that the similarities are explained by the essential sameness of the human mind and the consequent uniformity of cultural progress. He published also several important studies of folklore and a number of statistical-geographical works.

R. THURNWALD

Important works: *Ethnographische Parallelen und Vergleiche* (Stuttgart 1878); *Die Flutsagen* (Brunswick 1891); *Die Metalle bei den Naturvölkern* (Leipsic 1884); *Anthropophagie* (Leipsic 1887); *Braunschweiger Volkskunde* (Brunswick 1896–1901); *Votive und Weihegaben des katholischen Volkes in Süddeutschland* (Brunswick 1904). For a complete list of works see *Zeitschrift für Ethnologie*, vol. xliv (1912) 339–53.

ANDREWS, ELISHA BENJAMIN (1844–1917), American educator. He was in turn soldier in the Union army, student at Brown University and at Newton Theological Seminary, Baptist minister, student in Europe, president of Dennison University, professor at Newton Theological Seminary, professor at Brown University, professor at Cornell University, president of Brown University, superintendent of schools in Chicago and chancellor of the University of Nebraska.

His contributions to the scholarship and public opinion of his time were many and important. They took the form of sermons, addresses, articles, translations from the German, and books dealing chiefly with history and economics. In all his speaking and writing there were clarity, vigor, human sympathy and unremitting search for philosophic understanding. Andrews was avowedly of the type which its opponents call "radical." In the midst of a financially solid Rhode Island he was a downright advocate of free silver. The founding of the Woman's College in Brown University gives indication of his zeal and daring in furthering the education of women. He was likewise a pioneer in the establishing of extension courses for the general public, and when the *Cosmopolitan Magazine* projected a scheme for popular college education his imagination was fired by the proposal and he was eager to share in its realization.

The presidency at Brown came when Andrews was at the summit of his powers. He was notably successful at the two points at which alone it is essential that a president should succeed. First, he gathered, held together and led a faculty which was in quality far out of proportion to the funds provided for its payment. Second, in a community whose interests and prepossessions were vaguely or clearly hostile he dominated and swept its student body into the currents of scholarship and moral intensity.

ALEXANDER MEIKLEJOHN

Consult: Meiklejohn, A., *Freedom and the College* (New York 1923) p. 49–67.

ANDREWS, STEPHEN PEARL (1812–86), American philosophical anarchist. He was identified chiefly with formulating a scheme of universal order based on "sovereignty of the individual." He called it "integralism" and considered it as scientific as Newtonian law. A utopian in a day of utopian experiment, he found practical expression of his theories in the communities of Josiah Warren and Fourier, whom he regarded as the greatest of social prophets. He believed naively in the speedy universal realization of a natural scientific social order without government, law, marriage, the family or punishment. Economic salvation was to be achieved by equal wages in industry run on the principle of "cost as the limit of price," with labor notes as credit and exchange. He pushed his ideas to grandiose lengths, prophesying the abolition of disease and death through the power of belief. The "Pantarchy" of the "Infinite Republic" was to be directed by the most advanced intelligences, who would create "God." He had a considerable following among the utopian-minded, but his disciples were unorganized and his pedantic works reached only their first limited editions. In earlier years he was known widely as a passionate abolitionist, as the chief exponent of the Pitman shorthand system, which he introduced from England, and as the inventor of a universal language.

ROGER BALDWIN

Important works: *Basic Outline of Universology* (New York 1872); *Love, Marriage and Divorce*, a controversy with Horace Greeley and Henry James (Boston 1889); *The Science of Society* (Boston 1895); *The Church and Religion of the Future* (New York 1886).

ANGARY. In early times in the East the term angary, *jus angariae*, was applied to the taking over for public use of means of land transportation. The term was later applied to the similar taking over of means of transportation upon the water. Such action in early days was not always confined to times of war or based upon absolute necessity, but was taken sometimes in order that the king's journey might be more easy, or that an exploring expedition might not be delayed.

Writers in the seventeenth and eighteenth centuries referred to angary as a recognized right but one that involved adequate payment for the service rendered. Gradually treaties began to be made which regulated the practise and which provided that the right of angary should not apply to persons. The treaties sometimes related the right of angary to embargo. The seizure of neutral vessels by Napoleon in 1798 for transport of troops to Egypt was classed as angary. In 1870 Prussians seized and sank six English vessels in the Seine in order to prevent movement of the French forces and Bismarck advanced the claim that it was under the right of angary. Many treaties in force in 1900 admitted the existence of the right of angary, and of about fifty treaties referring to angary before 1900 only about one third are unfavorable. Of the five treaties since 1900 which mention this right three are unfavorable. Article 5 of the treaty of 1902 between the United States and Spain provides as follows: "Furthermore, their vessels or effects shall not be liable to any seizure or detention for any public use without a sufficient compensation, which, if practicable, shall be agreed upon in

advance" (33 U.S. *Statutes at Large*, pt. 2, p. 2105, 2108). In 1907, at the Second Hague Peace Conference, the seizing by belligerents of neutral railway material within belligerent territory was regarded as analogous to the right of angary. The right of angary was, however, beginning to be regarded as obsolete before the World War, and Article 494 of the British Regulations and Admiralty Instructions (vol. i, 1913, p. 191) provided that if a neutral British merchant ship were "coerced into the conveyance of troops," etc., the senior naval officer should remonstrate or take "steps to assure her release."

During the World War there occurred a marked change in the drift of opinion and practise. Turkish vessels were taken over by Great Britain in 1914, and in a British note to the Netherlands, March 21, 1918, it was said: "After full consideration the Associated Governments (the United States and Great Britain) have decided to requisition the services of the Dutch ships in their ports in the exercise of the right of angary." The Dutch government denied the right but the ships were retained, used and returned. Charter hire was paid and also indemnity in case of damage or destruction.

There has been much discussion as to the existence of the right of angary. Germany called the practise "a strange violation of right," while the French Minister of Marine on November 18, 1917, declared angary is lawful "in presence of imperative and urgent need for the national defense and in absence of contrary treaty stipulations."

GEORGE G. WILSON

See: REQUISITIONING; EMBARGO; NEUTRALITY; BELLIGERENCY; WARFARE; MERCHANTMEN, STATUS OF; ALIEN PROPERTY.

Consult: Albrecht, A. E., "Requisitionen von neutralem Privateigentum, inbesondere von Schiffen" in *Zeitschrift für Volkerrecht und Bundesstaatsrecht*, vol. vi (1912) suppl. no. 1; Bullock, C. L., "Angary" in *British Year Book of International Law* (1922–23) p. 99–129; Harley, J. E., "Law of Angary" in *American Journal of International Law*, vol. xiii (1919) 267–301; Great Britain, Parliament, "Miscellaneous Paper 11 (1918) Cd. 9025" in *Sessional Papers*, 1918, vol. xxvi (Accounts and Papers, vol. xii) 747–58.

ANGAS, GEORGE FIFE (1789–1879), British colonizer, "the father of South Australia." He was born in Newcastle-on-Tyne and inherited from his father a profitable shipping business. In 1832 he became interested in the scheme to settle South Australia on the Wakefield plan, by which land was to be sold at a "sufficient price" instead of being given away. The money thus obtained was to be devoted to public works and to subsidizing the emigration of carefully chosen laborers. Parliament approved the planting of the colony (1834) provided sufficient land could first be sold. When it became apparent that not enough land could be sold at £1 an acre, Angas and two friends bought the unsold 14,000 acres at 12/- an acre and floated the South Australian Company to develop this and other lands. For the next sixteen years Angas worked unceasingly in London to carry the colony through its infant troubles. He sent out many shiploads of emigrants, including six hundred persecuted Lutherans from Prussia. He founded the South Australian School Society as well as two banks to handle Australian trade. In 1851 he went to live in the colony after having played an important but inconspicuous part in the formation and the passage of the South Australian constitution. In 1838 Angas heard of French plans to occupy New Zealand and successfully urged the British government to forestall this action.

HERBERT HEATON

Consult: Hodder, E., *George Fife Angas, Father of South Australia* (London 1891), and *History of South Australia*, 2 vols. (London 1893); Brady, Edwin J., *Australia Unlimited* (Melbourne 1918) p. 829–44.

ANGELL, JAMES BURRILL (1829–1916), American educator and diplomat. He was graduated from Brown University in 1849 and after spending several years in travel and study in Europe he returned to Brown as professor of modern languages. In 1860 he left to become editor of the Providence *Journal* and in 1866 accepted the presidency of the University of Vermont. In 1871 he was appointed president of the University of Michigan, which he raised from a little known institution to one of the strongest state universities in the country. With his administration are associated the development of the university's virtual independence of the legislature in questions concerning finance; also the accrediting system, elective studies, the study of education, graduate and summer schools and improvement in medical, dental, engineering and architectural education. In the history of higher education Angell ranks with Presidents Eliot, Gilman and White. His chief strength lay in his broad conception of a democratic system of public education. He retired as president emeritus in 1909 and died at Ann Arbor in 1916.

Opportunities for public service in another direction came in 1880–82 when he was minister plenipotentiary and chairman of a commission to revise the treaties with China, especially those bearing on Chinese immigration to this country, a task performed in an unprecedentedly short time. In 1887 he was a member of the Canadian Fisheries Commission and in 1895 chairman of the Deep Waterways Commission. In 1897–98 he was minister to Turkey.

I. L. KANDEL

Important works: *Progress in International Law* (n.p. 1875); *Reminiscences* (New York 1912); *Selected Addresses* (New York 1912).

Consult: Thwing, C. F., *Guides, Philosophers and Friends* (New York 1927) ch. ii; Shaw, Wilfred, *University of Michigan* (New York 1920) p. 64–79.

ANGIULLI, ANDREA (1837–90), Italian philosopher and educational theorist. He was professor of pedagogy at Bologna and Naples and the most vigorous systematic writer of the Italian positivist school in the political-pedagogical field. As a young man he was influenced by the liberal Catholic thought of Gioberti, then by the neo-idealism of Spaventa and was thus led to Hegelianism. His first book, *La filosofia e la ricerca positiva* (Naples 1868), revealed him as a positivist whose conception of a scientific era was derived from the philosophy of Comte. Although Angiulli's position was between those of Mill and Littré, giving exclusive place to neither man nor nature, he never, as Gentile has pointed out, proceeded beyond the recognition of the necessity for superseding positivism. His doctrine was substantially an expression of scientific mysticism; it postulated a cosmic activity which man creates by his thought and a mysterious harmony in things which guides them through the various forms of life in a continuous progression which becomes conscious in man. In this philosophy man becomes the liberator of humanity, dominating the real world through science and controlling it through perpetual, insatiable research. Without revolution or reaction he can ameliorate his condition by the transforming power of criticism. Such "reconstitution of the social organism depends upon the mental reconstitution of all the organisms that compose it." The state can be made the organ of the necessary scientific education. The state as educator claims every field: physical, intellectual, moral, aesthetic, religious, economic, civil, political. But since the solution of all problems can occur only in the course of centuries, the state is essentially the guarantor of liberty to future generations. The state must seek to introduce the higher achievements of science into the lower cultural strata in order to prepare all minds for the understanding of truth. This education will exclude all theological dogmatism, and religion, reduced to the subject matter of history, becomes the object of science, not a matter of precept. For Angiulli the ideal program of study is limited to science. He even maintained that the only true spiritual interests of the child consist in knowledge of the objective world. Indeed, to him imagination meant nothing and both aesthetic and religious education were irrelevant. His pedagogy, as systematized in his works, *La pedagogia, lo stato e la famiglia* (Naples 1876) and *La filosofia e la scuola* (Naples 1888), held undisputed sway in Italy until 1900.

GIUSEPPE LOMBARDO-RADICE

Consult: Gentile, G., *Le origini della filosofia contemporanea in Italia*, 3 vols. (Messina 1917–23) vol. ii, p. 123–53; Caramella, S., *Studi sul positivismo pedagogico* (Florence 1921).

ANIMAL PROTECTION. Although history and literature record the affections of individuals for animal pets, no organized movement for animal welfare developed until the nineteenth century. The nineteenth century sentiment for animal protection, like the humanitarian movements for the abolition of slavery and the amelioration of the situation of submerged elements of the population, traces its intellectual ancestry to eighteenth century rationalism. Denial of a special divinity to man cleared the way for recognition not only of brotherhood to one's fellowmen but also of kinship with the animal world. The sentiment for animal protection had always existed in particular individuals; the rationalization of the sentiment developed in the late eighteenth and early nineteenth centuries, when it found an earnest propounder in Jeremy Bentham; the impetus to organization and legislation for animal protection was a side aspect of the general humanitarian activity of the time.

The movement for animal welfare operates in two fields—the legislative and the institutional. There is a close relation between the two, since animal welfare societies are usually instrumental in the enactment of animal welfare legislation and are usually the agencies for its enforcement. Animal welfare legislation may be classified as: first, statutes penalizing

cruel treatment of animals (wanton cruelty, failure to care properly for individual animals or to provide suitably for commercial transportation, fashionable or sporting misuses of animals and vivisection); second, statutes covering the organization and activities of animal protective societies and giving their agents police powers; and third, statutes permitting or compelling the instruction of humane principles in public school systems. Game laws, wild life preservation laws and bird sanctuary laws save birds and animals from the guns of hunters, but the purposes of these laws are not purely humane; often the regulation is intended for the benefit of the sportsmen themselves.

Choice for an arbitrary date for the commencement of organized activity for animal welfare may be divided between 1822, when the English "Martin's Act" for animal protection was passed, and 1824, when the English Society for the Prevention of Cruelty to Animals was formed by Richard Martin. The progress of the animal welfare movement has been most marked in England, in the British dominions and in the United States. It has made slower progress in the Latin countries, where it has never succeeded in enlisting the support of the Catholic church.

The first German society was formed in Dresden in 1839. A Paris animal protective society was formed in 1845, and one was organized in Vienna in 1846. The American S.P.C.A. was organized by Henry Bergh in New York in 1866. By 1929 there were in England 1679 branches and auxiliaries of the Royal S.P.C.A. American societies in 1928 numbered 537. The funds of the English societies are drawn exclusively from endowments. Many of the American societies receive, in addition, public funds. In some states, notably in Colorado and in Wisconsin, animal protection has been made a state function.

The purpose of the earlier animal welfare or protective societies was to enforce the statutes against cruelty to animals. Agents and officers of the societies made arrests and prosecuted offenders. As the animal welfare societies of the larger cities grew stronger and richer, the original pressing demand for their activity as prosecutors in individual cases of cruelty declined. They have never been able to relinquish this function, but more and more they have been able to supplement animal protection by animal welfare activities. They have erected watering troughs for horses at convenient city locations, established animal hospitals, provided animal shelters to care temporarily for strays and to dispose of such as are not claimed by owners, and engaged in campaigns of education among adults and children to inculcate in them a love for animals. In many cases some or all of these distinct functions are carried on by a single society. The tendency in large cities, however, is toward specialization and separation of functions.

The American animal welfare movement differs in one important particular from the animal welfare movements in other countries; it is often amalgamated with a parallel movement for protection of children from cruelty. Although in most of the larger American cities child protective activities are carried on by independent organizations—societies for the prevention of cruelty to children—334 out of the 537 American humane societies combine child protection and animal welfare work. This combination of functions is not always fortunate, since the two activities demand different techniques, and according to the dominant interest of an organization one activity or the other—usually child protection—is often neglected. In communities where human interest is not sufficiently developed to maintain two independent organizations, however, the combination of activities is the only practicable solution.

In England the Royal Society for the Prevention of Cruelty to Animals is a national organization, operating through branches and auxiliaries. The American humane societies are local organizations. Unity of animal welfare activity in the United States has been achieved through federations, nationally through the American Humane Association, founded in 1874, and through state federations in eleven states.

Antivivisection—opposition to the use of animals in scientific experimentation—represents a radical aspect of the animal protective movement. In England it has consistently been part of the program of the S.P.C.A. Antivivisection sentiment was the impetus for the formation of many of the German protective societies. In the United States the animal protective societies have rigidly dissociated themselves from the antivivisection movement, leaving this field to an independent group of antivivisection societies. The legislative accomplishments of the movement in England and in the United States have been the licensing and limitation

of animal experimentation rather than its abolition.

WILLIAM J. SHULTZ

See: HUMANITARIANISM; GAME LAWS; CHILD LEGISLATION.

Consult: McCrea, R. C., *The Humane Movement* (New York 1910); Shultz, W. J., *The Humane Movement in the United States, 1910 to 1922* (New York 1924); Fairholme, E. G., and Pain, Wellesley, *A Century of Work for Animals: the History of the R.S.P.C.A. 1824-1924* (London 1924); Salt, H. S., *Animals' Rights Considered in Relation to Social Progress* (rev. ed. London 1915).

ANIMAL PSYCHOLOGY. *See* COMPARATIVE PSYCHOLOGY.

ANIMAL SOCIETIES. Agglomerations formed by animals are to be distinguished as associations (mere collections) and societies (organic wholes). Associations are chance gatherings of animals brought together in certain places by an external factor (insects on a lamp, flies on a piece of meat, lice on a tree branch, game at a spring). Among men, according to this definition, those persons form an association whom accident brings together in a railway coach, in a theater or in a street crowd. In contrast to this, societies are always held together by an internal factor which propels the individuals toward one another and keeps them bound together—by social instincts which are subjectively manifested in man as the need of companionship.

We may divide animal societies into mateships, families and herds. To the last named belong not merely mammals but also swarms of birds and fishes and "states" of bees, ants and termites. Social life always involves among animals a certain degree of brain development; on this account societies are to be found only among those animal species and categories of the zoological system that are most advanced in bodily organization (among mollusks, cuttlefish; farther on in the scale, arthropods, especially insects; and still farther on, vertebrates).

Among many of the lower animals there are no individual sex relations, but what occurs is an emission of sex substances by both male and female into the water where the fertilization of the egg by the sperm follows. In the case of other types among the lower animals, however, a coition does indeed occur, but the sexual act takes place between the sexes without rule, several or many times; that is, there exists a state of promiscuity. We speak here of promiscuity as the general rule, for it is, in the absence of organized mateship, the normal behavior of these species of animals. The higher we ascend in the zoological scale, the more do instances accumulate in which there emerges a psychic union of the sex partners for longer or shorter periods, or what we must call real mateship. This union takes place not through external factors but through internal causes contained in the psyche of the individuals concerned—through the instinct for mateship. Among birds and mammals permanent mateship is the norm from which only a few species diverge.

The forms in which animal mating appears are: monogamy (one male mated with only one female); polygyny (one male with his "harem," that is to say, two or more females); and polyandry (one female with two or more males). Polyandry is rare in the animal kingdom (as also in man); when it does occur among animals it is always due to the fact that the female sex surpasses the male in bodily size. Monogamy and polygyny are found both as solitary mateships and as mateships within a herd—that is to say, in the first case the mating couple or the male and his harem segregate themselves from their fellows; in the latter case, however, we find monogamous or polygynous mateships within larger herds. Further, monogamous or polygynous mateships either last during one breeding season or are formed for longer periods and sometimes for a lifetime. Accordingly we may distinguish seasonal mateships and permanent mateships. It goes without saying that it is difficult for an observer to determine in the case of wild animals whether individuals are mated for a season or permanently.

According to what has been said we may distinguish nine different categories of mateship: solitary polyandrous mateship (certain worms and spiders); solitary monogamous seasonal mateship (a few beetles and fishes, some amphibians and reptiles, mammals of prey, such as martens, cats, lions, jaguars, foxes, wolves and bears); solitary monogamous permanent mateship (many birds, rhinoceroses, orang-utans); monogamous seasonal mateship within a herd (many birds); monogamous permanent mateship within a herd (many species of parrots, gorillas); solitary polygynous seasonal mateship (buffaloes, elephants, many deer, antelopes, wild sheep, wild goats); solitary polygynous permanent mateship (domestic fowl, South American ostrich, guanacos, vicuñas, primitive wild horses, zebras, wild asses,

kangaroos, apes); polygynous seasonal mateship within a herd (certain seals); polygynous permanent mateship within a herd (baboons).

Among monogamous or polygynous animals the mating bond is more or less strictly kept; there are in this respect specific as well as individual variations. Monogamy is strictly kept among cranes, swans and geese. Among other species of birds the mates are occasionally unfaithful; we speak then of accessory promiscuity. A clear distinction may be observed between the two forms of promiscuity: promiscuity as the general rule which involves no organization of mateship; and accessory promiscuity which accompanies mateship. The latter is, as we know, no uncommon occurrence among men; on the other hand promiscuity as the rule has never under searching investigation been known among any contemporaneous or historic peoples. Among birds and mammals, notwithstanding the many species in which mateship is the rule, there are a few in which mateship is just as regularly absent, and with these latter promiscuity is the rule. Here are to be mentioned ruffs, North American cowbirds, European cuckoos, bats, North American bison, hares, quails, argus eyed pheasants. Among the black cocks and the capercaillies the sex relations border on promiscuity.

Out of mateship, on the appearance of offspring, there arises the family, whenever the animals concerned remain together for a time. This union is brought about through the family instinct. According to whether both parents or only one parent stays with the young, or whether the young remain united by themselves for a while, we may distinguish four categories of the family: parent family (certain beetles and fishes, many birds and mammals); father family (some fishes and frogs); mother family (some insects and spiders, some fishes, frogs, birds and mammals); child family (some caterpillars and fishes).

Mateship and family among animals are both connected with breeding. The herd, on the other hand, is a form of society which, as such, has nothing to do with sex and reproduction. Mateships and families may, however, as we saw, be included within herds. The bond of the herd is the social instinct. Three distinct kinds may be noted. First, temporary herds are those which are bound together by a temporary manifestation of the social instinct (traveling swarms of locusts, dragon flies and other insects). Second, seasonal herds are those which appear in species with a mating season. In this classification a further distinction should be made between herds during sexual inactivity and herds during the breeding period. Some species congregate in herds only during the annual periods of sexual inactivity, while during the breeding period monogamous (many migratory birds) or polygynous (the South American ostrich and Indian buffalo) mateships segregate themselves from their own kind. Other species, however, live in societies throughout the year, but the structure of the herd changes with the seasons; with the fur yielding seal, for instance, the herd consists during mating time of numerous harems belonging to individual males, while the old males and the youngsters not allowed to mate by the masters of the harems remain aloof. During sexual inactivity, on the other hand, the males and females live in separate herds—the female herd including the infants and occasionally also the young males. The third distinctive type consists of permanent herds which may be formed either by seasonal mating (e.g. rodents living in settlements) or by continuously mating species (e.g. gorillas). Every such herd consists on close analysis of a number of monogamous (rodents and gorillas) or polygynous mateships (baboons), with their respective young. A special kind of permanent herd is constituted by the "states" of the social insects.

To investigate and to classify the various forms of animal societies thus enumerated is the task of special animal sociology. There is, besides, general animal sociology. The latter studies those general features which appear whenever any association is formed, such as the establishment of a social scale, mutual understanding, mutual assistance, etc. It ascertains, for instance, that many birds and mammals, through struggle or intimidation, immediately establish a system of rank in their societies; it studies leadership in societies, mutual help and attack, common games, dances and signal callings, communication and imitation, teaching and tradition within animal societies, property of the individual and of the entire society, manifestations of the collective psyche, etc.

Animal sociology is not without importance for human sociology. In a certain sense it forms its foundation, for much that appears "typically human" in an isolated consideration of man becomes in the light of animal sociology purely a phenomenon of group psychology. With animals it is primarily internal ties and in-

hibitions that regulate their cohabitation in mateships, families and herds. The supreme regulatory principle is not brute force; that intervenes only where irreconcilable opposites collide. In no sense is everything in confusion in animal herds, either in sexual or in other affairs. Let us consider, for example, a brooding swarm of doves. These animals live monogamously, yet there exists accessory promiscuity inasmuch as infidelity occasionally occurs among the mates. It would be entirely erroneous to attempt to explain the union of monogamously paired doves only by the general absence of opportunities for unfaithfulness. The objection to this is that no social organization, even if it be that of brooding doves, can be based on such external factors. As an important condition we must always have the deeply entrenched predisposition of single individuals to bring their instinctive reactions to bear upon an objective situation no matter what obstacles stand in their way. There is, besides, a variety of supplementary supporting factors such as respect for the strength of the beaks of the other mated doves, claims made by the necessities of nest building, bringing up the young, etc. The primary fact, however, is the instinct of monogamous mateship.

It has repeatedly been asked which is older, mateship and the family or the herd (in the case of primitive man, the horde), and whether perhaps one may have grown out of the other. Animal sociology teaches that the question is not well put; for mateship and the family, on the one hand, and the herd, on the other, are forms of society formation which in certain animal species exclude one another, in others exist side by side. The mateship and family, on the one hand, and the herd, on the other, are based on different biological principles, of which neither is traceable to the other.

Mateship, family and herd (horde) are prehuman biological institutions; when, as we have to suppose, in the evolution of man human reason gradually became differentiated from instinct, it found all these social forms preexistent, and nothing remained but to justify them after the fact by rationalistic considerations.

F. ALVERDES

See: SOCIETY; ASSOCIATION; INSTINCT; FAMILY; MARRIAGE; PSYCHOLOGY.

Consult: Alverdes, Friedrich, *Tiersoziologie* (Leipsic 1925), tr. by K. C. Creasy as *Social Life in the Animal World* (New York 1927).

ANIMISM, the belief in spiritual beings, is one of the oldest inventions of man. We must infer that it dates from palaeolithic times, and its subsequent world wide distribution and incomparable influence upon human thought and activity are to be paralleled, for instance, in the invention of fire. Both are so fundamental in human history that no one has successfully imagined an order of human events in which they do not figure.

This universally animistic state of mind of primitive peoples was, to the early anthropologists, exponents of nineteenth century English rationalism, bewildering and very nearly incredible. Since it was their habit of mind to assume the rationality of human processes, Tylor and Spencer were quite naturally overwhelmed by this unanimous fantasy: the ascription of being, on the pattern of that known in human beings, to the external world. Their difficulty was intelligible enough. Animism is not, like forms of marriage, to be understood ultimately in relation to the biological structure of man or, like the forms of industry, to his needs of food and shelter. Even where animistic practises were used in connection with economic pursuits, they were, from the rationalist's point of view, supernumerary; that is, man knew the technique of stupefying fish in a pond or of burning over the ground before seeding, and the animistic acts and tabus that were inevitably superadded, if not to agriculture, then to hunting or to warfare, could not be justified on the economic basis.

Tylor derived animism from those experiences which gave man the notion of the separable human soul. These are primarily dreams, but also include shadows, reflections in the water, etc. Once primitive man had arrived at the hypothesis of his own soul, he transferred the notion first to other humans and later to the inanimate world. Spirits, then, however many, are rooted in one common notion. Those which are transferred to the world of the dead gain currency as ghosts; those which are transferred to animals, as animal spirits; those which are transferred to the world of nature, as all the host of nature spirits. There are also those "souls" of disease and nightmare against which so much ritual is directed, and those guardian "souls" which as the personal protectors of individuals are so variously known.

Tylor emphasizes the fact that spirits are not necessarily differentiated from the objective world on the basis of their spiritual, i.e. non-

material character. Spirits are supposed to leave footprints, to need holes cut in partitions through which it is desired that they should pass, to dwell together in villages often as material as those of human beings.

Spencer in his discussion of animism laid weight also on the importance of the concept of the human double. Andrew Lang stressed the fact of trance and psychic experience as calling into being animistic conceptions. More recently Marett has given theoretic prominence to the occurrence of non-personalized concepts of spirit. These are well known under the Indian names of *orenda* and *manitou*, and better yet the Polynesian term of *mana*. Marett calls this aspect "animatism," and describes it as a simpler form of the religious concept than that of the visualized supernatural beings with whom Tylor was specifically concerned. J. W. Hauer, agreeing more nearly with Lang's emphasis, has recently derived animism from the religious experience, the intrusion of compelling psychic states felt to be authoritative and imposing upon mankind the animistic interpretation.

Tylor's exposition of animism has been challenged by a number of anthropologists, notably Durkheim and Lévy-Bruhl, on account of its over-intellectualist character. While both of these critics phrase their problem in such a way that they do not contribute specifically to a discussion of animism, their criticism of the classic statement of animism is in line with modern psychological thought.

In common with other thinkers of his time, Tylor was interested in the origin not of complex emotional backgrounds but of conceptual phenomena, and he regarded these as of primary importance in behavior. It is more in accord with present day conclusions to regard the concept as secondary and the act as primary, and it is natural that the modern problem in regard to animism should have shifted. In Marett's phrase, we think of religion as "danced out, not thought out," and this shift is especially significant in connection with the problem of animism. The question has been distorted by the classical emphasis. It has been regarded as a department almost of cosmology, as an affair of theories and beliefs. In the modern view it is animistic behavior that is crucial: that behavior which plays opposite to the external universe regarded not as thing but as person. Our present day dichotomy of behavior has isolated two distinct types: the type directed toward things, which follows strictly a cause and effect sequence; and the type directed toward persons, which runs the gamut from love to manipulation, but which deals only in small degree with measurable cause and effect. Of this dichotomy primitive man knew little. As we have noted above, he knew thing-techniques, but he did not regard them as ruling out person-techniques. He harangued the tree as bride or as child, taking it to wife with the ordinary marriage rites, or cradling it according to the ceremonial of childbirth, at the same time and place that he demonstrated his mastery of felling large trees without the use of iron. He simply made no dichotomy where with us it has become fundamental.

Behavior of this sort in our own civilization is most easily observed in the child. Modern child psychology exhibits many examples of the child's assumption that his relations to the inanimate world are of one pattern with those toward the animate world of people: he fondles as he would his mother the pretty thing that has pleased him, he strikes the door that has slammed upon him. Animism considered as behavior is nothing more than this; properly speaking, it is only the expression of a state of mind that has not made our distinction between behavior toward persons and behavior toward things, but which brings the whole field under the one rubric, treating the entire external world according to the pattern learned in dealings with fellow beings.

From this point of view animism loses much of its fantastic character. It is not evolved de novo, but represents a well tested gamut of acts and accompanying emotions, from adoration and cajoling to bargaining and legalistic compulsion, all of which are familiar in the sphere of human relations and are here simply transferred to the supernatural. If primitive man believed that his most serious matter of fact efforts in hunting or agriculture were still insufficient, without the addition of prayer and fasting, to propitiate the supernatural beings, it was no more than we ourselves feel necessary in such human situations as that of parents and children. We judge material care still insufficient unless we give evidence also of a certain emotional attitude. In other words, the religious behavior of primitive people followed rules of conduct which we have not ourselves repudiated; the difference lies in their belief that that part of the external world which we now manipulate by knowledge of cause and effect sequences

should be managed by the same rules as those that obtain in the human world.

This view of animism shows clearly that it does not bar out, even for the most primitive, the development of naturalistic control of the environment. We have used the example of the felling of trees. Any field of activity illustrates the same point. The Australian or the Bushman by minute knowledge of a locality can obtain water from roots and water holes unavailable to a civilized person; a Polynesian can build a trustworthy boat from materials that would seem unusable to others. In addition they use incantations, fastings and tabus. It is obvious that the roots of modern science are in the matter of fact techniques and knowledge of the environment, not in the magico-religious realm at all. Frazer's contention that magic is a primitive science is untenable. At any period in the world's history, in so far as any procedure depended on supernaturalism it was removed from scientific method.

It is important to observe that animistic behavior was fallacious only in that it was applied outside the realm of man's dealings with his fellows. With the person-technique as such, as a technique that must always be in some measure removed from cause and effect considerations, we can have no quarrel. Human beings are most moved, not by mathematical demonstrations, but by love, by gifts, by cajolery, by punishment. Our cultural emphasis tends to slight this fact, stressing in practical affairs the possibility of impersonal manipulation of groups, and in psychological thought the cause and effect sequences in the individual. We may well remember that we often fail by our methods when primitive man would succeed by his. A labor dispute attacked by the techniques used in the rain ceremonials of the Pueblos of the Southwest would never need the militia. Within the field in which this type of behavior was perfected—in the field of personal relations—the person-technique of primitive people is often admirable. And if their thought characteristically extends beyond reason the confines of this type of behavior, it is at least arguable that ours extends as far, in the incalculable region of human relations, the confines of the thing-technique. The fact that European civilization has made its most significant contribution in exploring mechanical causation should not blind us to the fact that those other forms of behavior which are characteristic of human relations were carried to a high point of art by many peoples in their varieties of animistic behavior.

RUTH BENEDICT

See: MAGIC: RELIGION; TECHNOLOGY; ANTHROPOLOGY; FETISHISM; TABU; ANCESTOR WORSHIP.

Consult: Tylor, E. B., *Primitive Culture* (7th ed. New York 1924); Spencer, Herbert, *Princip'es of Sociology*, 3 vols. (London 1876–96; vol. i, 3rd ed. 1885) vol. i; Lang, Andrew, *The Making of Religion* (3rd ed. London 1909); Marett, R. R., *The Threshold of Religion* (2nd ed. London 1914); Hauer, J. W., *Die Religionen*, vol. i– (Stuttgart 1923–); Durkheim, Émile, *Les formes élémentaires de la vie religieuse* (Paris 1912), tr. by J. W. Swain (New York 1915); Lévy-Bruhl, Lucien, *La mentalité primitive* (Paris 1922), tr. by L. A. Clare (New York 1923); Frazer, J. G., *The Golden Bough*, 12 vols. (3rd ed. London 1911–20).

ANNAPOLIS CONVENTION. *See* CONSTITUTIONAL CONVENTIONS.

ANNENSKY, NIKOLAY FIODOROVICH (1843–1912), Russian statistician, journalist and political figure. After studying law and history in preparation for an academic career he joined the statistical department of the Ministry of Transportation. This official connection was severed in 1880 when, because of his outspoken liberalism, he was exiled by police orders to Siberia for a term of three years. On his return to European Russia he managed the statistical department of the Kazan, and later that of the Nizhni Novgorod provincial *zemstvo*. During his association with the latter it acquired the reputation of an all Russian school for *zemstvo* statisticians. In his farm assessments Annensky relied largely upon the results of soil tests, a procedure which later gained wide acceptance in Russia. In 1895 he moved to St. Petersburg to become chief of the municipal statistical bureau and to join, with Korolenko, the editorial staff of *Russkoe Bogatstvo* (Russian Fortune), the leading monthly organ of populist socialism. Beginning in 1882, when Annensky attracted considerable attention by an article on the "New Trends in Economics" in which he criticized German socialism of the chair, he contributed articles on political and economic subjects to various periodical publications. After 1900 he devoted himself entirely to journalism, and in 1904, upon the death of Mikhaylovsky, the editor-in-chief, became the chairman of the editorial board of the *Russkoe Bogatstvo*. In his articles for this magazine Annensky dealt with social and economic topics, such as budgetary problems and questions of financial policy. His attention, however,

was absorbed mostly in editorial work in the economic and political sections of this publication. He helped to found the Laborite People-Socialist party in 1906 and was elected chairman of its central committee, an office which he retained to the day of his death.

V. MIAKOTIN

ANNEXATION is primarily a term of international law denoting the act of a state, within the limits of that law, in adding to the territory held under its sovereignty territory not so held prior to that action. It confers all powers of use, exclusion and alienation. The term cannot in strict accuracy be applied to extension of the authority of the state over territory which even after such action remains outside the scope of its full sovereignty, as in the establishment of a protectorate, military occupation, acceptance of a League mandate or the acquisition of territory on lease. The action must be taken for the state by public officials or persons previously authorized so to act or whose action is subsequently ratified by the state. There is no etymological reason why the term should not be applied to acquisitions of territory not previously held by another state, but it is more frequently applied to acquisitions of territory previously so held.

The only ground upon which annexation may validly be based, in international law, is that of consent by the state whose territory is annexed in whole or in part (*see* CESSION) or, in the case of territory not formerly held by another state, consent by the international community to the act of the annexing state. The consent of the predecessor state, in the former case, may be given tacitly (as in peace time prescription), and even under coercion, as by cessation of resistance to conquest (operation of rule of *uti possidetis* at end of war); but without such acquiescence no proclamation of annexation or military conquest by a second state is effective (Belgium, 1914–18). No plebiscite of the inhabitants of annexed territory is as yet necessary under international law to confirm either the action of their former government in making the cession or the action of the new sovereignty in making the annexation. On the other hand the consent of the ceding state may be given expressly, in a treaty agreement for sale, exchange, etc. In either case recognition of the fact of transfer is incumbent upon all other states, in view of the standing rules of international law permitting acquisition of title by these means, in the absence of prior agreements by which the cession is placed outside the power of the ceding state (Platt Amendment), or of subsequent agreement of the parties reversing the cession (Port Arthur). Outside states may not, however, by agreement among themselves transfer the territory of another state without its consent (Bessarabia), although in recent years several cases of international action to create or sanction title to territory for an individual state have appeared (Danzig). Finally, in the case of territory not previously held by another state the agreement of the international community is admitted in the standing rules of international law authorizing acquisition of territory by discovery, occupation and accretion. Subsequent recognition of actual annexations of all types will operate to confirm title, but in no case does it appear that notice of annexation need be given or such recognition obtained until the question arises in the routine course of international relations. In spite of many opinions expressed to the contrary, it does not appear that actual occupation by the authorities of the annexing state is required to complete annexation where the basis of annexation itself does not require such occupation; thus such occupation is necessary to acquisition by conquest, occupation of new lands, prescription and accretion, but not necessarily to acquisitions by discovery.

The result of annexation is to transfer the allegiance of the inhabitants to the new sovereignty; nationals of the old sovereignty become nationals of the new, and resident aliens transfer their allegiance as such to the new state also. The latter may permit the inhabitants—nationals of the former sovereignty—to retain their nationality on any terms which it may think desirable (e.g. removal); it is under no obligation to do so. The existing public law, including criminal law, remains in force except where incompatible with the public law of the annexing state, as do the local governmental organization and practise, subject to the same limitation: thus in certain cases annexed units may retain a great deal of their identity, as before the annexation (Texas). Any military government set up by the annexing state during military occupation similarly remains in effect. Titles to public property rights pass to the new sovereignty; public obligations are inherited by it only where they have been reasonably incurred for the betterment of the territory annexed, but in no case are obligations contracted for resistance

to the annexation so inherited. In view of the many variable and indefinite factors which go to determine the results in this situation, it is held that the annexing state may decide for itself, if the matter is not regulated by the agreement for cession, what obligations it will assume as a result of annexation, subject to these general principles. Treaty obligations of the annexed territory are inherited by the succession state, where the annexed unit does not retain power of discharging such obligations itself, subject to similar principles. The law of private relations, and private rights and obligations thereunder, remain unaltered, subject to the authority of the new sovereignty.

Historically annexation has been extremely important in the relations among the European nations and in the development of the United States. The former have not only in past centuries annexed vast colonial territories in the Americas, in Africa and Asia (relatively uncommon application of the term), but have also from time to time annexed from one another metropolitan territories in Europe itself (Alsace-Lorraine, Poland), usually as a result of conquest. The United States annexed vast territories on the continent of North America and, later, overseas, mainly as a result of purchase, with some admixture of conquest. The acquisition of original title by discovery and occupation of new land being now no longer of great importance, it seems probable that annexation as a basis of national territorial sovereignty will grow in importance in the future. But the decreasing discretion of the nation in controlling use of its own territory, as a result of increased international supervision (internationalization, mandates, minority protection, etc.), together with the growing tendency to restrict freedom of annexation ("no annexations," Article 10 of the Covenant, demand for plebiscites) may counterbalance this influence. Any arrangements for revision of the territorial status quo by international agreement, implicit in the outlawry of conquest, would further emphasize this change. Moreover there seems to be some decline in the eagerness of states to make annexations of territories, continental or colonial, populated by hostile peoples or by backward races requiring expensive tutelage by the administering state. The future of annexation as a form of state action is problematical.

PITMAN B. POTTER

See: CONQUEST; CESSION; ALLEGIANCE; PLEBISCITE; SELF-DETERMINATION, NATIONAL; TERRITORIES, UNITED STATES; COLONIES; IMPERIALISM; MANDATE; ALSACE-LORRAINE.

Consult: Hertslet, Edward, *The Map of Europe by Treaty*, 4 vols. (London 1875–91); Fauchille, P., *Traité de droit international public* (8th ed. of Bonfils' *Manuel*), 4 vols. (Paris 1921–26) §§ 216–20, 427–32; Hall, W. E., *Treatise on International Law* (8th ed. Oxford 1924) §§ 30–42; Hershey, A. S., *Essentials of International Public Law and Organization* (rev. ed. New York 1927) §§ 169–84, 125–30; Hyde, C. C., *International Law, Chiefly as Interpreted and Applied by the United States*, 2 vols. (Boston 1922) §§ 98–133; Liszt, F. von, *Das Völkerrecht systematisch dargestellt* (12th ed. Berlin 1925) §§ 17–18; Luter, J. de, *Le droit international public positif*, 2 vols. (Oxford 1920) § 20; Phillipson, C., *Termination of War and Treaties of Peace* (New York 1916); Kunz, J. L., *Die volkerrechtliche Option*, 2 vols. (Breslau 1925–28).

ANNUITIES are yearly or other periodic payments of a certain sum of money granted to one for life, years or in fee, chargeable upon the person of the grantor (Sir Edward Coke, *circa* 1615, *et al*). The annuity is often confused with a rent charge, which is a charge against lands in the hands of the purchaser and arises out of the land itself. It should not be confused with gifts of incomes from funds, with incomes or profits indeterminate in amount, or with incomes from ordinary legacies, however payable. The periodic payment of sums certain, chargeable upon rights and personal property, seems to have become obsolete.

Annuities may provide sums certain either for others or for oneself. The first type of annuity is the older. It is of testamentary character and takes the place of a legacy in the lump. In modern times this form of annuity is used in connection with marital separation agreements and as provision for wayward or spendthrift children. Provision for self, or jointly for self and spouse, seems to be the prevailing practise.

The annuity may have been in vogue in ancient India, China, Babylon and Assyria. Annuities were granted in Egypt at the close of the twentieth dynasty (Setnakht). The Romans bought and sold annuities. Early in the Middle Ages in England and in northern Europe annuities chargeable against the person of the grantor evolved from payments charged against lands, rights, tolls and personal property. From the eleventh to the fifteenth centuries the expense of petty wars in Italy, Germany, England, Flanders, Brabant and elsewhere was met by loans repayable as annuities chargeable against the credit of the cities and countries involved. Loans for the general purposes of

cities, repayable as annuities, for life or years (singly or jointly), or in perpetuity, were often resorted to (Tournai, Bruges, Nuremberg, Florence, Ghent).

The "tontine," a pseudo-annuity, arose toward the end of the seventeenth century as a result of the attempt of Mazarin and Colbert to resuscitate French finances. Lorenzo Tonti, the inventor of this plan, proposed that a fund of 25,000,000 livres be collected and each year interest be paid thereon at a lower rate to younger members and a higher rate to older entrants into the fund. Subscribers were to be divided into ten age classes, each constituting a closed group, surviving members of each class receiving annually a pro rata share of the interest fund allotted to the class. After the death of the last subscriber the original fund reverted to the state. Tontine loans were also issued in Amsterdam (1671), Groningen (1671) and in other places on the continent. Tontine practises survived into the eighteenth century.

The calculation of annuities passed from a guesswork basis to one based upon observations of human mortality in the seventeenth century, chiefly as the result of the work of Jan de Witt, who in 1671 presented his famous report to the Parliament of Holland and West Friesland. This report contained the table of minimum values to be accepted in return for life annuities, the principal sums to be used in financing the wars which threatened Holland at that time.

The English government attempted for the first time in 1692 to raise money through life annuities. The granting of life, deferred and term annuities in England supplemented the earlier instruments of tallies, navy and exchequer bills. During the eighteenth and nineteenth centuries annuities accompanied the state lotteries, lottery loans, the issue of consolidated 3 percent stock, the victualing bills, tariffs and other sources of the king's revenue. Annuities have been employed in American finance only once—by Hamilton in the funding of the revolutionary debt.

The common or formal types of annuities now in vogue may be divided into two main classes: annuities certain and contingent annuities. An annuity certain is a series of payments made at equal intervals over a fixed period of years. The contingent annuity is one for which the date, either of the first or last payment, depends upon the happening of some event, the time of whose occurrence cannot be foretold.

Annuities certain may have the first payment at the end of the first period (immediate annuities); at the beginning of the first period (annuities due); or the first payment may be made after the lapse of a given number of years (deferred annuities). When annuity payments continue forever they are said to be perpetuities.

The simplest form of contingent annuity is the whole life annuity, i.e. payments are made throughout the life of an individual. Life annuities are often granted jointly to several lives, or as long as one, at least, of several lives survives. An annuity is said to be forborne when the payments are not taken when they fall due but are left to accumulate at compound interest.

In annuity calculations it is necessary to approximate from tables of the probability of human survival and of compound interest the present value of the series of payments. When the payments are made at equal intervals and in equal amounts for a stated number of years, (n), the present value $(a_{\overline{n}|})$ and the amount when forborne $(s_{\overline{n}|})$ may be expressed as sums of geometric series, that is:

$$a_{\overline{n}|} = v + v^2 + v^3 + \cdots + v^n$$

$$a_{\overline{n}|} = \frac{1 - v^n}{i} = \frac{1 - (1 + i)^{-n}}{i}$$

and:

$$s_{\overline{n}|} = 1 + (1 + i) + (1 + i)^2 + \cdots + (1 + i)^{n-2} + (1 + i)^{n-1}$$

$$s_{\overline{n}|} = \frac{(1 + i)^{n-1}}{i}.$$

To introduce the life contingency element in the simplest manner it is necessary to take into account, with the present value of each payment, the probability that the annuitant, or receiver of the payments, will survive a given number of years (n). That is:

$${}_na_x + vp_x + v^2{}_2p_x + v^3{}_3p_x + \cdots\cdots v^n{}_np_x$$

where $v = (1 + i)^{-1}$ and ${}_np_x$ probability of a person aged x surviving n years. The commutation columns (invention of John Nicholas Tetens, 1786) of the life table chosen for the given class of annuitants may be used to sum such series. The mathematics of the annuity has engaged the attention of the ablest of minds —De Moivre, Dodson, Simpson, Price, Euler, Tetens and others.

In modern practise one finds the annuity form expressed in retirement and disability

pensions, in the "income" or "instalment" settlement features of ordinary life insurance, in the disability annuity annexes of life insurance and in the wide variety of annuity contracts *per se* offered by insurance institutions. In recent years the sales of annuity contracts have increased remarkably. Since 1916 the companies reporting to the New York Insurance Department show an increase of 160 percent in sums received and of 120 percent in the reserves set aside for annuity payments. The total reserve fund so held by these companies in 1926 was approximately a quarter billion of dollars.

Insurance students feel that with the prospect of an increase in the purchasing value of money and a decrease in the yield on fixed-rate securities available to the private investor, moneyed persons in the United States will be attracted more and more to the certain proceeds of an annuity. The wage working population also may benefit in the future from the increased sales of the retirement and disability annuities now available on the "group" plan. Under this plan the consideration for the annuity is paid for jointly by employer and employee. These annuities are sometimes combined, in one arrangement, with group policies for life, health and accident.

Deferred annuities for persons not covered by industrial or establishment pension systems seem to meet with particular favor at the present time. These are paid for by the prospective annuitant in lump sum early in life, or in instalments during the working period of life or through a combination of these two methods. The first payment to the annuitant usually begins at age 60 or 65. If the annuitant dies before the annuity payments begin, the return, without interest, of the amounts paid in can be arranged ("refunding" or "guaranteed minimum return" contracts).

EDWIN W. KOPF

See: RENT CHARGE; PUBLIC DEBT; LIFE INSURANCE; PENSIONS.

Consult: Baily, Francis, *Doctrine of Life Annuities and Assurances*, 2 vols. (London 1813); Walford, Cornelius, "Annuities" in his *Insurance Cyclopedia*, 6 vols. (London 1871–80) vol. i, 98–168; Institute of Actuaries, London, *Textbook of the Principles of Interest, Life Annuities and Assurances*, 2 vols. (London 1901–02) vol. i; Avery, John M., "The Nature of an Annuity" in Association of Life Insurance Counsel, *Papers* (1928) 65–81; Kopf, Edwin W., "Early History of the Annuity" in Casualty Actuarial Society, *Proceedings*, vol. xiii (1926–27) 225–66.

ANSELM (*c.* 1033–1109), theologian and philosopher. In 1093 he was chosen archbishop of Canterbury, and a quarrel ensued with William Rufus concerning investitures and homage. This seemed to Anselm to involve the fundamental question of the liberty of the church and resulted in a trip to Rome in 1097. There he took a prominent part in the Council of Bari (1098) and the Synod of Rome (1099), where the decrees against simony, concubinage of clerics and lay investiture were renewed. After the death of William Rufus he returned to England and after some difficulties reached an amicable agreement with the new king, Henry I. The terms are not definitely known but it appears from contemporary documents that Henry gave up his claim to the investiture of bishops and agreed to abstain from arbitrary interference in their election. The pope, however, seems to have agreed temporarily that bishops should pay homage to the king.

Aside from his important role in the investiture controversy, Anselm was a towering figure in scholastic thought. His writings comprise, in addition to philosophical and pedagogical works (*De veritate*; *De grammatico*), a discussion of all the theological themes which agitated his time—the freedom of the will, the humanity of Christ, the sacraments, the Holy Ghost and the fall of the devil. On the crucial question of the existence of God, Anselm's ontological proof is classic. The collected works of Anselm appear in J. P. Migne's *Patrologia latina* (vols. clviii–clix, Paris 1863–65), which contains also Eadmer's *Vita S. Anselmi* (vol. clviii, cols. 49–134).

RICHARD MCKEON

Consult: "Anselm von Canterbury als Vorkämpfer für die kirchliche Freiheit des elften Jahrhunderts" in *Historisch-Politische Blatter fur das katholische Deutschland*, vol. xlii (1858) 535–61, 606–27; Church, R. W., *Saint Anselm* (London 1873); Rule, M., *Life and Times of Saint Anselm*, 2 vols. (London 1883).

ANSON, WILLIAM REYNELL, BART. (1843–1914), English law teacher and educational leader. In 1874 he became Vinerian reader in English law at Oxford; in 1881 he was elected warden of All Souls, and became vice chancellor of the university in 1898. He was active in the revival of the study of law at Oxford, and his work there resulted in a succession of important law textbooks for students and in the establishment in 1884 of the *Law Quarterly Review*. Anson's writings are characteristically

those of a teacher. His *Principles of the English Law of Contract* (Oxford 1879, 16th English ed. Oxford 1923; 8th American ed. Chicago 1929) was a model introduction to the subject in the last century, when the chief reliance was on texts rather than on the original authorities. It represents the nineteenth century movement for organization and systematization of the common law by an analytical-historical method, in which it was sought to put English law into the mold which the German historical jurists had constructed as an instrument of university teaching. *The Law and Custom of the Constitution* (3 vols., Oxford 1886–98; 5th ed. Oxford 1922) is an analytical survey of "the machinery of the existing Constitution of England," seeking to take it to pieces by analysis and to explain the nature and working of each part.

In education he had much to do with the constitution of All Souls as finally determined by the reforms after 1877; he was active in support of the Education Bill of 1902, which sought to incorporate the voluntary schools with the board schools in a single national system; and he helped to lay the foundations of the organization of education which has obtained in England since 1918.

From 1899 to 1914 he was burgess (member of Parliament) for the University of Oxford, and was parliamentary secretary of the education department from 1902 to 1905. He was of the best type of nineteenth century liberal, inclined to improvement but cautious, tolerant, appreciative of all sides and skilful in compromise.

ROSCOE POUND

Consult: Henson, Herbert Hensley, *A Memoir of the Right Honourable Sir William Anson* (Oxford 1920).

ANTEQUERA, JOSÉ MARÍA (died 1891), Spanish writer on juridical and historical subjects. Antequera served for many years in the ministry of "Gracia y Justicia," was editor of *El faro nacional* (1851) and of *El estado* (1859), and contributed to various periodicals, among them *El cristianismo* and *La ilustración católica*. His best known work is *Historia de la legislación española desde los tiempos más remotos hasta nuestros días* (Madrid 1849, 4th ed. 1895), the fruit of twenty-five years of study. He takes the view that law and legal institutions are an epitome of the religious, social and political ideas of a people, and hence stresses particularly those codes and institutions which reflect the internal growth of the Spanish nation. While much in this book has been superseded by later monographs in special fields, particularly in regard to the origins of the *municipios*, the *Fuero Juzgo*, the *señorios* and the Aragonese and Catalan primitive codes, it still remains a valuable survey of the field and will serve the student as a useful introduction and contrast to other works on the same subject. He gives a list of the most important *fueros* from 780 to 1523, and summaries of all the important codes and of the *fueros* which came to serve as models. He wrote also *La cuestión religiosa en la historia legal de España* (Madrid 1870).

MARIE R. MADDEN

ANTHONY, SUSAN BROWNELL (1820–1906), American feminist and agitator for social reform. The Hicksite branch of the Society of Friends had in Susan B. Anthony the most indomitable woman exponent of its left wing social creeds. From a home which was a center of discussion and activities highly radical in their day a brother and a sister of Susan's also bore to the outer world a gospel of humanitarianism. Their Quaker father had dared to marry a Baptist, and he held heretical opinions on subjects other than marital. Nor was he afraid to have his children do likewise. Their mother was a daughter of the American Revolution of the first rank, for her own father had fought for national independence. Thus in an invigorating domestic atmosphere were stimulated the mind and temperament with which Susan Anthony attacked the issues of her time—temperance, slavery, trade unionism, feminism. But she was not solely home bred. From the age of seventeen to the age of thirty she was a teacher, getting a first hand contact with labor in its twofold aspect of social problems and sex status. Remaining celibate, every ounce of her nervous energy went into the causes she espoused and made her the "propulsive fire" of the woman movement which had been launched in 1848 under the leadership of Lucretia Mott and Elizabeth Cady Stanton.

Fiercely persecuted at the beginning of her public career, Susan Anthony was the most revered woman in America the year she died at the age of eighty-six. She had given the largest measure of devotion to the combined tasks—finally approved—of widening industrial, educational and professional opportunities for women, erecting the principle of equal pay for equal work, extending women's rights over property, arousing their sense of civic responsibility and securing forum privileges for its

expression, practising what she preached in the matter of economic independence and applying her equalitarian philosophy to the emancipation of a race as well as a sex. Although she did not live to see ratified the federal amendment granting woman suffrage, she had agitated for it incessantly for fifty-five years. She had poured a steady stream of articles into the press, pleaded from platforms across the continent, drafted resolutions, circulated petitions, raised funds for publications and assistants, met the requirements of a difficult and voluminous correspondence, argued before state legislative committees and the Congress at Washington, struggled with a weekly paper, helped in editing the documents of the movement, and from 1892 to 1900 she carried the responsibilities of president of a national organization of women. In all her work, however, her emphasis was on the vote as an instrument, not a goal.

MARY R. BEARD

Consult: *The History of Woman Suffrage*, ed. by E. C. Stanton, S. B. Anthony, M. J. Gage and I. H. Harper, 4 vols. (New York 1881–1902); Townsend, H. A., *Reminiscences of Famous Women* (Buffalo 1916); Howe, M. A. de W., *Causes and Their Champions* (Boston 1926); Eddy, G. S., and Page, K., *Makers of Freedom: Biographical Sketches in Social Progress* (New York 1926); Dorr, R. C., *Susan B. Anthony* (New York 1928).

ANTHROPOGEOGRAPHY. *See* HUMAN GEOGRAPHY.

ANTHROPOLOGY.

INTRODUCTORY. Anthropology deals with man as a social being. The races, languages and cultures found in different localities and following one another in the course of time are the material and contain the problems of anthropological study. The historical events that have led to modern conditions and the sources of the differentiated forms of social life, whether sprung from a common source or of multiple origin; the processes by which modifications of race, language and culture come about by the action of inner forces and by mutual influences; the interrelations between man and his environment and those between race, language and culture; the types of mental activity found in distinct cultures; the relations between individual and society—these present some of the problems that anthropology is trying to solve.

Its subject matter includes all the phenomena of the social life of man without limitation of time and space. From an anthropological viewpoint human life of the earliest times and of the remotest parts of the world is no less important than that of historic times and of our own race. The geographical distribution of forms of human life and their historic sequence from earliest time to the present must be included in the scope of anthropological researches. The first task of the science is therefore the reconstruction of the history and distribution of mankind and of the forms of human life.

This material must be supplemented by the investigation of the physiological reactions of the body determined by heredity and environment; of the mental processes of the individual under the stresses of natural and social environment; and of the behavior of society. The analysis of static types, languages and cultures alone is insufficient for an understanding of their development. The dynamic conditions of change require a knowledge of the sequence of events and of the functioning of society and of its component individuals.

The life forms of any given people exhibit three distinct phenomena: bodily form, language and culture. Culture itself is not a unit, for the manifestations of social life are diverse in character. Bodily form is determined by biological conditions, by the influences of heredity, environment and selection. Language is largely dependent upon linguistic processes. Although these are intimately related to other cultural phenomena they are so unique in their character that the linguistic processes may be considered separately. Culture in the narrow sense of the term is highly complex, for the conditions under which economic life, inventions, social forms, art and religion develop are not analogous, although in many respects interrelated.

A reconstruction of the history of mankind must take into account all these aspects, for each one throws light upon a definite series of happenings. Since the conditions under which change takes place in bodily form, language and culture are quite distinct, it must not be expected that the same series of events will be reflected in each. Observation shows that these groups of phenomena possess only slight coherence. In modern times the bodily appearance, speech and culture of the American Negro show a continuance of racial type combined with complete change of language and culture. Earlier occurrences of the same type are illustrated by the substitution of Latin for Iberian in Spain and of Arab for Berber in North Africa. Sometimes languages persist notwithstanding changes in type due to the intermingling of races, as

among the Athapascan Indians who live in isolated localities on the Mackenzie River, in California and on the Mexican border. Their languages are closely related, their types quite distinct. The differences of culture in Africa, combined with similarities of types and close relationship of languages, also illustrate the independence of cultural development from physical form and language.

On account of the disparity of these elements classifications of mankind based on bodily form, language and culture give contradictory results. Each group of phenomena must be looked at independently as reflecting one aspect of the history of mankind.

Two methods for the reconstruction of human history during those times in which no written records exist are available: prehistoric archaeology and the comparative study of similar phenomena in regard to form and distribution. Prehistoric archaeology can give us information only on the occurrence of such tangible objects as skeletal remains, objects of stone, pottery, bone; in favorable cases more perishable materials may be preserved. Fragments of intangible aspects of culture may sometimes be inferred from the forms of artifacts; but language, beliefs and customs are, on the whole, inaccessible to archaeological research. The possibilities of comparative study may be illustrated by the results of linguistic study, which has succeeded in establishing a considerable part of the linguistic history of the Indo-European family of languages.

The attempt to reconstruct the history of mankind is beset with one fundamental difficulty. Similarity of bodily form and culture is not always due to common origin but parallel forms may develop independently in distinct units. Independent parallelisms are found in life forms. The desert plants of Africa and America have a similar *habitus* and similar modifications of organs, although they are not genetically related. The marsupials of Australia have developed on lines similar to higher mammals, although they represent a distinct genetic line. Immediate physiological responses due to insufficient nutrition or to particular kinds of exercise are analogous in all races of man. In language similar categories, like a classification of concepts according to sex or form, or similar processes, like duplication of words or of parts of words for grammatical purposes, are found in a number of isolated regions. Similarities of inventions, customs and beliefs may also have sprung up independently here and there. In language the number of words and grammatical forms, all of which are so many independent elements, is so large that in most cases historic relation can be definitely established by the existence of numerous independent analogous forms. It is frequently true that the question of the independent origin or historical connection of isolated cultural phenomena cannot be answered categorically. The occurrence of parallel phenomena in biological forms and in language does not countenance the assumption of the non-existence of independent origin of cultural achievements. For this reason we demand in a reconstruction of historic development that a proof of historical connection of cultural forms in distinct areas should be based on the occurrence of complex and unrelated phenomena and upon the distribution of the phenomena over continuous areas; also that the assumption of lost intermediate links should be used with greatest caution.

Consult: Ratzel, Friedrich, *Anthropogeographie*, 2 vols. (3rd ed. Stuttgart 1909–12), and *Völkerkunde*, 3 vols. (Leipsic 1885–88), tr. by A. J. Butler as *History of Mankind*, 3 vols. (London 1896–98), for the importance in historical reconstruction of a study of distribution over continuous geographical areas; this principle has been rigidly applied in the study of North American ethnology by Leslie Spier, "The Sun Dance of the Plains Indians" in American Museum of Natural History, *Anthropological Papers*, vol. xvi (1921) 451–527, and "Havasupai Ethnography" in American Museum of Natural History, *Anthropological Papers*, vol. xxix (1928) 81–392; Boas, F., "Tsimshian Mythology" in Bureau of American Ethnology, *31st Annual Report, 1909–10* (Washington 1916) p. 29–1037; Kroeber, A. L., "Handbook of the Indians of California" in Smithsonian Institution, Bureau of American Ethnology, *Bulletin 78* (Washington 1925). Fritz Graebner, *Methode der Ethnologie* (Heidelberg 1911) takes the viewpoint that independent origin is impossible and assumes that a few correspondences in remote areas are proof of historic connection; on this basis he establishes *Kulturkreise* based on similarities which he assumes to be retained since remote antiquity. This theory has been adapted and expanded by W. Schmidt and W. Koppers, "Gesellschaft und Wirtschaft der Volker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912–24) vol. iii, pt. i. Quite unacceptable are the views of G. Elliot Smith and his followers, who would derive all phases of human culture from Egypt (see, for instance, Perry, W. J., *The Children of the Sun*, London 1923). The other extreme is represented by Daniel Brinton who would not admit any borrowing. On the whole the earlier anthropologists, like Adolf Bastian, did not take a definite position on this question. Bastian was rather indifferent to the problem of historical transmission or independent development, because he laid stress upon the psychological conditions that bring into

being certain ideas everywhere; no matter whether the impetus may come from inside or outside, the same ideas will always develop. Edward B. Tylor, although primarily interested in the problem of the general line of evolution of culture, recognized the importance of the problem of independent origin versus historic transmission.

BIOLOGICAL ASPECTS. Man is closely related to the anthropoid apes, and the home of man must be looked for in an area in which early anthropoid forms occur. These are absent in America, present in southern Europe, Asia and Africa. The origin of man must, therefore, be looked for in the Old World. The oldest human remains belong to the early quaternary and are represented by a lower jaw found near Heidelberg. The form of the jaw is so distinct from later and recent forms that it has been described as a separate species, "Homo Heidelbergensis." In the middle quaternary another primitive type is found, "Homo Neandertalensis," remains of which occur in western Europe. It was probably not the ancestor of modern races, but a side branch. Towards the later quaternary, forms appear which are related to modern man. It is even possible that at this time the differentiation of the Negro race and of the Mongoloid races had occurred. The absolute time elapsed since the end of the quaternary is estimated at about ten thousand years. There is much difference of opinion in regard to the time when the Neandertal man lived, but it can hardly be less than fifty thousand years ago. Crude implements made of stone are much older. Neandertal man also possessed fire, and there are evidences, at the end of the period in which he lived, of fireplaces and burials. All this has a bearing upon race development, because the use of utensils and of fire characterizes the mode of life of man as that of a domesticated being, enjoying artificial protection and artificially modified feeding. The body of modern man shows clear evidence of the effect of domestication, for the hair form of the Negro, the loss of body hair, the length of hair on head and face, the blondness and general loss of pigment, the blackness of the Negro, the lack of periodicity of sexual function, the permanence of the female breast, the reduction in size of the face, are analogous to features that develop in domesticated animals. The history of human races must be considered from the point of view of the origin of races of domesticated animals. On the basis of morphological evidence it seems that two, perhaps three, fundamental races must be distinguished: the Negro, which is found in Africa and in isolated places in southern Asia and the islands north and east of Australia, in general around the Indian Ocean; the Mongoloid in Asia and America; and as a third ancient type the Australoid and a similar type in southern India. The European would seem to be an early offshoot of the Mongoloid, while the Negro may be an offshoot of the Australoid.

At the present time a large number of local types exist, the history of which is difficult to trace. There must have been many centers in which during an early period of isolation distinct types developed, but this period has been followed by intermingling of distinct types, so that at the present time no sharp lines can be drawn between the varieties of man.

The individuals composing any local variety exhibit considerable differences among themselves. The brothers and sisters composing a single family—a fraternity—also show considerable differences among themselves. Each fraternity represents on the average a certain hereditary type, and when these types are compared they also exhibit a considerable variety of forms. When comparing neighboring groups, similar groups of fraternities are found in all. For this reason it is impossible to define a local race in such a way that the description would fit all members. All that can be done is to determine the frequency distribution of the various component types.

On account of these conditions it has been found necessary to give for each type exact measurements in place of general verbal descriptions. The selection of features that are commonly measured is determined partly by striking differences in form, as in the relations between transversal width and antero-posterior length of the head, partly by the ease with which exact measurements can be taken. Not enough attention has been paid to the morphological significance of the measurements selected. This would require a detailed inquiry into their permanence under varying conditions. The object of the metrical description is essentially a statement of the distribution of hereditary types and of their modifications by the environment.

It is not permissible to assume that individuals of the same bodily form, but members of distinct local groups, are genetically identical, for the series of their offspring will always revert toward the population to which they belong. If these are distinct, the offspring of each will develop on different lines. Too little is known of

the ancient development of types under conditions of isolation, of the effect of intermingling, and of the variability of types, to allow us to lay great weight upon the attempts to reconstruct the history of development of present types and to determine their ancient habitats.

The development of specialized types may be investigated in isolated, inbred communities. The high nobility of Europe and small, stable village communities offer such opportunities. It has been shown that under these conditions peculiar hereditary features appear with unusual frequency in the community. Up to the present time attention has been directed particularly to the occurrence of pathological traits, but observations on small tribes indicate that many normal traits may increase in frequency in the same way. The frequency of divisions of the occipital bone among the American Pueblo Indians, the hairiness of the Ainu, the excessively round heads in some of the valleys of the Alps must probably be explained in this manner. Minor differences of local types may perhaps all be due to the effects of early segregation of small groups, the characteristics of which were transmitted by heredity. In this case the range of variation of local types would be limited by the range of variation of the ancestral group. New features can develop only by mutations.

The question how far environment may bring about variation in type has hardly been investigated, because most metrically determined forms are assumed to be dependent on heredity alone. It is recognized that stature, an expression of bulk of the body, is strongly influenced by both heredity and environment, that the improvement of economic and hygienic conditions raises the average stature of a population through a direct influence upon the conditions of growth. Headform and facial width are also not absolutely permanent, but it is not known to what extent changes under varying conditions may develop. Their occurrence is analogous to skeletal changes that are observed in animals born in captivity which differ in details from the bodily forms of the parents.

Differentiation of local types may develop also by selection. If a relation exists between bodily form, on the one hand, and birth rate, mortality and tendency to migration, on the other, changes in the distribution of individuals will occur that are reflected in the impression given by the population as a whole, although physiologically determined changes in the individual may be entirely absent. It has been suggested that a population containing many blonds exposed to a climate with intense sunlight would become darker by greater mortality of the blonds. Correlation between pathological processes and bodily forms is therefore of importance for an understanding of the development of local types. Much of our knowledge of this subject is vitiated by the difficulty of differentiating between social and organic conditions that determine the selective processes. In modern populations the different social strata do not represent identical types. This is due to the varying mobility of populations and local differences in social and economic status of the component parts. Since birth rate, mortality and migration are dependent upon social status, the distribution of bodily forms must undergo changes. It is doubtful how strong this influence may be in populations that are socially homogeneous. At the present time the identity and distribution of each local human type can be determined, but it is not possible to account satisfactorily for the processes of differentiation.

Wherever distinct types are in close geographical contact, and whenever archaeological research indicates a sudden change of type in a specific region, it is possible to trace by means of the study of types the migration of peoples. Thus the sudden appearance of round-headed types in prehistoric England is an indication of migration; the similarity of certain groups of Japanese to Malay forms proves the existence of racial relations; the contrast between the East Indian aborigines and the dominant people who resemble west Asiatics proves immigration of the latter from the west; the distribution of types in Italy proves the intermingling of the type of the Alps with the Mediterranean type.

A number of authors classify races according to certain combinations of metric and descriptive features, for instance, as tall, long-headed, narrow-faced, blond, and recognize another race as soon as any of the selected elements changes beyond a certain arbitrarily determined limit. Types thus isolated have no biological significance because it can be shown that almost all of them are unstable variants of one ancestral strain.

Consult: On early races: Keith, A., *The Antiquity of Man*, 2 vols. (2nd ed. London 1925); MacCurdy, G. G., *Human Origins*, 2 vols. (New York 1924); Boule, M., *Les hommes fossiles* (2nd ed. Paris 1923), tr. by J. E. and J. Ritchie (Edinburgh 1923); Osborn, H. F., *Men of the Old Stone Age* (3rd ed. New York 1918); Macalister, R. A. S., *A Textbook of European Archaeology* (Cambridge, Eng. 1921); Burkitt, M. C., *Prehistory* (2nd ed. Cambridge, Eng. 1925);

Baver, J., *Der Mensch im Eiszeitalter* (Leipsic 1927); Reche, O., "Homo" in *Reallexikon der Vorgeschichte*, vol. v (Berlin 1926) p. 361–80. On heredity, environment and selection: Bauer, E., Fischer, E., and Lenz, F., *Grundriss der menschlichen Erblichkeitslehre und Rassenhygiene*, 2 vols. (2nd ed. Munich 1923; vol. i, 3rd ed. 1927). On phenomena of domestication: Fischer, Eugen, *Rasse und Rassenentstehung beim Menschen* (Berlin 1927). On anthropometry: Martin, Rudolph, *Lehrbuch der Anthropologie*, ed. by Stefanie Oppenheim, 3 vols. (2nd ed. Jena 1928); Hrdlička, Aleš, *Anthropometry* (Philadelphia 1920); Wilder, H. H., *A Laboratory Manual of Anthropometry* (Philadelphia 1920). On classification: Topinard, P., *Éléments d'anthropologie générale* (Paris 1885); Deniker, J., *Les races et les peuples de la terre* (2nd ed. Paris 1926), tr. from the 1st ed. as *The Races of Man* (London 1900); Dixon, R. B., *The Racial History of Man* (New York 1923).

Psychological Aspects. The relations between bodily form and mental function are of particular importance for the student of human society, for if mental life is partly so determined, differences between the social life of various races may have to be explained on this basis. Much stress has been laid on this point. There is no doubt that individually the members of each local type differ among themselves no less in functional characteristics, both physiological and psychological, than in bodily build. Among different local groups, however, the same phenomenon is present that occurs in bodily build: analogous types are found in different local races. Furthermore function is much more subject to environmental influence than anatomical form. The same organism may be functionally adapted to a wide range of environmental conditions. For this reason organically different individuals are apt to react in similar ways when subjected to the same environment, while organically similar individuals will react differently when living in different types of environment. It is not correct to say that structure is entirely irrelevant in the determination of functional life, as extreme behaviorists claim; for we have ample evidence to show that organs, including the central nervous system, do not function in the same manner in all individuals.

These considerations are, however, irrelevant for the study of languages and cultural forms. The language spoken by a person, and his behavior, are not determined by anatomical forms and the functions depending upon them, but depend upon the social medium in which he lives. Identical twins, one of whom has grown up in Europe, the other in a culture analogous to that of Australian aborigines, will speak the languages and be guided in their lives by the customary behavior of their environment. Differences in organically determined functioning may influence their position in this environment, but not the character of their behavior. Individual organic differences are immaterial for an understanding of types of culture.

Consult: Thurnwald, R., "Psychologie des primitiven Menschen" in *Handbuch der vergleichenden Psychologie*, ed. by G. Kafka, 3 vols. (Munich 1922) vol. i, pt. ii; Myers, C. S., and McDougall, W., "Physiology and Psychology" in Cambridge Anthropological Expedition to Torres Strait, *Reports*, 6 vols. (Cambridge, Eng. 1901–12) vol. ii.

Language. While in most cases the study of bodily form results in rather vague impressions relating to the descent of populations, the study of languages often gives us more precise data in regard to historical events so far as they are reflected in language. On account of the independence of the numerous stems composing the vocabulary of a language the occurrence of the same stems in several languages is an incontestable proof of their historical relation. The stems undergo, in course of time, changes in form and in meaning. Definite directions of change in form prevail at certain times and in certain regions. These can be studied by a comparison of vocabularies, and it is possible to reconstruct older forms with a fair degree of certainty. By following out these changes in form and meaning of stems and of grammatical structure, the history of languages may be partially reconstructed. If related languages are found in extended areas we obtain proof of a historical connection and of a gradual differentiation, as in the cases of the Bantu Negroes who occupy a large portion of Africa and speak related languages, and of the Indo-Europeans who ranged before the period of modern colonial expansion from Spain and Ireland to India and Central Asia. When scattered remains of a language are found in a wide territory, as the Finnish on the Baltic, in Hungary and in isolated groups in Russia, significant inferences in regard to linguistic history may be drawn.

The importance of linguistics for anthropology is generally underrated. The categories of speech are the categories of thought, and the form of language directs the attention of the speaker in definite lines. Grammar embraces a set of categories that *must* be expressed by the speaker. In English I may say, "the man is sick"; in other words, "the definite single man at the present time is sick." The thought cannot be ex-

pressed without stating that we want to speak of a definite or indefinite man, of one or several, of past or present. Other languages select other aspects prescribed by their grammar. We may find the vaguest term, "man sick," or determinations quite different from ours that, however, must be expressed, such as "man (or men) near you visible evidently sick." A generalized translation from English into such a language is impossible. Language does not express the whole of a sense experience, but selects certain parts in regard to which the imagination of the hearer is restricted, while in regard to all others it remains free. The mental pictures produced by the statement of the same expression in different languages are not comparable in their details. In this way the flow of ideas depends upon the language spoken, for our thoughts may be directed in one way by a language that classifies objects according to sex, in other ways by those that classify according to social position or form, or by those that have no classification whatever. Our thoughts may be influenced by what is considered as an object, what as attribute; by what is regarded as a state and what as an action. In all these respects fundamental differences occur.

Similar observations may be made in regard to the vocabularies of different languages. The principles of the classification of experience differ considerably. Many American languages lay great stress upon form. To throw a long or a round or a flat object are distinct concepts. Actions relating to single or multiple objects may be differentiated. On the other hand, specific terms like our "to swim," "to fly," "to walk" may be expressed by a single stem, modified by qualifying elements. The combination of experience in categories follows the most diverse lines.

The influence of language upon cultural life must not be exaggerated, however, for a new cultural need is met by the development of new linguistic forms. The absence of abstract nouns, when it occurs, does not hinder the development of abstract ideas. If the need for them is felt by new experiences, language follows by giving a value to new, formerly unidiomatic expressions. The vocabulary of philosophy is largely of this character. Phenomena of nature that vary in form, each of which has a special significance in the life of a people, are differentiated in language. Thus the Eskimo differentiates between falling snow, drifting snow, snow on the ground, a snow drift and soft snow. We use only one term. The peasant differentiates between horses according to age, sex and coat color; the Siberian native has numerous terms for his reindeer, the African for his cattle. Those not interested in horses, reindeer or cattle use only a very few terms.

Not all similar linguistic phenomena are due to historic connection. The fundamental traits of all languages show that their forms are a necessary result of the way in which we acquire experience. If every single experience were expressed by a single sound complex, i.e. a word, speaking and understanding would be impossible. It is necessary that the sounds should be recognized. This is possible only if the sounds are not too many and are fixed, and if the whole mass of experience is classified, so that similar experiences are grouped together and recognized by the symbol of the same sound complex. The classification of experience brings it about that the specific designation of an experience must be expressed by its subsumption under a number of classes which must be brought into relation. This means that words, i.e. classes, and grammar, i.e. devices of expressing relations, must be and are common to all languages.

Notwithstanding important differences, the sounds of most languages have in common the fact that they are produced by breathing out, or by the expulsion of air compressed in the oral cavity. Only the tribes of South Africa produce sound by sucking air into the oral cavity in which a partial vacuum is produced. Specific processes by means of which stems are grammatically modified are few: the addition of syllables as affixes (as in "un-kind-ly-ness"); changes of stem (as in "write, wrote"; "teeth, teethe") and significant position (as: "the wolf killed the man; the man killed the wolf") are universally distributed. Mechanical changes of sounds resultant from contact or other close association (as "impossible" for "in-possible") are frequent and of varied character. Sometimes historic changes of sound follow the same rules in widely separated areas. Thus the *k* in Bantu has changed in many dialects to *ch* (as in "church"). The same change occurs in a number of American languages. The effect of the loss of accent of a syllable has also often the same effect in regard to its phonetic development. Thus linguistic data give a safe proof of the independent origin of similar phenomena in remote parts of the world.

Consult: Meillet, A., and Cohen, Marcel, *Les langues du monde* (Paris 1924); Vendreys, J., *La langage*

(Paris 1921), tr. by P. Radin (London 1925); Wundt, W., *Völkerpsychologie*, 5 vols. (Leipsic 1900–09) vols. i–ii; Boas, F., Introduction to "Handbook of American Indian Languages" in Smithsonian Institution, Bureau of American Ethnology, *Bulletin 40*, 2 vols. (Washington 1911–22); Sapir, Edward, *Language* (New York 1921); Jespersen, O., *Language* (London 1922).

CULTURE. Culture embraces all the manifestations of social habits of a community, the reactions of the individual as affected by the habits of the group in which he lives, and the products of human activities as determined by these habits. On account of the heterogeneity of the habits of life it is customary to describe culture from a number of distinct viewpoints: the adjustment of man to surrounding nature; the mutual relations of individual members of a society; and the subjective behavior of man. The adjustment to nature includes the use of natural products for the purpose of nutrition and of obtaining shelter, as well as for less immediate purposes. The relations between individuals include sexual life and the forms of social conduct; the subjective behavior is manifested in art, religion, ethics and science. These various aspects of cultural life are interrelated and their complete separation in a systematic description gives a warped impression of the character of culture. Nevertheless a full description cannot be given without taking up each aspect of culture separately.

The definition of culture given here indicates that so far as the relations of members of a species to nature and to other members of the same species are concerned, phenomena analogous to those of human culture occur in animal society as well. As a matter of fact many of the characteristic human adjustments are found in the animal world. Insects, birds and mammals preserve food for unfavorable seasons; they build shelters, sometimes of very complex construction; they store up provisions; ants cultivate fungi; apes use sticks and stones as tools; they may even break off a stick to be used for a specific purpose. The social relations of animals are varied. There are hermits who meet the opposite sex only at the time of pairing; there are large societies like swarms of fish that welcome any number of their own species and may even admit members of other species; there are other more rigidly organized societies with recognized leaders; and among insects we find the organized states of bees and ants with an elaborate division of labor. Property rights are asserted by individuals and by animal societies. It is even doubtful whether the culturally determined, purely subjective behavior is entirely absent among animals. The habits of the bower-bird suggest a pleasure in form. Apes seem to enjoy ornaments and rhythmic movements. Domesticated animals distinguish forbidden acts from those permitted. There is no absolute gap between many of the aspects of human culture and the life habits of animals.

In the relations of man to nature the procuring of food and shelter are fundamental. With the spread of man over all climates, ever new adjustments to the food supply and protection against the rigors of climate become necessary.

Consult: Wheeler, W. M., *Social Life among the Insects* (New York 1923); Yerkes, R. M., *The Mental Life of Monkeys and Apes* (Cambridge, Mass. 1916); Alverdes, F., *Tiersoziologie* (Leipsic 1925), tr. by K. C. Creasy as *Social Life in the Animal World* (London 1927).

Food. Archaeological evidence proves that during the palaeolithic age, up to the end of the glacial period, man lived as a food-gatherer, that is, by hunting, fishing and gathering edible parts of plants, shellfish and other stationary or slow moving animals. These conditions still prevail among a few tribes, such as the Eskimo, the Indians of California and the western plateaus, the tribes of Tierra del Fuego, most of the Australians, the Bushmen and some other Pygmy tribes of Africa, the Veddah of Ceylon and the Andaman Islanders. Where the food supply is distributed irregularly through the seasons, the art of preserving food is indispensable. The Eskimo preserves little, partly because the supply of sea mammals is fairly regular, partly because the climate makes preservation difficult. The Australians lay by enough to allow large assemblies to live for weeks on stored provisions. Permanent association of man with plants and animals, that is, cultivation of plants and domestication of animals, does not begin until the neolithic period. It seems probable that the dog is the oldest domesticated animal. Its domestication is now universal, except in a few of the islands of the South Pacific. Domestication probably developed through a form of symbiosis, the dog following human camps and living in part on the refuse of human food. It is significant that all the most important domesticated animals are gregarious: cattle, sheep, goats, reindeer, buffalo, horses, ducks, chickens and geese. It is therefore probable that the relationship of man to gregarious animals was one of the conditions that led to domestication. It has been suggested that the

hunter who follows the same herd establishes a certain property right over it, and that he protects it against the attacks of wild animals; that in this manner gradually a permanent relation between man and the animal was established that led to domestication. If this is true, domesticated animals would have served first of all as a food supply. Their use for other purposes would be a much later development. The present distribution of the use of milk suggests that this discovery is also a late acquisition.

Many of the cultivated plants occur also in great masses. This is particularly true of the grains. Wheat and barley appear in Europe as the first cultivated plants. The property relation of man to an area in which such grains abound may still be observed among the Indians of the Great Lakes who gather wild rice; or among the seed-gathering Indians of the western plateaus. From the more or less permanent relation of man to an area bearing an abundance of the food-producing plant the art of cultivation may have developed. On Vancouver Island we may observe that spots producing roots of cinquefoil are cleared of stones and marked as property by being surrounded by walls of the pebbles that have been thrown away; along the north Pacific coast tribal property is established by burning over woods in order to produce a larger supply of berry-bearing bushes. The relation of man to fruit-bearing trees seems different from this, because in some cases a single tree produces as much nourishment as a large area on which gregarious plants grow. It is remarkable that many of the plants used and cultivated are not edible without special preparation, on account of their taste or because they contain poisonous substances. Examples are the cassava potato and acorns. Some have lost these qualities under cultivation.

All early agriculture was practised without the help of domesticated animals. It was analogous to our cultivation of plants in gardens. The invention of the plough and with it the use of draft animals for tilling fields is a late invention of the people of the northern half of the Old World.

Shelter. In earliest times man dwelt in natural shelters such as caves. The labor bestowed upon representations of animals in the caves indicates that his stay in the caves was continuous. The kind of shelter erected in the cave or outside is not known. Some people utilize caves even now. Among modern tribes the simplest shelter is a windbreak erected of poles and filled in with branches. More complicated are double windbreaks that offer shelter from two sides and tents that are closed all around. In some regions shelter is sought in subterranean or semi-subterranean dwellings. While these structures serve a number of individuals as protection against climate and partly against attacks of wild animals, the individual is sheltered by clothing. In the arctic climate life without clothing would be impossible; but in more temperate zones the requirements of clothing are variable. The Fuegian in a tempestuous, wet and chilly environment and the Indian of Vancouver Island exist with very little clothing, while in some tropical regions, as in Uganda, the whole body is covered. Climate alone does not account for the kind of dress used.

Inventions. The specific methods of procuring food and shelter depend upon inventions. The earliest art of which we know is the shaping of brittle stone by means of flaking and chipping, for use in striking, breaking and scraping. Implements of this type belong to the early quaternary. The art is almost universally distributed. It is likely that wood in the form of sticks was also used, but wooden implements have not survived the ravages of time. The skill in handling brittle stone gradually increased and the forms became more elaborate and specialized. The shaping of tough stones by pecking, polishing and drilling occurs in Europe much later. Toward the end of the earlier palaeolithic period fire had been discovered and was presumably used for obtaining warmth and for preparing food. On account of the difficulty of obtaining fire it is carefully kept in rotten logs or other forms of slow-match. It is claimed that the Andaman Islanders do not know how to make fire, that they keep up their fires continually. Fire is most frequently produced by drilling, less frequently by a sawing or cutting motion. It seems likely, therefore, that the production of fire was learned from these processes, and at a time when drilling and cutting tools were made of wood. The use of fire for preparing food is difficult to understand. Without long experience scorched and burnt animals found after a fire of natural origin cannot have been attractive, on account of the strangeness of taste and smell; and it is difficult to see how it happened that the experience was presented with sufficient frequency to become attractive. It is still more

difficult to understand the discovery of boiling. Many modern tribes boil by throwing red hot stones into water contained in a box or basket. This is presumably the earliest method of bringing water to a boil. It would seem that the only experience that could lead to this result is presented in cases where a stream of lava runs into a pond, bringing the water to a boil and cooking the animals living in the water. To make use of this observation the invention of containers for water and the appreciation of boiled food were required. Experience with fire also led to its use in hardening, shaping and hollowing out wood.

An important step in the development of implements was made when two pieces were united together. The earliest stone implements were merely held in the hand. Later on the stone was attached to a handle and in the further development of tools the elaboration of the handle is almost more important than that of the working tool. The art of combining different parts into a unit is also the basis of sewing and weaving.

The invention of pottery was not made until after the end of the palaeolithic period. Even now pottery making is not universally distributed. The discovery may have been made when food was roasted or steamed in underground ovens made in clayey soil. People whose habits require a frequent change of dwelling place do not use pottery on account of its fragile character. It presupposes permanence of a dwelling that, however, may be occupied only seasonally. In many parts of the world pots are made of strips of clay that are built up spirally, in coils. This suggests a relation of the technique of pottery to that kind of basketry which is made by sewing together coils of fibrous material.

Wood, bark, bone and horn are shaped by cutting, shaving, drilling and polishing. They are bent by steaming. Pieces are joined together by tying, sewing and pegging; sometimes also by gluing.

The use of skins required methods of preservation to avoid rotting and stiffening of hides. Both mechanical and chemical means are applied to this end, such as scraping, application of various substances for curing, and smoking.

The invention of basketry may have antedated that of pottery. Weaving by intertwining coarse materials and coiling by sewing together spiral coils of fibres or twigs are the processes applied. Weaving of cloth developed through the substitution of spun hair or plant fibre for stiff intertwined materials.

The most important step in industrial development was the discovery of the use of metals. Locally pure copper was used like stone. It was hammered into shape. In Babylonia and Egypt the reduction of copper ores was known in the fourth millennium B.C. About the middle of the third millennium bronze, an alloy of copper and tin, appeared in Egypt, first containing a small amount of tin which gradually increased to about ten percent. In America bronze was also invented and used in Peru and in parts of Central America. Iron appeared in Egypt in the twelfth century before our era. It has never been used in aboriginal America, except in a few cases in which pure meteoric iron was available.

The impetus to many inventions must have come in the work of procuring food and shelter. The gathering of roots led to the development of instruments for breaking the soil. The effective accumulation of seeds, berries and other vegetable food supplies was made possible by the construction of receptacles which also facilitated the preservation of supplies and their protection against the ravages of small animals. Bark, wood and basketry were used both for carrying and preservation.

The killing of animals brought about the development of means of overtaking and overcoming them. Weapons for throwing served to wound them; pits and traps were employed for holding and killing them. Masses of skeletons of the mammoth and of horses found as remains of periods in which hunting implements were still apparently ineffective suggest the use of pits and of the battue. The use of pits is also suggested by some palaeolithic rock paintings. At the end of the palaeolithic period bow and arrow, spears and throwing sticks were in use. Harpoons and fishing implements were also made in this period.

The various inventions were also utilized for the construction of dwellings. Simple mechanical devices for lifting heavy beams must have been developed in connection with the erection of habitations intended to shelter many individuals. Stone architecture was a late development. Stone enclosures or more complex structures were probably first used for graves, as evidenced by early stone circles, stone cysts and dolmens. Stone architecture developed in the eastern Mediterranean and in the plateaus of South and Central America.

The acquisition of tools, implements and

other property requires means of transportation in cases of removal from one place to another. In addition to the receptacles already mentioned which were carried by man, means for transporting heavier loads on sliding conveyances were required. Domesticated animals were used for carrying and hauling, and special means of locomotion on snow, like sledge and snowshoe, were invented. The wheel is a comparatively late acquisition confined to parts of the Old World. The use of regular routes of travel, such as are found also in animal life, created trails through the woods and brought about the discovery of fording places. Much later, trails were artificially developed and rivers or valleys crossed by primitive bridges. Navigation must have developed at an early time. Without it the peopling of islands would have been impossible. The simplest forms of transportation by water are rafts made of wood or bundles of floating plants, but we also find at an early time the dug-out. The canoe made of ribs covered with bark or hide and the plank boat are later inventions.

A number of inventions deserve special mention on account of their complexity and the proof they give of the ability to profit by the observation of complex phenomena. Bow and arrow belong to this group. In Europe the rock paintings of Spain give evidence of the inventions of these before the close of the glacial period. In all probability the experiences gained with spring-traps may have helped to develop the invention, but there could have been no immediate observation that would lead to it. The intricacies of the flight of the Australian boomerang were observed in the peculiarities of the flight of thrown sticks, but it required an incredible amount of experience and of acute observation to discover that the inclination of the planes of the two arms towards each other is the condition under which the observed and desired movement is obtained. Another unusually complex invention is that of sailing by the wind which the Micronesians use: the shifting of the mast; reversing of bow and stern in order to keep the outrigger on the lee side; but particularly the difference in curvature of the sides of the Marshall Islands canoe which serves to prevent the turning of the canoe in the direction of the outrigger. The Negroes of Africa reduce iron ores in furnaces in which the ore and charcoal is placed in alternating layers and in which increased heat is produced by a system of bellows that supply the furnace with a constant current of fresh air. This art is widely spread over Africa and may be a discovery of the Negroes, although arguments may also be given for its invention in western Asia. The early cultivation of plants and domestication of animals disclose other practises that are difficult to understand as discoveries due to the observation of nature. The artificial pollination of the date palm and the gelding of animals may serve as examples. Many other similar inventions may be mentioned in which the opportunity for discovery by observation is exceedingly remote.

Consult: *Reallexikon der Vorgeschichte*, ed. by M. Ebert, vols. i–xiv (Berlin 1924–29). For modern industries of primitive people: Mason, O. T., *The Origins of Invention* (London 1895); Tylor, E. B., *Researches into the Early History of Mankind* (Boston 1878), and *Primitive Culture* (7th ed. New York 1924); Avebury, J. Lubbock, *Pre-historic Times* (6th ed. New York 1902); Hoernes, M., *Natur- und Urgeschichte des Menschen*, 2 vols. (Vienna 1909; rev. ed. by O. Menghin, 1927); Weule, K., *Die Anfänge der Naturbeherrschung*, 2 vols. (Stuttgart 1921–23); Franchet, L., *Céramique primitive* (Paris 1911); Forestier, G., *La roue* (Paris 1900); Hough, Walter, "The Methods of Fire-Making," in United States National Museum, *Report 1889–90* (Washington 1891) 395–410.

Economics. In primitive society men and women cooperate in gathering the necessary food supply. A fundamental difference due to physiological causes is found in their activities. Childbearing women during pregnancy, when nursing young children and when caring for a number of children, are less mobile than men. They are unable to move rapidly over great distances and hence their lives are spent in or near the camp. For this reason we find that among all hunters and fishermen the men occupy themselves with the chase and with fishing, while the women gather vegetable products and slow moving or stationary animals that are within reach of the camp, and perform all the work that pertains to the camp. Secondarily it follows that the men prepare the utensils for the chase while the women work on the utensils and implements used in camp. Stone and wood are the principal materials used by the hunter. Hence the man performs work in stone and wood. He uses hammer, knife and drill. Normally the woman works on meat, skin and fibre; she cooks, preserves food, prepares skins, spins, sews and weaves baskets and cloth.

The woman's work is largely devoted to the gathering and handling of plants. In technically somewhat more advanced communities the whole agricultural work falls to her share while the men are unfamiliar with the raising of plants.

It is therefore probable that the art of agriculture was developed by woman. The men, on the other hand, are constantly occupied with the chase. In technically more advanced communities they take care of the domesticated animals. Accordingly it seems likely that domestication of animals was developed by the men. The theory that domestication developed from the habit of keeping pets, a practise common, for instance, in South America, is not tenable, because an essential trait of domestication is the free reproduction of the herd, a condition not found among pets, and also because pets are cared for by the women, who do not occupy themselves with domesticated animals.

In most cases the typical division of labor according to sex continues until some type of labor that in simple communities is performed by man is utilized for the further development of agriculture. This is the case when irrigation or building of terraces is required, or when the help of domesticated animals is introduced in agricultural work, as in ploughing.

Even in simple forms of society there is further division of labor according to individual preference. When hunting and fishing are practised, some men devote themselves by preference, or even exclusively, to the one or the other occupation. Among the Chukchee there is a differentiation between maritime dwellers who are sea hunters, and reindeer breeders. Members of the same family may belong partly to the coast people, partly to the inland reindeer breeders. Some individuals, skilled in particular industrial pursuits, devote themselves to these and furnish their tribe fellows with the products of their labor. The person who is endowed with the power of curing disease and of communicating with the supernatural world is a professional in the strict sense of the term.

In somewhat more complex societies, as among the Africans or Polynesians, there is a much more highly developed division of labor. No longer are all the industries carried on in each family group, but there are definite trades; in Africa, particularly, the blacksmiths, in Polynesia the carpenters and boat builders.

When the social structure is more complex, hereditary groups may take over definite functions. In North America some special division of the tribe may furnish the warriors; in the region of the Great Lakes of East Africa agriculture and herding are carried on by distinct hereditary divisions of the tribe. On Vancouver Island whaling was the privilege of a small group. In the civilized states of America, as well as in Egypt, the division of trades was very elaborate.

The feeling for property rights is not confined to man. Both individual and social property rights are found in the animal world. The woodchuck owns its hole; the bird its nest, sometimes even its surroundings; the squirrel and mouse their stores of winter provisions. Animals defend their property against strange individuals or groups. Eagles drive away other birds of prey, monkeys and kangaroos have their own limited territories which they defend against invasions. In all groups of primitive man there is a feeling for property of the individual in objects made or constantly used by himself, and of groups in the territory they occupy. Food, while individual property, is generally shared with members of the group. The individual has absolute control over objects made or constantly used by him, as long as their destruction does not involve loss or danger to others. Human property differs from that of animals in being transferable in the form of presents or exchange. Property is not only individual or tribal; it may also belong to tribal divisions (see *infra*). The tribal territory may be so subdivided, and social groups may have common property interests in other valued objects. Many of the individual or group property rights might better be called social privileges. Individual property or an individual privilege in which a group has a claim of participation must pass from the holder in the case of death, or sometimes even during his life, to other members of the same group. These conditions are expressed principally in the customs regulating inheritance. The range of objects that may be considered as property is very wide. Not only material objects are property, but also songs, tales, position and other privileges.

Since even in the simplest forms of society a differentiation of occupation exists, at least in so far as the sexes contribute different parts of the sustenance and are engaged in different industrial occupations, and since furthermore a pronounced feeling for property rights exists, we find also customs regulating the exchange of produce. In the small family both parents generally contribute to the support without consideration of the value of the goods, but when the family breaks up, the man and the woman each claim as their property what they have collected or made, and in general in exchanging goods or making presents to outsiders their respective ownership manifests itself. These conditions are more complex whenever a more elaborate

division of labor exists, so that a family is no longer economically self-sufficient. In most forms of primitive society such exchange is made by barter or by rendering service. M. Mauss has pointed out that the fundamental principle of exchange is the obligation of accepting a present and the consequent obligation of the return of an equivalent. The Chukchee reindeer-breeder exchanges furs for seal-meat and thongs obtained from members of his own family or from others who dwell on the seacoast. The Indian of the western plateaus exchanges dressed deerhides for dried salmon. Another form of payment occurs when valuable appliances are borrowed for purposes of productive work or when in a cooperative enterprise one individual furnishes the needed appliances, such as a canoe or nets. In these cases the participants share in the product of their work but yield to the owner of the appliance a specific privilege. A member of a family group is also considered as a valuable asset. This finds expression both when compensation is demanded for a death caused by an outsider and in the payments or service demanded in exchange for the privilege of marrying a girl and taking her away from the family unit. Although other attitudes play an important role in these cases, their economic import must not be neglected.

There are few tribes that are absolutely self-sustaining. Most of them obtain from neighbors some necessities, such as salt and iron in Africa, and shells and, in later times, horses in America. In extreme cases a tribe may take up a specialized occupation and rely for everything else upon its neighbors. An outstanding example are the Toda in India who have given up almost everything for a milk industry. Exchange with neighboring tribes is generally by barter, in cases of mutual fear by silent barter, the objects of exchange being deposited and left, either to be taken up and exchanged or refused by the second party. When barter is more regular, a standardization of values occurs. In Africa, on the islands of the Pacific Ocean, and in many parts of America values are measured by standards. Some of these may be used for practical purposes, while others, although useful, are handled only as representations of values, that is, as money. In Africa salt, iron in various standard forms, and cattle serve as standards of wealth. All of these may be used, while the usefulness of shell money which occurs, for instance, in Africa, Micronesia and America is restricted to the manufacture of ornaments. On the north Pacific coast of North America blankets, canoes and copperplates representing certain values are in use as standards. In some parts of East Africa wealth is measured solely by cattle, not by any other kind of possession.

Wherever a highly developed system of exchange exists, we find also systems of credit. The amount given is repaid by exchange or in money value at a later time, either without or with interest. When it cannot be repaid in substance it may have to be repaid in service. An extreme form of this institution is found in the bonding of members of a family in debt, which prevails in many parts of Africa.

War, notwithstanding its numerous other affiliations, must be considered as a form of economic activity, for most wars or raids among primitive people are waged for the acquisition or retaliatory destruction of property, including the values inherent in human life. The horse stealing raids of American Indians, the cattle and slave raids of Africans, and the plunder of villages in Melanesia are examples. In arid countries the possession of water, among herders the need of pastures, have led to armed conflicts between those who try to acquire them.

Consult: Cunow, H., *Allgemeine Wirtschaftsgeschichte*, vol. i– (Berlin 1926–); Schmidt, M., *Grundriss der ethnologischen Volkswirtschaftslehre*, 2 vols. (Stuttgart 1920–21); Koppers, W., "Die ethnologische Wirtschaftsforschung" in *Anthropos*, vols. x–xi (1915–16) 611–51, 971–1079, a general historical review.

Social Organization. Man everywhere lives gregariously, and a local group varying in size forms a unit firmly coherent in its relation to outsiders. In the same way that many gregarious animals form closed societies which do not admit strangers of the same species, so in primitive society every local unit forms a closed society hostile to all outsiders. This is clearly expressed by the frequent custom among primitive tribes of designating themselves as "human beings," all outside groups by specific terms. There are probably no tribal units in existence now that have exclusively hostile relations to their neighbors, but suspicion and avoidance are very common. The feeling of community of interest of the members of a closed group is characteristic of even advanced types of human society.

Free sexual relations and marriage must be clearly distinguished. Free relations are the result of sexual passion, marriage involves property relations. Although in many cases free

premarital sexual intercourse is forbidden and, if discovered, punished, there are numerous cases in which it is permitted or is even required, except among individuals who belong to an incest group (see *infra*). Marriage is often easily terminated, until in old age a more permanent relation between husband and wife develops. Personal attachment between two young individuals is often passionate and accompanied by jealousy, but temporary. Abnormal sexual habits, such as homosexuality, have been observed among many primitive tribes. They may be explained as an effect of domestication common to man and highly domesticated animals.

The position of the individual in the social group is determined by age, sex and membership in a fixed subdivision usually consisting of descendants of a common ancestor, immediate or remote, known or assumed.

Infants and young children are dependent upon adults and therefore occupy a special position in the social unit. As they acquire greater independence they may continue to be grouped by age classes or they may merge in the general population. The old-age group which loses its economic independence is also often set off from the active population. The period of adolescence and complete maturity also brings about the formation of separate groups. Individuals passing through these stages at approximately the same time may continue throughout life as a group that retains its individuality, as in East Africa, or they may be advanced through a number of groups differing in functions and characteristics. Generally the more detailed age groupings are more pronounced in the male sex than among females.

A fundamental difference prevails in the social position of the sexes. It is due to the difference of their biological functions and the resulting difference in economic position, men being hunters, women food-gatherers; men herders, women agriculturists, at least in most of the simpler forms of human societies (see p. 82).

Since on hunting expeditions and in war men work in groups which need a leader, social recognition of leadership belongs almost always to the man. Woman's work is more commonly individual or at least does not require leadership.

In the daily life of primitive man the family group is the most important unit. It consists normally of parents and children. The family forms the economic unit in the life of hunters who live in infertile areas, for each group needs a large area for its sustenance. The mother cannot procure sufficient food for herself and her children, and a male is needed to maintain the family. The human family unit is analogous to the family unit of animals.

The relations to one another of individuals constituting this group depend upon the relation of the family to the larger social group of which they form a part. In almost all forms of human society the family consisting of parents and children forms an incest group, sexual intercourse between parents and children and between brothers and sisters being forbidden. The mature children must seek mates in other family groups. If the original family does not separate completely after the establishment of new families by the children, relations are established that give rise to a great variety of forms. These complications are bound to arise where families do not live in temporary isolation, but occupy jointly a village or a limited territory in which communication is frequent.

Three fundamental forms controlling the interrelation of families are possible and do occur. First, the family may be a firm unit and the relations of the children to father and mother may be the same. This is called a family with bilateral descent. Second, the man who marries a daughter of a family may come in as a stranger and may remain more or less an outsider, while the daughter's children may be considered as born to the family and members of the family. In this case there is a close relation between mother and children, a loose relation between children, relations-in-law and father. Third, the son may take a wife from another family into his own family, so that his children will be members of his own family while his wife remains an outsider. In this case a close relation exists between father and children, a loose relation between mother and children. The second and third are families with more or less clearly recognized unilateral descent, the second matrilineal, the third patrilineal.

Social status is largely a reflection of such relationships. In a small community in which bilateral descent prevails, the concept of the family as an incest group cannot be extended over the later generations. If it were, the whole tribe would become a single family and marriages in the group—endogamic marriages in the tribe—would become impossible. All marriages would have to be with foreign tribes, and tribal exogamy is the concomitant of this condition.

In both cases of unilateral descent consciousness of family relationship in later generations may be preserved and leads to large exogamic groupings in the tribe. This is possible only in two cases: when the terms of relationship are not individual, but extend over classes of individuals so that a whole group may be recognized as members of an incest group or as outsiders; or when a certain symbol holds together the whole large family group, such as a name, a particular kind of dress, or practises others do not share.

When a common term is used for the mother and all her sisters, when the children of this group of sisters call one another brothers and sisters and when this designation is carried through the generations, combined with the conceptualization of brothers and sisters as an incest group, the tribal unit will be divided into a number of exogamic units. If the tribe is small and no accessions to these groups occur and if, for some reason, they do not split up, this will ultimately lead to a dual division, owing to the unavoidable extinction of most of such lines of descent. The same result is obtained when the unity of the later generations is preserved by a common name or by some other symbol. Conditions of this kind are generally designated as totemism. The totemites share a name, a symbol, beliefs or rites.

The principles according to which relationship may be conceptualized vary considerably. The most frequent principles are sex of person spoken of; generation; collateral or direct line of descent; relative age; sex of an intermediate relative, as in terms of maternal or paternal descent or in terms of affinity through wife or husband, sister or brother; sex of speaker; death of an intermediate relative, as, for instance, death of mother in the term used for a maternal uncle; social rank. The combination of these principles of classification vary considerably, and many of them may be omitted. When the principle of generation is omitted, all the males of the mother's line (in the case of matrilineal descent) may be designated by the same term. When sex of the intermediate relative is considered, there may be four terms for cousins, as father's brother's child, father's sister's child, mother's brother's child, mother's sister's child. In the same way as in our term "brother" relative age is disregarded and the term is reciprocally applicable, generation may be disregarded, so that one term may designate the reciprocal relations between uncle and nephew or between grandfather and grandson.

The incest groups vary in character. When the fraternal and paternal nomenclature is extended, as described before, and exogamy is adhered to, the whole group so designated forms an exogamic unit and there is a sharp distinction between parallel cousins (that is, the children of two brothers or of two sisters—in matrilineal society the children of sisters, in patrilineal society the children of brothers) and cross cousins (that is, children so related that the father of one group of brothers and sisters is the brother of the mother of the other one). The former, as brothers and sisters, belong to the incest group; the latter belong to different families and may, or even must, intermarry.

Endogamy is found in local units. Marriages outside of the tribe or village may be forbidden. In India the basis of endogamy is caste, based largely on occupation. In Australia its basis is generation. Individuals of even generations may not marry members of odd generations. Both in India and Australia endogamy is combined with exogamy. In India the caste is subdivided in exogamic family lines. In Australia the whole tribe is divided into generations and into exogamic moieties. There may even be a double system of these, giving rise to a most complex system of marriage regulations.

In most cases the regulations preventing sexual relations in the incest groups are felt as absolutely binding. There are, however, cases in which sexual relations in the incest groups are considered as condonable.

Exogamy and endogamy are extreme expressions of a differentiation of behavior in the group of relatives both by consanguinity and affinity. Some relatives may be exceedingly free in their social intercourse. They stand in the positions of "joking" relationship. Others have to be treated with extreme respect, which sometimes takes the form of absolute avoidance. This occurs particularly between mother-in-law and son-in-law. It is generally felt as an expression of respect. Avoidance and familiarity are related to actual or potential sexual relations between the sexes, or to community of sexual interests.

From the interrelation between social position and sex, social leadership generally belonging to the men, a peculiar contradiction results in all cases of matrilineal descents. When social position belongs to a family line it cannot be transmitted from father to son, but must be inherited from a male of the mother's family, that is, from the maternal uncle. This is frequently the source of the avunculate, although

prominent position of a woman's brother in the family unit may bring about similar conditions without matrilineal descent. Since often the mother's brother does not belong to the same economic unit as that to which his sister belongs, a certain weakness is inherent in the avunculate and it is liable to give way to systems in which inheritance and descent are combined in the same sex.

The constitution of the family is dependent upon the numerical relation of mates. There are four possibilities: several men may be mated with several women; one man with several women; one woman with several men; or one man with one woman. All these forms do occur, most frequently the union of one man with several women (polygyny), or of one man with one woman (monogamy). The two other forms, polyandry and group marriage, are rare.

If polygyny is combined with permanent matrilocal residence, the wives must necessarily be sisters; if combined with patrilocal residence, they do not need to be related. In Africa polygynous households consist of a number of separate houses, each being presided over by one woman. Since marriage is always accompanied by a transfer of property rights, often by exchanges between the two families, or presents or payments made by the groom's family to the wife's family, the relationship between husband and wife is involved in these transactions. In case of payments made by the groom's family, the deceased wife's sister may be claimed as a substitute; or after the death of the husband his brother or son from another unrelated wife may claim the widow. In other cases the deceased husband's brother may be claimed as a substitute by the widow's family. Both these forms, sororate and levirate, are expressions of the property relations between families. In some cases they lead to apparent group marriages between brothers and sisters. In exceptional cases women of different generations, such as mother and daughter, may be involved in these relations.

There is no evidence that any one of the four forms of marriage was the original form. It seems rather probable that according to economic and other conditions of life one or another form developed.

Groupings consisting of relatives by consanguinity and affinity occur everywhere. In many primitive societies, particularly in those in which the local unit embraces larger numbers of individuals, other types of social groupings occur, some very firmly knit, others rather loose. These groups are held together by their social functions: occupational, political or religious. In many cases we find clubs embracing age classes of one sex, particularly young men. In others military societies occur which have definite duties or privileges in military undertakings. In extreme cases, as in some parts of Africa, they form regular regiments in an army. In still others they perform police functions. There are also societies that are pitched against one another in games and those charged with religious activities, like the shamanistic societies of the Pueblo Indians or those of Melanesia.

In some cases these societies are identical with the groups based on actual or supposed consanguinity, or they must be recruited from their membership. For example, one of the divisions of the Omaha tribe which is viewed as consanguineous is charged with the defense of the camp circle, another one functions as keeper of the sacred objects of the tribe. The societies are likely to surround themselves by secrecy, their activities, teachings and functions being known only to members. Often all the adult males form a group from which women and children are rigidly excluded. Intrusion is punishable by death or other heavy penalties. Meetings of the society are held in secrecy and guarded by the use of musical instruments, such as the bull-roarer or whistle, that keep outsiders away. Hereditary rights to membership in a society imply either that the society is identical with one of the family groups or sibs, or that its members are selected exclusively from one family or sib.

As the family groups may have associated to themselves a name, symbol, privilege or rite, so the societies are apt to assume the same characteristics. Probably all societies have names. Many are characterized by their dress or, like the African military groups, by the decoration of their paraphernalia. The societies of British Columbia differ in rank and possess privileges. Whenever a religious element is involved in these organizations, they have rites of their own and supernatural protectors appear in the same way as in family groups. The forms of these phenomena are analogous to those of totemism, but attach to a society instead of to a group considered as consanguineous.

On account of the secrecy involved in the organization of these associations new members must undergo a course of instruction. Its character differs according to the character of

the society and to the manner of acquisition. When membership is attained by purchase of a seat in the society and when the prerogatives of the society are purely formal, no elaborate instruction may be necessary because the society has no esoteric teachings. In other cases the novice may be compelled by the older members, or by the prevailing custom, to join and there may be an elaborate course of instruction, often connected with complex rites of initiation. In this case the entrance into the society is often coincident with adolescence and is of a religious character (see p. 102).

The size of the social group varies. In extreme cases all the males may form one association. The other extreme is reached when a social group consists of a single individual only. Between these extremes all possible sizes of groups are found.

The existence of any type of grouping is accompanied by stratification of society. Single individuals, as well as social groups that claim any kind of social distinction, are segregated from the general mass of the population. The segregation does not need to be based on the forms of society referred to before, but may be due to individual prominence in some capacity: experience and skill as hunter, fisherman, herder, agriculturist or warrior and consequent wealth; skill in arts; in helping the sick; in real or supposed possession of unusual qualities. All these may insure to the individual unusual prominence in his community. A different kind of stratification results from the privileges or powers of a closed society, in which all the members on account of their membership form a privileged class. When membership is determined by consanguinity we have a hereditary nobility. In other cases a hereditary priesthood or other similar forms result. The unity of the tribe depends largely upon the functions and mutual relations of these associations. When their activities are correlated, or when they form an integrated series in which leading individuals or associations control the others, the tribe will form a well organized unit. The control may be based on friendly relation or may be forced, as in cases of subjection of one class by another, or of a conquered unit by its victors. When they are uncoordinated the tribal unit will be loose.

In the limits of the group, no matter whether it is held together by consanguinity or by functioning, the members are subject to the rules of the group, which are supreme. Breach of these rules is resented or even punished. In this sense the group is analogous to the state, from which it differs because it does not unite all the members of the community in one whole, subject to common rules of behavior. The more complete the coordination or subordination of these groups, the more will the political organization approach our concept of a state. Since cohesion of the groups implies constant contact, possibility of communication and local contiguity are necessary elements in the formation of well integrated groups. Examples of uncoordinated groups are family groups or sibs that require mutual aid among the members and joint responsibility against outsiders, as in blood feuds, religious societies, like those of the Dakotas, which are held together by similar revelations, and many of the military societies of the Plains Indians. Coordination and subordination are characteristic of many of the politico-religious societies of Africa and of political organizations such as the League of the Iroquois. In some cases the separate, uncoordinated groups may form temporarily coordinated associations, as in the case of the Plains Indians during the buffalo hunt, when they are subject to a particular society that performs, temporarily, police functions, or the sibs of the Kwakiutl, which, whenever a village has dealings with another village as a whole, become a unit.

Consult: For older important literature: Morgan, L. H., *Ancient Society* (New York 1877); Maine, H. J. S., *Ancient Law* (10th ed. London 1906); McLennan, J. F., *Studies in Ancient History* (2nd ed. London 1886), and *Studies in Ancient History*, second series (London 1896); Bachofen, J. J., *Das Mutterrecht* (2nd ed. Basel 1897). A more recent point of view is represented by Lowie, R. H., *Primitive Society* (New York 1920), and *The Origin of the State* (New York 1927). See also Rivers, W. H. R., *Social Organization* (London 1924); Webster, H., *Primitive Secret Societies* (New York 1908); Schurtz, H., *Altersklassen und Mannerbunde* (Berlin 1902); Westermarck, E. A., *The History of Human Marriage*, 3 vols. (5th ed. London 1921); Frazer, J. G., *Totemism and Exogamy*, 4 vols. (London 1910).

Law. Ordinarily the individual is not restrained in his actions so long as their effects concern only himself. As soon as his actions have a bearing upon the well being of his fellows a customary behavior is demanded which may be designated as customary law. Its domain is intimately associated with the general social and religious concepts of the community. Property rights are guarded. When a forbidden marriage is planned and it is believed that it entails dangers to others, it will be prevented. When the breach of a tabu is considered as

dangerous for the community, observance will be enforced. Interference with the individual who plans an action detrimental to himself may emanate from his family or his friends. He may also be shunned, because his action is condemned, or because intercourse or contact with him may be dangerous. Behavior in these cases is not regulated or enforced.

In many cases, particularly in America, customary law is obeyed merely in deference to public opinion. There are no restrictions that serve the enforcement of the law, excepting police organizations that control communal undertakings such as the gathering of fruits, the hunt or war. These are charged not with judicial function but merely with executive control. In Africa, on the other hand, a most elaborate system of judicial procedure is found almost everywhere. It uses the taking of evidence, the oath and the ordeal, and is strictly comparable to European and Asiatic forms of procedure.

Where public opinion controls, the individual crimes that affect the community may result in the killing or driving out of the criminal, or ways may exist by means of which the effects of the crime may be warded off—by purification or other religious means. There is no set punishment or compensation. When the evil results can be warded off there is no punishment. On the other hand, infractions that affect the interests of individuals or of groups of individuals are settled by revenge taken on the perpetrator or on a member of his group, according to the principle of retaliation. The damage inflicted in revenge must not exceed the original one. In other cases compensation may take the place of retaliation. A life may be redeemed by payments adjusted to socially established valuations. Wherever strong solidarity of a group occurs, responsibility is not individual but rests with the group. Actual law giving machinery and imposition of arbitrary fines are common in Africa but are rare or absent in other areas.

Customary law is binding only in the social group. The relations to outsiders are commonly unsettled, although in many cases customary law regulates intertribal commercial intercourse, and forms exist that provide for the avoidance or termination of hostilities.

Consult: Post, A. H., *Grundriss der ethnologischen Jurisprudenz*, 2 vols. (Oldenburg 1894–95); Letourneau, C. J. M., *L'évolution juridique* (Paris 1891); Kohler, Josef, and Wenger, Leopold, *Allgemeine Rechtsgeschichte* (Leipsic 1914), introduction and pt. A; *Zeitschrift fur vergleichende Rechtswissenschaft* (Stuttgart 1878–).

Leisure. When the necessity of procuring food and shelter does not fill all the time of waking life, either because the food supply is plentiful and easily obtained or because the ample supply of one season is laid up and man lives in the intervening season on accumulated stores, the leisure time is spent in a variety of occupations. The total amount of tangible property that constitutes the possessions of a household depends largely on leisure time, on the permanence of abode and, in migratory tribes, upon facilities of transportation. The variety of household goods increases with the amount of leisure time. Besides this, time becomes available for activities that do not serve the immediate needs of life, and complications of technique, social gatherings and religious rites of various kinds have opportunity to develop.

In early childhood no contributions to the maintenance of the tribe are demanded and hence young children pass their time playing. Much of their playing is imitation of the occupations of their elders and a differentiation according to sex may be generally observed, the boys imitating man's, the girls woman's, work. Besides this, amusements in great variety occur: ball games, spinning of tops and plays based on personal dexterity or strength. Parents play with their young children, often accompanying the game by the singing of ditties. Adults also have games of individual dexterity, such as the making of string figures or contests in wrestling or running. Formal ball plays and racing according to set rules are common. Games in which the whole village may be divided into two units are often accompanied by betting. Games of chance, of the most varied character and played according to intricate rules, are found almost everywhere and lead often to a high pitch of excitement.

Consult: Culin, Stewart, "Games of the North American Indians" in United States Bureau of American Ethnology, *24th Annual Report, 1902–03* (Washington 1907) 1–846; Groos, Karl, *The Play of Man*, tr. by E. L. Baldwin (New York 1901).

Art. The influence of leisure upon technique is most important. It is characteristic of almost all untouched primitive culture that the technical skill exhibited in all kinds of manufacture is very great. Slovenly work has no place in primitive culture. Even when the members of the family have to provide all their weapons, implements and utensils, these are made with skill. This is still more the case when the technique used in various kinds of manufacture is

the same for most of the needs of the people, as among the Californian Indians, who use basketry for all their household utensils. As more time is devoted to a particular industry, skill becomes greater, and when sufficient leisure is available, joy in the skill acquired leads to a play with the technique that is one of the sources of artistic form.

The mastery of technique results in regularity of outline and of surface in the manufactured object, and there is evidence of the satisfaction felt in their achievement. In some cases the virtuosity displayed in the manufacture is not visible in the resulting form. The satisfaction can therefore lie mainly in the pleasure given by the control of the difficult technique, only secondarily in the regularity of form. Pleasure in virtuosity is the stimulus that leads to the development of complex forms.

The fundamental lines found in all manufactured work are the results of technical processes. The straight line is rare in nature, but is produced whenever a fibre or string is drawn tight or when the same process is carried along by a sure hand. Regularity of curves and circular forms result in basketry and pottery; spirals, in the coiling of thongs, ropes and wire.

Rhythmic repetition is also a necessary result of technical skill, for the regularity of movement involved in skill leads to the regular repetition of the same forms. The more complex the group of technical movements that produce a form unit, the more complex is also the rhythm. Less intimately related to the technical processes is symmetry, which although not universal is of frequent occurrence. Symmetrical forms result in basketry and pottery, but they are not so definitely the results of technical processes as the straight line, the regular curve and rhythmic repetition.

Every technique, as locally developed, produces fixed forms because the same technical processes are employed by all. These forms constitute the basis of the local art style. Without fixity of form art is impossible. The increasing complexity of technique, due to the development of virtuosity, often directly produces surface patterns. This is particularly noticeable in basketry but occurs also in stone chipping, adzing of wood and hammering of metal, whenever the work is done in complex rhythmic regularity. It is necessary to assume that these forms were felt as attractive, for the further development of the surface by decoration does not follow directly from technical needs. It may be observed that borders are emphasized, that prominent points are elaborated and that entirely adventitious forms are produced which have no relation to technical processes. These also follow fixed rules of arrangement. The mental effect of all these products is based entirely on the pleasure given by virtuosity and by a feeling for form.

Representative art has an entirely different source and appeal. It springs from the desire to represent some interesting object and its appeal is based on the contents and forms of the representation. So far as it is merely representation without skill, it has only the slightest relation to art. When executed with technical skill it has the double appeal of content and form. Representation can be made skilfully only in a technique in which virtuosity has been attained. The technique must therefore exert an influence over the form of the representation. The technical style will influence the style of representation. This may be particularly observed in weaving. The arts which allow the most naturalistic representations, on account of the flexibility of their materials, are pottery and carving. The most realistic representations are in the pottery of Peru or the Sudan and in the carvings of the Eskimo. In many other cases the rigidity of the art style will not admit realistic representation even in these materials. In representations of three-dimensional objects on a plane two methods are used, a symbolic one in which all those parts of the object are shown that appear to the maker as essential, without regard to their position; and a perspective one in which a view from a single viewpoint at a single moment is given. The former method is most rigidly developed in the art of the Indians of the north Pacific coast, the latter is characteristic of our classical art. Combinations between the two are frequent, as, for instance, in ancient Egyptian art in which the whole representation consists of a composition of a number of forms in perspective each seen from a different viewpoint.

Among many primitive tribes the association between technical form and representation has come to be so intimate that all forms are expected to be representative, so that apparently geometrical forms are given a symbolic meaning. In some cases this meaning is fixed for the whole community. In others there are great individual variations of the concepts suggested by forms. The symbolic meaning may be of intense emotional significance or it may be merely a name assigned to a form. In some cases

it can be shown that the meaning is read into a design which may be further elaborated according to the idea once suggested, or it may be an old representation which has become conventionalized by use or by the compelling force of an inadequate technical style or by the compulsion of stylistic requirements of space.

Art style is one of the "patterns" that characterize the thoughts and activities of every social unit. It is closely connected with motor habits, but no less with habits of formal arrangements. Every representation is subject to the molding influence of style. Its form is a result of the application of the style, and the style cannot be explained as a result of conventionalization of patterns. There may also be more than one style when different types of technique develop in a tribe, owing to a differentiation of occupations. More frequently one of the types of technique most productive of decorative forms imposes its style upon all the others.

On account of the close interrelation between technical skill and decorative art those parts of the population are the most productive and inventive that do most of the technical work. On the north Pacific coast the bulk of the industrial work consists in wood carving and is done by the men. In California the principal industrial occupation is basketry, which is done by the women. Hence the men are the creative artists in the north, the women in California.

Most primitive art is decorative. It consists of designs applied to useful objects. Works of fine art, made for the sake of art alone, are rare. Small representative carvings of the Eskimo and rock paintings and carvings of the Bushmen belong to this class. The paintings of glacial man also belong primarily to this class.

In some cases representations have a value only on account of the idea they express. This happens sometimes when objects are made for ritualistic purposes, to be discarded after the performance of the rite; or when the representations or symbols serve exclusively the purpose of communication. The symbolic devices used for the conveyance of messages, such as cowrie strings of varied forms in Africa, the signs set up along trails for the information of travelers, or the message sticks of Australia, are primarily means of communication or mnemonic devices. Sometimes they may have at the same time a decorative function, like the feathers of the Dakota Indians which, by the way they are cut and painted, express warlike exploits. The recording of information by means of pictures has also no artistic aim and is in character generally quite independent of the art style developed in those types of technique in which virtuosity has been attained. Picture writing or its further development into ideographic or hieroglyphic writing assumes artistic forms only when transferred to other artistic industries, as in Central American architecture and painting, or where it is given permanent form in codices.

The conditions for the development of music and literature are different from those for the graphic and plastic arts, because they require a different kind of leisure. While hunting and food gathering, man cannot work with his hands. The time for technical occupation is when he is at rest. On the other hand, the imagination from which spring music and poetry is at work at all times when attention is not concentrated on a particular object. For this reason even those tribes that are poor in industrial and art products, like the Bushmen, have a large body of music, poetry and prose tradition.

In primitive culture poetry is inseparable from music, and the dance is generally accompanied by music and poetry. Poetry and the dance are dependent upon musical form. There are simple forms of song in which the musical notes are sung on meaningless syllables. In others a single word or a name may be interjected between the meaningless syllables. In still others the words are distorted so as to become adjusted to the musical phrasing. Only when the words express consecutive thought may the tune be adjusted to the words, by addition or omission of short musical phrases.

Rhythmic repetition, parallelism of structure, and emphasis are the forces with which primitive music and song operate. The rhythm of primitive music is often very complex. Music uses also sequences of pitch. In some regions the whole range of pitch is very narrow, not more than three tones; in others it is wide. Discontinuous intervals are used everywhere, continuous raising or lowering of pitch occurs as a mannerism of singing. The system of intervals is fixed, although not easily defined on account of the inaccuracies of singing. Almost all primitive singing is in unison. When men and women sing together it is in parallel octaves. Singing in parallel fifths or fourths is rare. On the Admiralty Islands singing in parallel seconds occurs. The intervals are not based on harmony and differ from the scales of the music to which we are accustomed. The accompaniment of song by

rhythmic noises—handclapping, beating of boards, drums or rattles—is universal, and rhythm is sometimes carried along by beating alone. The coordination of rhythms of singing, instruments and dancing is often intricate. A complication arises when the instrument that is struck gives several distinct tones, like the drums of ancient Mexico. A further development of percussion instruments is the xylophone. This and similar instruments occur commonly in Africa. Pipes occur in the form of Pandean pipes, as in Melanesia and South America, and as flutes of several tones. Although reed pipes are used as calls and whistles, their use as musical instruments seems to have been confined to the Far East and to Europe. String instruments occur only in the Old World. The use of instruments must have contributed to the development of harmony, to the fixing of intervals and to polyphonous music.

On account of the interrelation between body movement and articulation—a special form of body movement—it seems likely that rhythmic body movements release rhythmic articulations, that is, song. In this sense songs that consist of meaningless syllables may have their origin in rhythmic movement. On the other hand, the excitement engendered by song leads to movements that are related to the rhythm of song, so that in this sense the dance is conditioned by song. All formally regulated body movements must be classed as dance. The dance accompanying states of great excitement, while adhering to the general local dance pattern, loses in fixity of form; the more formal the dance, the more rigid its adherence to artistic pattern. We find among primitive tribes solo dancing, as in the Arctic tribes among whom dancer, drummer and singer are often the same person, or solo dancing accompanied by a chorus. The most frequent form is the dancing of groups of men or of women placed in definite order and all performing the same motions. When these motions are imitative, the dance approaches a dramatic performance. In some cases the dance movements are accompanied by significant gestures or consist of gestures expressive of the words of the accompanying song. We find even more fully developed pantomimic representations.

In more highly developed song the words give a connected meaning. Many of the trifling songs that have been recorded fail to give an adequate impression of primitive poetry because the visitor hears first of all what corresponds to the street songs of our times. The subject matter of song is as varied as our own, although in the precarious life of primitive tribes the emotional connotation of the satisfaction of daily needs is infinitely greater than among ourselves. Hence the numerous songs describing in detail the emotional effect of the movements of animal and hunter or of the occupations of the food gatherer. The patterns of interest are very varied. Among the Eskimo we find songs describing the beauties of nature, a variety of songs relating to hunting, domestic affairs, quarrels, songs of religious import, and others expressing love for children, but hardly any love songs. Among some other tribes love songs are found. The language of religious songs or of other songs of serious import is sometimes archaic, or devices are used that make words appear different from the forms of ordinary usage. Metaphoric expressions, cumulative synonyms, parallelism of form, are used as artistic devices. Rhyme and assonance are rare except when they appear on account of repetition of words.

While most of the poetic forms are lyric, prose is either narrative or oratory adapted to public occasions. It is, however, not rare that oratory, as in the case of the laudatory oratory of Polynesia, takes poetic form. Impressive narrative may also assume a semi-poetic form by the regular repetition of meaningless syllables or by taking the form of a rhythmically organized recitative.

Narrative includes tales dealing with events in human society, animal tales, myths and the like. The forms vary according to local style and occasion. While human tales may be told in free form, the impressiveness of sacred myths may be increased by intimating rather than telling their contents. The form varies also according to the purpose of the narrative. Many Negro tribes like to associate their tales with a moral, as in our moralizing fable. In other cases the point of the tale may be etiological.

There has been much speculation regarding the origin of tales. It has been claimed that mythological tales are an immediate reflex of the anthropomorphic consideration of nature and that many apparently non-mythological tales are derived from myths. This theory is contradicted by the varied interpretation given to tales with mythological significance by various tribes, according to their particular mythological interests. Thus the mythological value appears as attached to the preexisting tale. While mythological concepts result from the anthro.

pomorphic interpretation of nature, plots of mythological tales seem to be transferred from the human sphere to mythology. According to this view folk tales and myths must be considered primarily as products of the art of narrative. Their religious significance is a secondary development. Since the tale is an artistic unfolding of the happenings in human society, it must reflect the habits and conflicts of life of the society in which the narrator lives. Themes like the conflict between father-in-law and son-in-law, or between stepmother and stepchild, must be considered from this angle. It is but natural that the tales reflect intimately the cultural life of the people, although in some cases, as in Europe, it may be the cultural life of a passing or past period. At the same time their character depends upon the play of imagination with the conditions of everyday life. Exaggerations of strength, size, abilities; fulfilment of wishes; conditions the opposite of what we are accustomed to, are features of imaginative narrative the world over.

There are fundamental differences in the forms of tales. Among most primitive tribes the single tales are rather short. Often they are connected by being concentrated around a single character, like the transformer tales of many tribes, the tales of Reynard the Fox, or the raven tales of eastern Siberia. A sequence may be established by letting the hero travel through a certain district. Only in rare instances are tales united by an inner bond, like some of the origin tales of Polynesia. Still more rarely are they cast in poetic form and united into epics, like those of ancient Greece and of the Orient.

Mention should be made of two minor literary forms: the proverb and the riddle. These are highly developed in some parts of the world, as in Africa, almost absent in others, as in America.

Consult: Balfour, Henry, *The Evolution of Decorative Art* (London 1893); Boas, Franz, *Primitive Art* (Oslo 1927); Grosse, Ernst, *Die Anfange der Kunst* (Freiburg 1894), English translation (New York 1897); Haddon, A. C., *Evolution in Art* (new ed. London 1914); Hirn, Yrjö, *The Origins of Art* (London 1900); Riegl, A., *Stilfragen* (Berlin 1893); Scheltema, F. A. van, *Die altnordische Kunst* (Berlin 1923); Stolpe, H., *Collected Essays on Ornamental Art* (Stockholm 1927); Wilson, Elisabeth, *Das Ornament* (Erfurt 1914); Wallaschek, R., *Primitive Music* (London 1893); Stumpf, Karl, *Die Anfänge der Musik* (Leipsic 1911); Werner, H., *Die Ursprünge der Lyrik* (Munich 1924); Leyen, F. von der, *Das Märchen* (Leipsic 1925).

Knowledge. A curious contrast is presented between the actual control of nature based on precise knowledge and the manifold beliefs and practises of primitive man. The inventions previously described are all the result of acute observation and of practical experience. The knowledge of primitive man extends over the whole field of his experience. He is familiar with the habits of animals and with the life of plants, so far as his practical experience brings him into contact with them. The regular movements of sun and moon are known and lead to calendar systems based on the celestial phenomena, but closely related to seasonal occupations. Measures of space and time are the more elaborate, the more extensive their use in technical occupations and in the regulation of daily occupations. Counting is the more elaborate, the more important the number of equal objects in everyday life. The north Californians have standard measures marked on their hands to determine the value of chains of shells; the tribes of British Columbia count their standard values by tens of thousands; the ritualistic calendar of the Pueblos determines with a fair degree of accuracy the time for the performance of the religious acts that occur during a series of years. Principles of geometry are empirically known and applied in the squaring of boxes by giving the diagonals equal length or by making a right angle by equally dividing the base of an isosceles triangle and connecting the center of the base with the apex. Geographical knowledge is embodied in the sailing charts of the Marshall Islanders, which mark the locations of islands, directions of the swell and of currents and cross seas, and in the charts of the Eskimo. All these illustrate the ability to learn from the observation of complex phenomena. The measuring of time and space and the art of counting indicate the beginnings of a systematization of knowledge which, however, has not led to a systematic observation of the regular connections between objective phenomena and the recognition that the objective world cannot be controlled by thoughts or acts that enable us to influence our fellow men.

Consult: Mason, O. T., *The Origins of Invention* (London 1895); Weule, K., *Die Anfänge der Naturbeherrschung*, 2 vols. (Stuttgart 1921–23); Hambruch, P., "Die Schiffahrt auf den Karolinen- und Marshall-Inseln" in *Meereskunde*, vol. vi (1912) no. 6; Goddard, P. E., *Life and Culture of the Hupa*, University of California Publications in American Archaeology and Ethnology, vol. i, no. 1 (Berkeley 1903); Boas, Franz, in Jesup North Pacific Expedition, *Publications*, vol. i–x (New York 1900–26) vol. v (1905–09) p. 410–12, and *Contributions to the Ethnology of the*

Kwakiutl, Columbia University Contributions to Anthropology (New York 1925) p. 112–19.

Religion. As we distinguish objects by size as large or small, by formal expression as beautiful or ugly, by ethical value as good or bad, without being able to draw a sharp line between the concepts of these opposites, so we distinguish between degrees of power over the outer world or of the power of the outer world over us. Ordinary ways of applying power are a matter of everyday experience. Extraordinary ways of applying power are wonderful. The emotion aroused by the latter is one of the chief elements of religious feeling. The line between the ordinary and extraordinary is indistinct. What is ordinary to one person or to one cultural group is extraordinary to another. Thus it is difficult to circumscribe the field of religion in a satisfactory way, because the same ethnic phenomena may have a religious connotation or may lack it entirely. The cure of a patient by extracting from his body the supposed cause of disease, like a piece of bone, may be a purely practical act. It may also be associated with strong emotional feelings related to an unusual heightening of the everyday powers of the practitioner. In the former case it has no religious connotation, in the latter it has. It is necessary to consider in the study of religion all activities and thoughts that are sometimes associated with the feeling of unusual power—either one's own or one that confronts one's self—even if in other cases they lack this connotation entirely. For this reason treatises on religious belief do and must include descriptions and discussions of the greatest variety of customs based on the assumption of relations which we do not recognize as founded on physical cause and effect, or on those in which physical cause and effect arouse a strong emotional attitude associated with the feeling for the existence of heightened powers. The specific character of this emotion is expressed by the attitude of man to those things which he considers sacred, as opposed to the ordinary secular life. From this point of view the religious side of ethical and aesthetic emotion will also find its proper place.

It is convenient to consider religious phenomena from two angles, as thought and action. The former gives us the general view of nature, which in a sense we might call the dogma; the latter, actions related to the dogma or those releasing religious emotion.

There are two widely distributed concepts of power, the one anthropomorphic and clearly conceptualized, the other vague and defined with difficulty. Languages like the American Algonquin, which classify the objective world in what is human-like (i.e. animate) and what is not human-like (i.e. inanimate), give the clearest evidence of the importance of the anthropomorphic viewpoint. It may be that some of those which, like the Eskimo, do not know of any differentiation, recognize human qualities in the whole world. The interpretation of events according to subjective experience is, however, general. As we are only too apt to explain the motivation of action in our fellow men in accordance with our own mode of thinking and feeling, so primitive man, with his lack of controlled experience, explains the events of the outer world as voluntary actions which, if helpful to him, are friendly, if impeding his plans, hostile. This is not to be conceived as a rationalization but as an automatic reaction, like the unrepressed action of a person in our civilization, child or adult, who vents his spleen on an inanimate object that has been the cause of some accident. The dogmatized development of this attitude may lead to the belief that the whole world is animate, or to the belief that human-like beings inhabit all objects and that the objects obey the orders of these beings rather than that the objects themselves act. This is in part the Eskimo conception of the inanimate world. Animals, on account of the many qualities of behavior that they share with man, are most commonly considered as strictly analogous to powerful human beings.

The anthropomorphic viewpoint is conversely applied in the conceptualization of inner experiences and of the phenomena accompanying death. In some languages qualities or even habitual actions are conceptualized as objects so that they appear as nouns. It is not by any means necessary that the occurrence of such concepts should lead to an imaginative process by means of which they are given concrete form and anthropomorphic character, but it affords ready opportunity for such development. We still feel the force in the use of metaphors based on a concrete form given to a state or attribute. Hunger, courage, love, sin, consciousness, death, are, owing either to traditional usage or to poetic imagination, endowed with qualities, particularly anthropomorphic qualities, and with concrete form. Sickness is often conceived as a concrete object or a living being that enters a body and may be removed again, or as an enemy

who attacks the body and against whom man may be defended. Sins or transgressions are commonly considered as impurities that may be removed by mechanical means. The skill of a hunter may be objectivated and exist as an object or as an anthropomorphic being leading an existence independent of the hunter himself. Other qualities, particularly life, power of action, personality, are indissolubly connected with the living individual. Their conceptualization, particularly their anthropomorphic conceptualization, leads to the varying concepts of the soul. It is not rare that several of these occur at the same time, so that we have an apparent multiplicity of souls, in reality a multiplicity of different anthropomorphic aspects of life.

Since those qualities, conditions and functions which we construe under the term "soul" are conceived as substances, body and soul have separate existence and their lives are not encompassed in the same period of time. This seems to be the essence of the belief in immortality. The soul may exist before birth and continues to exist after death, for the memory of the substantiated qualities of a person does not end with his death. The intangible memory-image of the deceased arises suddenly, and vanishes again when the calls of everyday life repress imaginative thought and day dreams. It partakes of all the features of the departed and he appears in his daily garb and in his daily occupations, all of which have, therefore, continued existence. The conflicts between everyday experience and the continued existence of these images lead also to the concept of the remote country of the dead. The detailed development of all these concepts into individual systems of mythology depends largely upon specific ideas developing in a tribal unit or introduced through intertribal relations. Anthropomorphism is the expression of a lack of differentiation between the self and its sense experience.

Fundamentally distinct from anthropomorphization is the conceptualization of power as an attribute of objects. The concept is necessarily vaguer than the concrete anthropomorphization. A stone, a piece of wood or a tree is conceived as having the quality of bringing good luck or misfortune; a particular place or a particular time is endowed with "sacred" qualities; a word or a symbolic action may have the quality of power; or finally all nature may have the quality of exerting power. The awe inspired by any of these phenomena is a response to their immanent power that may have a depressing or an inspiring effect.

Such powers may also be discovered in man. The seer who discovers the future, the twin children who control the weather, the warrior who has slain an enemy, the woman during menstruation or after child birth, and the dead are endowed with powers, helpful or dangerous. Those who have helpful powers perform religious functions in the community and are intermediaries between those without powers and the anthropomorphic beings or the vague powers whom they are able to control.

Both types of reaction to the outer world occur continually side by side and independently. They flow together in so far as the quality of power is ascribed to the anthropomorphized concepts.

Only the anthropomorphic aspect of the world lends itself to the development of mythological concepts, for the human forms participate in human activities. The animals speak and act like men, the wind travels through the world. the sun is dressed in shining garments, the soul leaves the body. For this reason mythological concepts reflect necessarily the pattern of tribal life. At the same time they are transfigured by imagination, human conditions being exaggerated or a contrast being created to the conditions existing in the known world.

Many mythological concepts that are found distributed widely all over the world may be the immediate outflow of the anthropomorphic viewpoint. This seems particularly true in connection with the conceptualization of the soul, of animals as human beings, perhaps also in the readiness with which active natural forces, like sun, wind and thunderstorms, or everchanging natural forms, like the moon, are given human forms; but mythological concepts are so varied and they are so readily influenced by imaginative suggestion that their actual development in each locality can be understood only by an analysis of their complex growth, due in part to the ever changing formulations given by imaginative minds in the course of generations, and in part to suggestions that come from the outside through cultural contact.

The mythological tales attached to the anthropomorphic characters are even more involved in their origins. All these tales, when stripped of their mythological trappings, are clearly human, novelistic tales. It is often assumed that these tales are an expression of the naive contemplation of natural phenomena. Their distribution and the variety of mythological purposes served by the same tale suggest that ordinarily the

reverse process has occurred. The anthropomorphic characters seem to have fitted a preexisting tale or to have suited peculiar human situations that are often the topic of conversation. These were transferred to the mythologic characters. There is ample evidence of the wide diffusion of tales and of the variety of their mythological applications.

Most mythologies attempt to account for the beginnings of things, for the origin of human inventions and for the regulations controlling life. The mythological imagination relating to origins is always satisfied with the existence of things as they are now in another concrete or conceptual world, from which they are brought into the world of man piecemeal or altogether; from a concrete world by heroic or crafty visitors, from a conceptual world through projection into objective existence by a creative will power, as in Semitic mythology; or by actual manufacture according to the preexisting idea. In some cases the beginnings of our era are marked not only by the beginnings of those conditions that make life possible but also by the introduction of the difficulties that beset human life, while the previous period did not know hunger, sickness and death. The correlated idea of an end of our period with recurrence of desired conditions is not so frequent.

While the vague concept of power as an attribute has not the necessary definiteness to lead to the formation of myths, it occurs constantly as an important element of mythical tales, just as it appears in human life: the mysterious qualities of space, exemplified by the contrast between inland and sea, mountains and plains, or between the cardinal points; of time as shown by the power or sacredness of certain hours or days, of the solstices, midnight or new moon; of numbers, as in the formal number of repetitions of an action, of the success of the third brother, of the fifth son or of the fourth attempt to reach a goal. In many of these cases the purely aesthetic pleasure in repetition may be felt as no less important than the mystic relations of space, time and number.

The forms of religious activities and those of religious concepts are interrelated. An extended group of religious activities serves the purpose of obtaining success in undertakings; in other words, they are designed to obtain the fulfilment of wishes. Magical acts are performed to control immanent powers of objects or of mythical beings. In the performance of a process resides the power to have the same process repeated in another desired place or on another object. This is magic by analogy. To dissolve the clay figure of an enemy in running water causes the enemy to waste away. The symbolic act by means of which an end is to be attained varies in character among different tribes and according to the ends to be attained. Fertility of plants or animals is promoted by sexual symbolism, rain and wind by symbolic, imitative actions. An object and all its parts are felt to be so intimately related that an action affecting the part will affect the whole. Particularly the human body is so keenly felt to be one with the hair, nails and excretions, with objects that have absorbed some of the exhalation or perspiration, that their maltreatment will immediately affect the body itself. Whatever is done to the part affects the whole. A spell can coerce anthropomorphic beings on account of its inherent power. The action of amulets is based on their qualities that exert a control over other qualities or anthropomorphic beings. An amulet makes it permissible to visit uncanny places and protects against the attack of spirits. On the other hand unlucky objects may thwart favorable influences.

Generally all kinds of power, conceived as qualities or in anthropomorphic form, are unable to overcome the defiling influences of the unclean, particularly of mourners and menstruating women, sometimes also of a murderer or of a warrior who has killed an enemy. Hostile powers may be overcome by magical acts.

It depends entirely upon the attitude of the performer of a magical act or of the wearer of an amulet whether his behavior is individually of a religious character or whether he looks upon it unemotionally purely as a relation of cause and effect, from his point of view as a practical or scientific process. When accompanied by the emotional state induced by the awe, respect, or feeling of sacredness of the qualities utilized, it is religious.

The devices used for influencing anthropomorphic beings are naturally parallel to behavior by which human beings are influenced: to entreaty, presents or compulsion. These devices applied to anthropomorphic beings are prayer, sacrifice and compelling spell. Formality of prayer and sacrifice are often necessary because their power is believed to be immanent not in the act as such but in its form. The stronger this concept, the more rigidly controlled is ritualistic behavior. Ritualistic accuracy of behavior is sometimes insisted on because of the inherent power of the precise

action; at other times it is interpreted as a requirement imposed by anthropomorphic powers. Simple forms of ritual are merely an expression of custom, like tabus or forms adhered to in gatherings. In most of these the religious explanation is due to rationalization of a prevailing custom, although the rationalization may produce new parallel customs. Examples of such rationalized customs are the food tabus. Some South African tribes observe food tabus, because the eating of the forbidden fruit would cause the teeth to drop out prematurely. There is no reference to a supernatural being. The Eskimos must observe their tabus because the concretely conceived transgression fastens itself to the hair of the anthropomorphic giver of food animals, annoys her and causes her to withhold the food supply.

Many ritualistic acts designed to increase the power of the performer require a heightened emotional state. When power is to be obtained from anthropomorphic beings, their grace is secured by rigorous purification, fasting, dancing and, in some cases, by self-torture. These may lead to a trance in which the desired power-bestowing vision is secured. The person who seeks a vision and the practising shaman work themselves up into a state of high excitement. Other ritualistic acts are perfunctory and lack the emotional connotation. Of this character are most of the tabus and proscriptions which are automatically repeated day by day: small, regular sacrifices and prayers and the like.The greater the formalism, the less the accompanying religious excitement.

Rituals are apt to increase in complexity, the larger the number of participants and the stronger their differentiation in regard to specific powers. Their specific forms depend not so much on religious concepts as on their relation to social forms and aesthetic impulses.

The terms animism, mana and other related ones have been avoided here, because their present use seems to obscure the essential point, the difference between the approach to the "supernatural" from the viewpoints of power conceived as anthropomorphic and of power conceived as an inherent quality of objects.

Consult: Spencer, Herbert, *Principles of Sociology*, 3 vols. (London 1876–96; vol. i, 3rd ed. 1885); Tylor, E. B., *Primitive Culture* (7th ed. New York 1924); Lowie, R. H., *Primitive Religion* (New York 1924); Sneath, E. H., *Religion and the Future Life* (New York 1922); Otto, Rudolf, *Das Heilige* (9th ed. Breslau 1922), tr. by J. W. Harvey as *The Idea of the Holy* (London 1923); Söderblom, Nathan, *Das Werden des Gottesglaubens* (Leipsic 1916); Hauer, J. W., *Die Religionen*, vol. i– (Stuttgart 1923–); Marett, R. R., *The Threshold of Religion* (2nd ed. London 1914); Durkheim, E., *Les formes élémentaires de la vie religieuse* (Paris 1912), tr. by J. W. Swain (London 1915).

Ethics. The impression given by the moral behavior of man in different cultures is that of a great variety of standards. The slight valuation of human life, anthropophagy, slavery, torture of captives, suicide, looseness of sexual relations, represent attitudes that seem fundamentally different from our own standards. Notwithstanding these differences in behavior the ethical motivation does not show analogous differences. A sharp distinction is always drawn between the members of the social group and outsiders. The standard of ethical behavior toward members of one's own group is regulated by subordination of the individual to group interests and by recognition of the rights of other members of the group. Mutual helpfulness in the group is demanded; inordinate egotism that overrides the interests of fellow members is resented. The Eskimo shares his game with unsuccessful hunters, the clan of Alaska Indians supports one of its members in his undertakings by gifts or loans of valuables. Property rights in the community are respected. General subordination under the rules which keep the society going is expected. These rules are not binding outside of the closed social unit. Behavior toward the alien depends upon the form of this concept. In most primitive societies the very fact that only members of one's own group are designated as human beings indicates that, at one time at least, a specific difference was felt to exist between them and aliens. With increasing recognition of the similarity of interests between aliens and group-fellows, the utter disregard of the interests of the former has been weakened, although the feeling of difference is an active force even up to the present time.

The social obligations that develop in intimate family life, particularly the instinctive relations between mothers and helpless children, not always only their own, may be observed everywhere. When the social customs interfere with them, as occurs in numerous cases, ethical conflicts arise.

In primitive society the standard of behavior is fixed by a common culture. As in the Homeric *epos* the relations of man and the gods were recognized beyond the possibility of a doubt and the ethics of behavior were regulated according

to a well integrated culture, so it is in primitive society, which does not favor individual freedom of thought. The individual does not seek an ideal, it is given to him. Pressure in regard to conformity in belief is very rare, but individual actions contrary to custom are so often conceived as detrimental to the common weal that they are resented and suppressed.

The most serious offenses within the social group are murder and bodily harm; infraction of property rights, including adultery; witchcraft and transgression of tabus or other regulations that concern the whole community. In cases of individual or group conflict retaliation is felt as an ethical duty. In some cases the feeling of respect for the rights of fellow members turns into jealous envy of every person who is in any way prominent, by wealth, wisdom or skill. This is a characteristic feature, for instance, of African society.

Consult: Westermarck, E. A., *The Origin and Development of the Moral Ideas*, 2 vols. (2nd ed. London 1912–17); Sutherland, A., *The Origin and Growth of the Moral Instinct*, 2 vols. (London 1898); Hobhouse, L. T., *Morals in Evolution* (3rd ed. London 1915).

THE INTEGRATION OF CULTURE. All the various aspects of human life: bodily form, language, culture, as well as the environment in which man is placed, are interrelated, and the form of culture is a result of this integration. In many aspects of culture the mutual influences are strong, in others weak.

Race and culture. No adequate proof has ever been given showing that the different behavior of racial groups is organically determined. The wide range of differences between individuals and family lines constituting a local race, and the occurrence of identical types in related races, have been pointed out before (p. 75). It has also been stated that this overlapping of forms is much more far reaching in physiological and mental functioning than in anatomical form. The apparent differences in mental reaction of races obtained by students of experimental psychology may be ascribed as well to differences in upbringing and in cultural experience as to differences in anatomical structure. The differences in results of tests taken on people of the same descent, but living in different environment, seem to prove the importance of environmental as against organic determination. In groups as much alike as the various types of Europe no anatomical difference can be found that would explain the varying behavior of different social or local groups. The achievements of different races have been adduced as proof of organic differences. The primitive culture of the Australians, contrasted with the high civilization of Europe, is taken as proof of the lower mental status of the Australian. While it is not possible to disprove the argument in this case, it is certainly not applicable in a comparison of north Europeans, central Europeans, south Europeans, Mongols and Malays. In these cases the historic conditions are so different, the organic basis of mental life so similar, that it seems arbitrary to explain differences as due to biological factors. It is possible that the frequency of creative genius may not be the same in all races and that slight differences in the distribution of various forms of functioning occur, but it cannot be shown that any of the existing races is, on account of its hereditary character, unable to participate in any one of the existing civilizations.

Consult: Gobineau, Arthur de, *Essai sur l'inégalité des races humaines*, 2 vols. (2nd ed. Paris 1884), bk. i tr. by Adrian Collins (London 1915). A general survey of the literature relating to mental differences of races has been given by Theophile Simar, *Étude critique sur la formation de la doctrine des races au XVIIIe siècle et son expansion au XIXe siècle* (Brussels 1922). Unfortunately the author does not discriminate clearly between the theory of racial and cultural characteristics, so that many of his statements are misleading. Among representatives of the theory of lack of correlation between racial descent and cultural life may be mentioned Hertz, Friedrich, *Rasse und Kultur* (3rd ed. Leipsic 1925), tr. by A. S. Levetus and W. Entz (London 1928); Zollschan, I., *Das Rassenproblem* (3rd ed. Vienna 1912); Boas, F., *The Mind of Primitive Man* (New York 1911), and *Anthropology and Modern Life* (New York 1928); Lowie, R. H., *Culture and Ethnology* (New York 1917). A medial position is taken by Hankins, Frank H., *The Racial Basis of Civilization* (New York 1926).

Environment and Culture. Attempts have been made to explain the whole cultural complex as due to environmental influences. This is not possible. In every society the elements that influence the actual course of cultural change are many and varied. We may expect to find an influence of environment upon culture, but the fact that a variety of cultural forms occurs at various periods in the same environment is sufficient indication that the environment alone does not determine specific cultural forms. The American Indian who did not know the use of iron and coal was influenced by his environment differently from his European successor. Increased knowledge changes the relation of man

to his environment. Before horses were introduced, the western prairies played one part in the life of the Indian. After the introduction of horses they played another part, and after the disappearance of the buffalo and the introduction of cattle, still another. Their introduction was determined by historical happenings that had no relation to the environment, but that changed the environment itself. Environment modifies culture, and culture modifies certain aspects of the environment. The limiting effects of environment are clear. The absence of vegetable products limits the culture of the Eskimo, the absence of snow that of the inhabitants of Central Africa. Absence of wood on the steppes, of stone on atoll islands, of fish in the desert are all limiting factors. On the other hand geographical conditions are a creative factor to a very slight degree only. Fertility of the soil does not produce agriculture. It helps in the development of agriculture where the art is known. The presence of large herds of reindeer has not created domestication in America, although Siberian tribes living in an analogous environment have domesticated the reindeer. The presence of iron ores in America has not developed American metallurgy, although in Africa the ores are utilized. The influence of environment is confined to modifications brought about in preexisting cultural forms. The direction which the stimulus takes depends upon cultural factors. The hard snow of the Arctic enabled the Eskimo, but not other Arctic tribes, to invent the vaulted snow hut. The occurrence of clay does not everywhere lead to the development of pottery. When it does occur, the excellence of the technique is not dependent upon the abundance and quality of material but upon the general economic demands and the technical and artistic activities of the people. Given a certain type of culture, the effects of environment may be traced in many important aspects of life, but only in this sense can environment be considered as a determinant. The periodicity of the seasons, the habits of animals, the general configuration of the country all exert their influences. Periods of activity and of leisure, the location of villages, movements of the tribe from one locality to another, the forms of means of transportation and the limits of political units are so affected. Thus the seasonal ripening of fruits followed by periods in which vegetable food supply is not available and the annual movements of spawning fish followed by periods in which the supply of fish is inadequate determine the habits of people dependent upon fruits and fish. The position of villages near streams that abound in fish or on the seacoast; the periodic migrations of tribes that hunt migratory game; the use of the sledge and snowshoe in snow covered countries; the political isolation of communities in secluded valleys, are determined or at least favored by local conditions. The food supply also controls the size of communities that do not import food products and thus exerts an indirect influence over social and political organization. The experiences with which the imagination of the people occupies itself are furnished by the environment in which they live. Hence their traditional tales, their metaphorical expressions and even their religious beliefs require, for a full understanding, a knowledge of the influence of environment upon a preexisting culture and of its importance as furnishing much of the available sense experience.

No less effective is the geographical position of a people that makes possible or hinders cultural contact and the dissemination of ideas and inventions. Attention has also been directed to the stimulating or enervating effect of climate upon the individual, but no direct relation between these conditions and the development of early culture has been proved to exist. Analogous cultural forms exist or existed in tropical Africa and in temperate North America, and advanced cultures flourished in India and in Europe.

Consult: Ratzel, F., *Anthropogeographie*, 2 vols. (2nd ed. Stuttgart 1899–1912); Semple, E. C., *Influences of Geographic Environment* (New York 1911); Vidal de la Blache, P. M. J., *Principes de géographie humaine* (Paris 1922), tr. by M. T. Bingham (New York 1926); Huntington, Ellsworth, *Civilization and Climate* (3rd ed. New York 1924).

Population. The density of population is determined both by cultural achievements and by environment. A population that is entirely self-sustaining, that does not receive food supplies from the outside, is limited by the food supply that can be secured from its habitat. An Eskimo tribe that relies upon sea hunting, or a Californian tribe that lives on acorns, cannot increase permanently beyond the limit that can be sustained in the most unfavorable years. These limits are higher where agriculture or herding occur. When the food supply is ample, the density of a population may increase, provided there are no other checks, like war, infanticide or disease. If at the same time the food supply is seasonal or so easily secured that time for

leisure remains, the total number of individuals who can devote their time to occupations other than the mere obtaining of food and shelter increases, and opportunities for the development of new cultural achievements are given. In general a correlation between density of population and diversity of cultural traits may be observed. Political organization depends upon the size of social units and upon the density of population.

It is possible that the natural limitations of population may have contributed to devices for an artificial retardation of the natural increase, by infanticide, abortion and restrictions of sexual intercourse, although it does not seem likely that these are primary causes.

Consult: Ratzel, F., *Anthropogeographie*, 2 vols. (2nd ed. Stuttgart 1899–1912) vol. ii, p. 95–256; Carr-Saunders, A. M., *The Population Problem* (Oxford 1922).

Language and Culture. The interrelations between language and culture have been touched upon before (p. 78). So far as inventions, institutions, art and religion go, they are not far reaching. Their importance lies in the influence of language upon speculative thought, upon directions followed in attempts to give explanations for customs; still more in the emotional value of words that serve as symbols, like those for supernatural power or sacred objects and acts. This, however, is not a specific characteristic of language. It is common to all symbols.

Interrelations between Other Cultural Phenomena. The relations between geographical environment and fundamental economic conditions are close, and in most cases the environment acts through the intermediary of economic conditions. These, being a part of culture, are much more closely related to other manifestations of cultural life than environment. The occupations by means of which man obtains food and shelter determine the directions in which his discoveries and inventions develop. The sea-hunting Eskimo has developed his boats and weapons because his whole life is based on the procuring of sea mammals for food and for heat; not that the specific forms are determined by the economic occupation, but the concentration of attention upon this occupation gives the opportunity for new achievements. The cattle breeder and agriculturists acquire their experiences and make their technical inventions in those domains of human activity upon which their attention is concentrated.

The amount of leisure depends upon economic conditions. The more easily food and shelter are secured, the more ready is man to devote his time to play with hands, tools and mind. The complexity of cultural activities increases, therefore, with favorable economic conditions.

While it cannot be maintained that social forms are determined by economic conditions, the two aspects of cultural life are indissolubly related. In a region of ample food supply in which the maintenance of life depends solely upon physical skill and in which a sparse population allows everyone to find a productive hunting ground, a differentiation according to rank or wealth is not likely to occur, except in so far as orphans, widows and old people may be thrown upon the mercy of their friends and relatives. When the produce of the country does not allow all to share equally, when specially favored spots are claimed as property, the equality is disturbed and economic and social differentiations are found. Thus the development of property concepts, the organization of the family and of occupations, the occurrence of societies with social or religious functions, are all intimately related to economic conditions. The forms of organization cannot be explained as due to economic necessity, but their development may be favored or hindered by economic needs, while they themselves always influence economic life. Thus property in land may be vested in the whole community. Among hunters and food gatherers all may have equal rights; or the labor bestowed upon a particular locality—like the building of traps, burning over of ground or tilling the soil—may give to an individual or to a group a temporary or permanent right to the use of a particular piece of land. The property rights in these cases depend upon the constitution of the cooperative unit, whether a single person, a family, a sib or a society. In extreme cases, as in some African tribes, all property in land may be vested in a single ruler.

Whenever the transfer of property involves future obligations on the part of the recipient, the transaction is public and gives opportunity to the development of ritualistic behavior. African marriages, the potlatch of northwest America and the elaborate Kula Ring of the Trobriands are examples.

Intertribal relations are strongly influenced by economic considerations. It has been pointed out that war is often a means to the acquisition of necessary or desired property. Peaceful contact

is commonly based on mutual economic interest, on the regulated exchange of produce which may lead to the establishment of regular markets, as in Africa or on the islands in Bering Strait where Asiatic and American tribes meet for barter.

The assumption made by Lewis Morgan and his followers of a close correlation between forms of family organization and other cultural traits is not borne out by the fuller data that are now available. We find the small bilateral family among the Eskimos, unusual complexity of the tribal organization among the Australians. In North America the division of the tribe in a few exogamic sibs is rather characteristic of the agricultural tribes, bilateral families are characteristic of many hunting and fishing tribes.

The terminology of blood relationship and of affinity is only to a small extent an expression of biological relations. It is primarily an expression of social relations. Assuming exogamy as an exceedingly ancient institution, as indicated by its universality, the extension of terms of the incest group beyond the small family will exert an influence over the development of sibs, as indicated before (p. 86). The mutual influence between the early terms of relationship and their application to wider circles may have established larger exogamic groupings and these in turn may have stabilized the linguistic categories.

A close connection may be traced between organization on occupational and political lines and technical progress. The greater the variety of technical processes and the more complex the technique, the more developed is social specialization, as among the Africans where the trade of the blacksmith is often carried on by a separate social class; or in Samoa, where the carpenters are a group by themselves. Specialization in technical pursuits of the two sexes or of individuals of special skill is universal. In the latter group those who are believed to be possessed of supernatural powers form a distinct class. Political organization depends in part upon the type of activity of the tribe, in part upon the size of the population. Recognized leaders who wield authority are found wherever communal undertakings occur that demand leadership for their success. The closer the contact between individuals and families whose interests are liable to come into conflict, the more frequently do we find more elaborate political organization. Its form is not determined by these conditions but by historical relations or other particular conditions.

Religious beliefs pervade the whole domain of cultural life, for technical, economic, legal, social and artistic manifestations are filled with beliefs and actions that have a religious background. Since the success of every action depends upon skill, upon the power of adequate performance, it may be thwarted by hostile or helped by friendly powers. The relation of man to the supernatural pervades, therefore, his whole life. Technical and economic activities are often accompanied by prayers and tabus; and everything pertaining to social organization is sanctified. Customary law is largely occupied with the observances of religious proscriptions.

More essential than these interrelations between various aspects of culture is the unification of culture according to definite patterns. In a number of primitive cultures occur fundamental attitudes that dominate the thoughts and behavior of the society. Thus the Indians of the northwest coast of America are entirely dominated by the desire for rank and social prestige to be attained by lavish distribution of wealth. All the actions of men and women, from childhood on, are dominated by this thought. The methods of social preferment are fixed and may be observed in the procedures connected with social gatherings, shamanism, ceremonies and war. Many Melanesians seem to be under the sway of a similar pattern, in which, however, display of property is more important than distribution. The Indians of the plains are dominated by the idea of advancement of social standing by means of warlike exploits and military glory of a set type, with emphasis upon personal bravery. Their feeling for military prowess as a dominant characteristic of their lives is entirely distinct from that of the headhunting Dyak. In contradistinction to these types of culture that stress social standing, Dr. Bunzel describes the life of the Zuni, Dr. Mead that of the Samoan, who strive to merge individuality in the mass. Dr. Benedict has described in a most instructive manner the distinction between the "Dionysian" orgiastic pattern of the lives of most Indians and the "Apollonian" formal pattern of the Pueblos. In many cases the general cultural pattern is weak and the culture seems to us thin. Nevertheless the strong influence of patterns of thought or behavior may be felt, even in these cases, in more limited aspects of culture. An example is the art style to which every newly invented pattern conforms. The pronounced styles of New Zealand, those of the tribes of the Amazon region, of the basketry of the Indians of

various parts of California or the local character of mythology and folklore are of this kind. The strong influence of the pattern appears also in social organization and religious ritual. When one section of a tribe is designated by a name, all have names; when one believes in a totemic ancestor or protector, all have this belief; if tabus are proscribed for sibs, they are likely to be proscribed for other types of social groupings.

The integration of culture here discussed is not identical with the correlations established by early investigators, like Lewis H. Morgan. It is also distinct from those correlations between language, economic life, social organization and religion which W. Schmidt and W. Koppers derive from a comparative study of cultures. Notwithstanding their attempt to reach historical results by an analysis of cultures based on the occurrences of numerous analogous phenomena, they end with an evolutionary series in which many aspects of culture appear firmly associated on each developmental stage.

Consult: Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912–24) vol. iii, pt. i; Schmidt, W., "Die Genitivstellung in den nord- und mittel-amerikanischen Sprachen" in International Congress of Americanists, 21st congress, *Proceedings*, pt. i (The Hague 1924) p. 287–304, and "Zur Genitivstellung als Ausdruck der geistigen Einstellung" in Anthropologische Gesellschaft in Wien, *Mitteilungen*, vol. lviii (1928) 234–36.

Education. Children grow into the integrated culture largely by imitation. Their play is based on imitation of the activities of their elders and they participate at an early age, at least partially, in many of the industrial and social activities of the community. Formal education does not occupy much time, but it is not lacking. Behavior according to tribal standards is rigorously exacted and breaches are not passed over lightly. The breach of an important tabu, like intrusion into a secret religious society, may even be punished by death, however innocently committed. All this does not make the development of unruly gangs impossible. They may even be encouraged as a means of developing a domineering and warlike spirit. As soon as children are capable of taking part in the industrial activities of the tribe, they are expected to do so. Girls take charge of their younger brothers and sisters, assist in household duties, and learn the industries carried on by women. Boys participate in the work of the men. At the same time moral instruction is given directly, by explaining those types of behavior that are considered right, respectful behavior before elders and supernatural beings, or arrogance toward inferior classes; the proprieties of behavior in everyday life; liberality or parsimony; craftiness or truthfulness. Often the moral teaching is attached to an entertaining tale which may be pointed toward a moral, or may be merely illustrative. An important part of the education of the young is connected with ceremonies of initiation, for in many cases the secret beliefs and rites are divulged to them at this time. The rites also impose severe hardships upon the young. They develop and test their endurance. The function of most of these rites is to make the young full participants in tribal life. The corresponding ceremonies through which the girl has to pass are generally less educative, but hinge upon the magic power of the first menstruation. Still the educative features are not absent. A special feature of the adolescent rites of boys and girls is the preparation for special activities. A boy may strive for means that make him a successful gambler, shaman or warrior; a girl for skill in an industry or in her home work. Sometimes skill in special activities is secured in childhood. The Eskimo shaman may impart power to a child by holding it in his lap. In New Caledonia the navel string cut on a hard stone makes the child hard like a stone in battle; in Vancouver Island, when fastened to the baton of a good singer, it makes the child a good singer.

Consult: Hambly, W. D., *Origins of Education among Primitive Peoples* (London 1926).

THE STUDY OF CULTURES.—*Evolution and Progress.* The early anthropologists, like Spencer, Tylor, Morgan and Lubbock, who developed their theories under the stimulus of Darwinian evolution, observed correctly the increasing complexity of cultural forms, the progress of knowledge and the elimination of antiquated forms. On this basis the theory of the evolution of culture appeared to them as a continuous process. They erred in assuming a single unilinear evolution which may be discovered by means of the study of examples collected at random from all parts of the world. To give one instance, both Tylor and Spencer, each from a single fundamental idea, tried to develop the whole religious structure, although Tylor at least recognized diversification in later development. It is the picture of biological

development in which diverse life forms spring from the same source. Extreme evolutionists even assumed a unilinear development according to which every existing primitive and advanced culture may be given its proper place in a single ascending line. At present we recognize that cultural phenomena rarely have a single source. Economic life has two fundamentally distinct sources in the occupations of man and woman, from the combination of which agriculture, with the help of domesticated animals, later develops; the graphic and plastic arts develop from virtuosity in technique and from attempted representations which flow together and determine the later course of art; in religion are found the two fundamental ideas of power as an attribute of objects and as one of anthropomorphic beings. Besides this, in the further course of historic development, contact with foreign tribes plays an important part, so that the general picture is one of culture arising from multiple sources that unite, branch out and flow together among themselves and with remote lines.

While the general evolutionary scheme is no longer tenable, the problem of progress remains. Observation proves that the inventions and knowledge of man have extended with ever increasing rapidity, and it is possible to speak of progress in technique, in successful exploitation of natural resources and in knowledge, for every step taken is an addition to previous knowledge. Cases of loss of previous knowledge are comparatively rare and, for mankind as a whole, temporary. It is much more difficult to speak of progress in any other cultural activity, except in so far as those aspects of cultural life that contradict the advances of knowledge gradually disappear. The lack of change in fundamental ethical attitudes has been mentioned (p. 97). Progress in social organization refers generally to a better adaptation to economic conditions and ethical requirements as understood according to the general state of knowledge.

Diffusion and Independent Origin. Discussion of the problem of independent origin or diffusion of cultural traits has played an important part in the history of anthropology. The significance of diffusion is now generally recognized, abundant proof being available through the evidence of prehistoric archaeology, of early history and of the distribution of cultural phenomena. The gradual spread of bronze and iron in Europe, the evidence of mutual influences between Europe, Central Asia and the Far East, the distribution of inventions relating to navigation among the tribes of the Indian and Pacific Oceans, the distribution of Indian corn and its cultivation in the two Americas, are cases in point. There is, however, still much uncertainty in regard to the degree of similarity that constitutes proof of historical identity, and also in regard to the interpretations of locally isolated phenomena for which no historical contact seems likely. Some investigators claim for these independent origin, others historic connection. In many cases conclusive proof seems impossible. A detailed study of continuous distributions gives fairly certain results in regard to late contacts, while in many cases the direction of diffusion is determined with difficulty. Thus the interpretation of the history of the megalithic structures of western Europe depends upon an answer to the question whether they are imperfect forms suggested by a knowledge of Aegean structures or whether the latter are an elaboration of the cruder forms. In a case of this kind prehistoric archaeology may give an ultimate answer, while in the distribution of an art, custom or belief that extends fairly evenly over a wide area, but in varying perfection, a categorical answer based on distribution alone cannot be given. Neither is it possible to claim that the region of the fullest development of a cultural form must be its original home. As animal forms have become extinct in a district where they first appeared and flourish now in other continents, so cultural forms may originate in one area, become extinct and live in a remote district. Only in cases of the occurrence of easily recognized fragments of a cultural trait in discontinuous spots adjoining an area of its continuous distribution may we conclude with some certainty that it is recently introduced. A chronology based on distribution alone will always be full of uncertainties.

Inferences regarding early diffusion must be based on our experience in regard to stability of customs. The assumption of stability extending over exceedingly long periods is the fundamental basis of the *Kulturkreise* constructed by Frobenius, Graebner and Pater Schmidt. The basis of their argument is that wherever a sufficient number of independent analogous forms are found in remote areas, these are definite proof of an early historic connection. When in this manner the disconnected, surviving traits of one of the original culture forms have been isolated, the inference is drawn that all mixed

forms are more recent. The original forms are furthermore assumed to be those that are farthest removed from the original home of man—in South Africa, Australia and South America—and on this basis a time sequence is determined. While we must accept the methodological viewpoint, namely that wherever a sufficient number (quantity) of entirely independent elements of identical form occur, these are likely to be of common historical origin, nevertheless the proof of the permanence of the features compared has not been given. Observations on modern primitive cultures show that cultural traits which according to this theory are assumed to have remained stable since earliest times are undergoing constant changes. Neither inventions nor practises nor ideas remain stable under changing environmental or historical conditions. The theory would have to be substantiated by proof showing that those features for which great antiquity is claimed remain stable under varying conditions and over long periods. Stress is laid, for instance, on the square or round forms of houses. The American Athapascans have not retained their house forms, but these vary from square wooden structures to conical tents. In Polynesia, notwithstanding analogy in structure, the Samoans have round or elliptical houses, while house types of most of the other island groups are square. The social organization of tribes is not stable, but undergoes changes—often rapid changes. This is proved by the diversity of systems of relationship in closely related tribes and by such changes as are evidenced by the present status of the Bella Coola and Kwakiutl of the north Pacific coast of America, or by the contrast between the cattle breeding Bantu of east Africa and those of west Africa who lack cattle.

The theory minimizes the possibility of the independent origin of similar ideas. Graebner, with whose name the theory is particularly associated, denies its existence. A few entirely isolated occurrences seem convincing: the looking glass of obsidian of the Romans and of British Columbia and Mexico; the paddle with swallow-tail point on the coast of Oregon and on the lakes of Mecklenburg in Germany; the enema, by means of a tube with mouth piece, of the Bella Coola and of modern times; the scales of ancient Peru and of the Old World; sun dried bricks in the Orient and in America; the writing of numbers, by giving values to each unit according to its position, in Yucatan and in our method of writing; the small arrows used for bleeding in Africa and in Asia. It is difficult to give historically valid examples of the independent development of inventions, because our civilization has been for a long time richer than that of primitive people and because the popular knowledge of elements on which new inventions are based is not well known. Thus the safety pin seems to have been reinvented after it had been in general use during the bronze period. Still it is mentioned in Germany by Hans Sachs in 1568. The jew's harp was recorded as a new invention in 1673, although there is evidence that it was known in 1535. The winding of twine in Polynesian fashion was reinvented in New York, but a patent was denied on account of the use of the method by the Polynesians. The history of invention and discoveries proves that in a given stage of culture analogous discoveries are bound to occur. This should apply also to primitive people who live under similar conditions and who are confronted by similar problems.

There is also lacking a clear definition of identity. A careful analytical study would justify the rejection of many assumed identities. The development of square and round houses does not need to have followed the same course everywhere. The invention of boards and their use for house building necessitates angular structures. The use of two parallel inclined wind sheds also leads to the construction of angular houses. Totemism is not by any means the same everywhere, either in character or in origin. Australian and American totemism are analogous neither in form nor in concept. In small tribes two class systems may develop through a reduction of multiple divisions. Others are based on the dual organization required in games in which the whole tribe participates and which may have entered deeply into the social structure, or upon the contrast between peace and war functions, between the sacred and the secular. These forms vary so much that comparability must be proved in every case. Shamanism is a generalized term which includes many different concepts of the relation between the shaman and the supernatural world.

Cultural activities in adjoining territories are often similar in form, but differ in their significance. In North America the uniformity of the art of the prairie tribes and its individuality when compared with the art of other districts prove a common historic origin. Nevertheless the types of symbolic meaning given to the same forms are strongly differentiated. The ritual of

the sun dance is essentially the same, but not its meaning. In the explanatory or ritualistic use of the same mythological notion each tribe shows its individuality. Similar observations have been made in regard to the culture of Polynesia, where similar objective features have been retained in distant islands, although their social connotation is not the same. This is true, for instance, in all that pertains to canoe building. It may be inferred from these and other similar observations that, on the one hand, actions are more stable than their significance; on the other hand, that it is easier to adopt a new mode of action than a new system of thought. As among ourselves, a certain institution or other form of behavior may continue for a long time while with changing culture its meaning changes; on the other hand, foreign forms may be copied but filled with a meaning that conforms to the mental habits of the society that adopts it. The explanation of a custom given by a people at any given time must always be considered primarily a psychological one. It is very rare that the psychological explanation actually coincides with the historical development of the custom. All these considerations stand in the way of the acceptance of the *Kulturkreis* theory, which is based on the assumption of the permanence of correlations of supposedly identical cultural traits, the identity of which has not been safely established and which in modern primitive cultures prove to be unstable.

Consult: Ankermann, B., "Kulturkreise und Kulturschichten in Afrika" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 54–90; Frobenius, Leo, *Ursprung der Kultur* (Berlin 1898); Graebner, F., *Methode der Ethnologie* (Heidelberg 1911), and "Die melanesische Bogenkultur und ihre Verwandten" in *Anthropos*, vol. iv (1909) 726–80, 998–1032, and "Kulturkreise und Kulturschichten in Ozeanica" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 28–53; Schmidt, W., "Kulturkreise und Kulturschichten in Südamerika" in *Zeitschrift fur Ethnologie*, vol. xlv (1913) 1014–1124; Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912–24) vol. iii, pt. i; Rivers, W. H. R., *The History of Melanesian Society*, 2 vols. (Cambridge, Eng. 1914). I have not entered here upon a discussion of the views of G. Elliot Smith (see his "Primitive Man" in British Academy, *Proceedings*, vol. vii, 1915–16, 455–504, and *Migrations of Early Culture*, 2nd ed. Manchester 1929, and *Ancient Egyptians and the Origin of Civilization*, new ed. London 1923; also Perry, W. J., *The Megalithic Culture of Indonesia*, Manchester 1918, and *The Children of the Sun*, London 1923) because the basis of his hypothesis of a pan-Egyptian origin of all cultures is contradicted by all we know about primitive cultures.

Culture Areas. The concept of culture areas has been developed as a device for describing the typical common characteristics of culturally related tribes. Such groups are generally found in contiguous areas, although they may also be scattered and interspersed among other cultures, like the Pygmies of Africa or the Pueblos of New Mexico and Arizona. The necessity of such a grouping develops from the bewildering variety of individual cultural forms that fill the continents. It originated in the needs of museum administration and found its first expression in the system of cataloguing introduced by Adolf Bastian in the Ethnographical Museum at Berlin. Ratzel in his *History of Mankind* based his descriptions on this device, and Clark Wissler employed it in his description of the North American Indian. Like every other classificatory device built on a selection of typical traits, the concept of culture areas contains a strong subjective element and varies according to the stress laid upon one or the other traits of culture. To those who see the principal trait of culture in economic conditions and inventions and to those who lay particular stress on psychological attitudes, folkloristic material or social organization, the culture areas will not be the same. To those who have a keen feeling for the varying associations between such elements or who stress more minute differences, large culture areas appear too generalized. The assumption that the generalized characteristics of the culture area are present in any one of the constituent social groups may give an entirely erroneous picture of the integration of cultural values in a particular tribe. Thus the classification of the agricultural tribes east of the Mississippi valley, of the western prairie tribes and of the plateau tribes who were fishermen and buffalo hunters, each into one group in which all their cultural manifestations are thrown together, would give a warped picture of the individualities of their cultural types, although it is a convenience in visualizing certain aspects of their lives. This difficulty is also manifested in the concept of marginal areas which is a necessary complement to that of culture areas, because in intermediate districts the selected typical forms lose their prominence. The marginal cultures are no less complete in themselves than the typical ones, although they do not find an adequate place in the scheme of culture areas. In exceptional cases important contrasts may be found that set off one culture against another, such as Eskimo and Indian, Pueblo and nomadic Athapascan.

Pygmy and Bantu, but much more commonly transitional forms are found. The description of a typical tribe gives a safer insight into an integrated culture than the description of a culture area. On the other hand an analysis of culture areas as defined from various points of view, material culture, social organization and beliefs, gives us an insight into the conditions that helped to shape each individual culture.

Consult: Wissler, Clark, *The American Indian* (2nd ed. New York 1922); Herskovits, M. J., *The Cattle Complex in East Africa* (Menasha, Wis. 1926); Ankermann, B., "Kulturkreise und Kulturschichten in Afrika" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 54–90.

Historic Reconstruction. Archaeological research and the analysis of cultural forms are the only approaches by means of which historical reconstructions can be made. In favorable cases the sequence of deposits and fullness of remains may give a clear insight into historical happenings, although there often remain doubts in regard to the direction of cultural movements. European and Oriental prehistory and partly the prehistoric investigations of the Pueblo country, Mexico, Central America and Peru show that considerable parts of local history may be cleared up and that also early relations that extend over continents may be discovered. The analytical study of modern cultures gives us first of all merely a picture of geographical distribution which must be interpreted in historic terms. When adjoining cultures are studied, the fact of diffusion can generally be discovered with satisfactory probability. When the continuity is broken, convincing proof becomes the more problematic, the simpler and the more locally confined the phenomena compared and the greater the distance between the places of occurrence. The direction of dissemination and places of origin are not easily ascertained because the place of highest development and the center of present distribution do not need to coincide with the place of origin. An example of this is the distribution of tattooing, particularly in Polynesia. Most elaborate systems are found in New Zealand and the Marquesas; but these were not the places where the art had its origin. The sledge of the Arctic need not have been invented in Siberia where the most elaborate forms occur; bronze was not invented in Scandinavia where at one period it had a remarkably high development. For these reasons the historical results of an analytical study of culture may be convincing for recent changes in narrow areas and therefore of great value because they illustrate the kind of cultural changes that are occurring. They may even reveal the processes by means of which these changes came about. The more remote the time and the greater the distances between the areas to be compared, the more uncertain will be the results. A systematic chronological history of the sequence of cultural types the world over, although much to be desired, seems at the present time unattainable.

On the other hand negative evidence based on the presence of certain cultural features in one area, their absence in another, may give important evidence of continued separation. Universal distribution of cultural forms, if substantiated by great prehistoric antiquity, may be taken as proof that the form in question was either carried along by man as his habitat spread over the whole world, or invented repeatedly at a very early time. Stone flaking is almost universal. In a few places where hard woods offer a satisfactory substitute it does not occur. Fire is used all over the world. These have also been shown to occur in palaeolithic times. On the other hand, pottery and agriculture are not universal and they appear only in neolithic times. Metal work is restricted to the Old World and a few advanced tribes of Central and South America. Its invention is much more recent. Nevertheless universality of distribution cannot always be taken as proof of age. This can be seen in the history of Indian corn and of tobacco, which have spread all over the agricultural world since the discovery of America.

The contrast between the Old World and America indicates the early separation of the two continents. The plants on which agriculture is based in America are throughout distinct from those of the Old World, where millet was probably cultivated in gardens. Later, with the introduction of the plough, wheat and barley came in. Rice has been cultivated for a long period in eastern Asia. American agriculture is based on Indian corn, beans and squashes, all American plants. If American and Old World agriculture were historically connected we should have to expect that some of the important plants would be common to both. The American pottery area is separated from that of the Old World by one without pottery in the American Northwest. Domestication of large animals, excepting the dog, is confined in America to the Andean plateaus. Among American traps the spike trap (a ring with spikes turned inward) is absent, although it is common

in the Old World. America does not know the wheel. These differences in material culture are accompanied by others in custom and belief. America lacks an organized judicial procedure. The formal taking of evidence, the oath for the purpose of ascertaining guilt, the ordeal, are unknown in America. Even in Mexico no true ordeal is found. The idea of obsession by spirits which enter the body of the obsessed and belief in the evil eye seem foreign to America. In literary form there is an almost complete absence of the riddle and proverb. The few given by Bernadino de Sahagun (*Historia general de las cosas de Nueva España*, ed. by C. M. de Bustamente, 2 vols., Mexico 1829–30; vol. ii, p. 232–37) may be suspected as due to Spanish influence. These disagreements are much more convincing than the agreements which may be ascribed to parallel development, while the complete disappearance of essential parts of culture complexes seems very unlikely.

On the other hand, Europe and the greater part of Asia and of Africa must be considered culturally as a unit in which most of the traits absent in America have been historically disseminated: cultivated plants; animals of Asiatic origin, as the African cattle; judicial procedure with the taking of evidence, the oath and the ordeal; the abundance of riddles and proverbs; in a large portion of the Old World the ancient use of bronze with the typical fibula; the use of milk; of the wheel; of agriculture with the help of the plough drawn by animals; the belief in obsession.

Primitive Mentality. A distinction must be made between three aspects of primitive mentality. One of these relates to the mentality underlying the type of thinking and feeling expressed in primitive culture; another to the mentality of the individual as a member of primitive society; the third to that of the group. Folk psychology, as it is generally understood, deals with the first of these three aspects. Its basis must be found in the mentality of the individual as developing under social and other environmental stresses and in the forms of mental behavior of the community resulting from the joint action of the individualities formed and forming under these social stresses.

The mentality expressed in primitive culture differs from that prevailing in educated, civilized society in so far as fancied relations between the objective world and the fate of man occupy a prominent part. We call these beliefs, in so far as they survive among ourselves, superstitions. Included in these fancied relations are those relating to the effects of man's own objective action, reacting upon human lives through their influence upon the real or imaginary objective world—so-called magical art. Notwithstanding the prominence of this aspect of primitive thought the everyday activities and the range of knowledge of primitive tribes show that under other conditions their thoughts are regulated by a clear recognition of the practical means that are required in order to attain an object. Cause and purpose are clearly recognized, both in practical everyday life and in language. The early discoveries of primitive man illustrate his ability to profit by experience and to retain what is practically useful, and the numerous activities by means of which technical or other practical difficulties are overcome prove that in practical activities he acts and plans as we do. Sometimes his work is accompanied by what we might call extraneous actions that have no immediate relation to the object to be attained, such as prayers and observance of tabus and other ritualistic acts, but psychologically there is no fundamental difference between these customs of primitive life and the customs current in our civilization of invoking church ritual in activities that claim particular social importance, such as marriage, legislative and educational meetings or war. The essential divergence lies in different concepts of helpful or hindering powers that have no true causal relation to the actions that are being performed.

The knowledge of nature possessed by primitive man is essentially practical, not systematized, although beginnings of systematization may be found in methods of measuring time and space. The control of nature is imperfect, and untoward accidents in daily pursuits are more common than in work carried through by the perfected machinery of our times. At the same time much of the labor of primitive man is far more essential, in its direct results for the maintenance of life, than in our civilization, in which this relation is felt only through the intermediary of money values. This is one of the reasons that gives a higher emotional tone to many aspects of primitive labor.

It has been pointed out before (p. 94) that the power of influencing the course of events, conceived either anthropomorphically as a will power or as a quality, is believed to be inherent in the objects of the outer world. It does not seem necessary to assume that these concepts

develop through mental processes different from our own, for the experiences of everyday life teach constantly the existence of forces that cannot be overcome and that lead by the ordinary processes of conceptualization to the opposites of normal and supernormal, that is, supernatural, power. Their influence upon human activities is constantly held in mind. Under these conditions the emotional background of life is strengthened, and similarity of emotional attitude forms an associative bond. Thus it may be understood that the principal food animals and the powers that control them may among some tribes present themselves to the mind together, as a unit and in this sense identified, like the Christian Trinity. In the same way a person may identify himself with an animal when the emotional associative bond is strong enough. The warrior who not only acts a bear, but identifies himself with a bear, does so in the particular aspects of warlike ferocity, while at other times he may identify himself with his ancestor or with his totemic animal. This identification is probably analogous to our identification of music and sound waves. The two are identical from the viewpoint of physics, and yet musical form, auditory impression and vibration of the air are distinct. Owing to lack of clarity of expression the partial identification appears as complete.

While the knowledge of nature is not systematized, it is not rare to find that the beliefs of the tribes are brought into a system, generally the more so the more they are in charge of a few or single individuals. The mythologies of the Polynesians, those of the west Africans and those of the Pueblos of New Mexico may serve as examples. Even where the unifying effect of a single mind does not make itself felt, fundamental thought patterns may be recognized that underlie the views and attitudes of the people. This difference is probably due to the lack of a unity that holds together the many scattering observations of natural phenomena, as against the single notion of supernormal power in its anthropomorphic and qualitative form that is the basis of those beliefs and actions which are not derived from the practical handling of objects.

It does not seem necessary to assume on account of these cultural viewpoints that primitive man has a type of mind different from that of civilized man. His intellect deals with the phenomena of the world in the same way as ours, but with a different knowledge which admits what we should call supernatural interference with the laws of nature.

These considerations are not quite true for the individual in primitive society. In order to understand his way of thinking and feeling, it must be remembered that by education and imitation definite types of mental processes have been established and that a certain traditional content has been transmitted to him. With these he operates. The manner of thinking and feeling and the contents of tradition are normally not subject to critical examination. They form the basis of thought and action. A study of the behavior of primitive man shows that, given his premises, he acts logically. The acceptance of traditional premises is not a proof of a type of thought different from our own, but analogous to our acceptance of traditional theories, right or wrong. The stimulus to criticism contained in our diversified civilization and in the systematic exploration of nature does not manifest itself with equal intensity in other aspects of modern life. It is also not admissible to assume that criticism of tradition and skepticism in regard to traditional dogma never occur. Even the traditional tales of people tell of unbelievers, and individuals are found to whom the supernatural means little or nothing until they are shaken by strong emotions.

The mentality of the group finds expression in the interaction between individuals and in joint action. In so far as interaction between individuals remains in the bounds of individual behavior, it introduces new aspects into the scope of thought and feeling of the individual, but does not introduce other new elements. It is different in cases of joint action, when the close contact among the many releases the reactions of the crowd. The opportunities for expressions of crowd psychology are numerous in all societies in which joint enterprises are common. Joint hunting expeditions, migrations of the tribe from one village to another, group games, war, assemblies with much oratory and singing, group rituals, particularly those combined with dances, evoke the crowd spirit in which the emotional side of the mentality is immensely strengthened, and emphasize the emotionally conditioned associative acts

The intellectual powers and the will power of primitive man appear different from our own when measured by the motivations characteristic of modern life. When measured by their own motivations these differences seem insignificant. In practical everyday life intelligent effort is

evident; the will power demanded in war, hunting expeditions and in the enduring of hardships imposed by custom is no less than what we find in modern life. There is greater emotional instability owing to the stress laid upon supernormal influences controlling human life and the frequency of group activities. The emotional indifference exhibited in other cases that in modern civilization evoke strong emotional reactions—like the death of infants, or cruelty—shows that there is no essential difference in capacity for control, but that the conditions for exciting strong emotions are different.

Consult: Lévy-Bruhl, L., *Les fonctions mentales dans les sociétés inférieures* (Paris 1910), tr. by L. A. Clare as *How Natives Think* (London 1926), *La mentalité primitive* (Paris 1922), tr. by L. A. Clare (New York 1923), and *L'ame primitive* (Paris 1927), tr. by L. A. Clare (New York 1928); Cassirer, Ernst, *Philosophie der symbolischen Formen*, 2 vols. (Berlin 1923–25); Wundt, W., *Völkerpsychologie*, 10 vols. (new ed. Leipsic 1911–20, vols. i–ii and iv–vi published previously 1900–09); Vierkandt, A., *Naturvölker und Kulturvölker* (Leipsic 1896); Tylor, E. B., *Researches into the Early History of Mankind* (Boston 1878), and *Primitive Culture* (7th ed. New York 1924); Spencer, Herbert, *The Principles of Sociology*, 3 vols. (London 1876–96; vol. i, 3rd ed. 1885); Tarde, G., *Les lois de l'imitation* (3rd ed. Paris 1900), tr. by E. C. Parsons (New York 1903); Boas, F., *The Mind of Primitive Man* (New York 1911); Van der Leeuw, G., *La structure de la mentalité primitive* (Paris 1928); Allier, Raoul, *Les non-civilisés et nous* (Paris 1927), tr. by F. Rothwell as *The Mind of the Savage* (London 1929); Preuss, K. Th., *Die geistige Kultur der Naturvölker* (2nd ed. Leipsic 1923), and *Glauben und Mystik im Schatten des höchsten Wesens* (Leipsic 1926); Werner, Heinz, *Einführung in die Entwicklungspsychologie* (Leipsic 1926).

Laws of Cultural Development. The complexity of cultural development is so great, and the conditions that determine the course of historical happenings are logically so entirely unrelated, that the attempt to give an adequate explanation of the history of any individual society in regard to biological type, language and culture seems hopeless. Under favorable conditions certain specific sequences may be discovered and a strongly generalized picture of some of the fundamental facts in the history of mankind may be ascertained, such as refer to the original home of man, his gradual spread over the world, the sequence of inventions in different parts of the world and the special lines of development followed in continental areas.

The earlier hope of the discovery of a necessary sequence of cultural stages which would hold good for all mankind has been dissipated. The question remains how far specific laws may be found that express analogous processes occurring in diverse societies. This question may be asked in regard to the biological, linguistic and cultural aspects of social life.

Universally distributed forms, if not carried by early man all over the world, may be interpreted as determined by human nature. The general anatomical, physiological and psychological traits found in all members of mankind are certainly so determined. They are, so far as they are not shared by animals, the specific characteristics of the human species. Upright position, the form of the foot, the development of the brain, the adjustability to animal and vegetable food, the functioning of nervous system and sense organs belong to this group. The most generalized traits of language are also more easily understood as due to psychological necessity rather than to divergence from an early pattern. The classification of experience and the symbolic representation of each class by articulation; the necessity of bringing these classes into relation in order to convey a meaning from person to person; the distinction between the speaker, the person addressed and the object spoken of, are unavoidable characteristics of language. In the same way general characteristics of human thought may be determined. Adolf Bastian saw the prime object of ethnological study in the discovery of these forms of thought, the *Elementargedanken* which may be discovered in every culture, diversified as *Völkergedanken* according to modifications determined by the "geographical province." The classification of experience, particularly as expressed in the separation of object and attribute and the reobjectivation of the attributes, leads immediately to generalized thought forms which, notwithstanding their diversity of form, are expressions of the same mental processes. In this class are also the universal occurrence of inventions and of the objective knowledge of the world, results of physical work; of metaphysical knowledge, due to methods of classification; of religious knowledge, based on the emotional reaction of man to the powers that control him and that he controls; of the standardization of artistic style, and of ethics. From Bastian's point of view the universality of occurrence has particular importance.

Another set of problems refers to laws

governing changes in bodily form, language and culture. The occurrence of a hereditary modification of bodily form will spread or become extinct in the population according to the laws of genetics. Linguistic forms influence one another by analogy; sounds are assimilated or dissimilated. An established cultural pattern will dominate the cultural behavior. General laws may also be discovered referring to specific relations between various aspects of social life. Here belong, in the domain of biology, those dealing with the phenomena of the influence of environment and selection upon form and function of the human body. The increase of stature under the improved hygienic conditions of modern times may be generalized and said to hold good for all populations. Similar problems present themselves in the study of language. Most of these refer to linguistic changes that occur under the stresses of cultural requirements and relate to semantic changes, or to the formation of new words or forms that meet the new needs; to suppressions and replacements due to tabus; or to the formation of metaphorical expressions.

In the discussion of the integration of culture (p. 98) a few of the phenomena that may be expressed in the form of generalizations have been mentioned. Here belong the relation between density of population and increased social regulation; the limiting effect of environment and of economic conditions; and the molding effect of a pattern developed in one domain of social life over others. These generalizations, unless qualified by an application to specific social conditions, are likely to be so vague that their value for the understanding of definite problems is not great, while the specific cases are so complex that the generalizations are no longer applicable to any considerable number of societies.

Although the doctrine of unilinear evolution can no longer be maintained, it seems possible that laws exist that determine the development of a given culture in a definite direction. The gathering of vegetable food was followed by garden culture; the use of stone by that of copper, both in the Old World and in America. The development of modern science proceeds on the whole in a definite direction. As long as the same principles of thought or action persist, general characteristics of development may be predicted. When the beauty of decorative art is seen in an abundance of lines that cover the whole background, the profuseness of decorative motives will increase, but it can not be predicted either what particular direction decorative motives will follow or when a sudden change in taste may set in. When metaphysical or religious knowledge begins to be systematized the system will be elaborated until a new line of interest turns thought in a new direction. Probably all that can be said is that as long as a certain trend of activity or thought persists it will proceed, on the lines laid down, toward an increasing intensity or complexity. Nothing can be predicted in regard to detailed style of development, the duration of the trend and the new direction that action and thought may take after its termination.

Consult: For Bastian's views: Achelis, T., *Moderne Völkerkunde* (Stuttgart 1896). Also Spencer, Herbert, *Principles of Sociology*, 3 vols. (London 1876–96; vol. i, 3rd ed. 1885); Kroeber, A. L., "The Superorganic" in *American Anthropologist*, n.s., vol. xix (1917) 163–213, and "On the Principle of Order in Civilization as Exemplified by Changes in Fashion" in *American Anthropologist*, n.s., vol. xxi (1919) 235–63.

FRANZ BOAS

See: ARCHAEOLOGY; ANTHROPOMETRY; CULTURAL GEOGRAPHY; HUMAN GEOGRAPHY; PREHISTORY; CULTURE; CIVILIZATION; LANGUAGE; RACE; MAN. See also articles on specific anthropological topics discussed above.

ANTHROPOMETRY may be defined as the measurement of human beings. The term is synonymous with physical anthropology and is an integral part of biometrics, since its data, in large measure, are to be understood only through the use of statistics. The two types of anthropometric measurements gathered are those which are taken on the living and those taken on the skeleton.

Measurements which can be taken on the human form are almost infinite in number, but they have been standardized by anthropologists so that not more than one hundred are utilized. Indeed in actual practise far fewer are considered, and generally too few measurements are taken. Those favored most are head length and breadth, auricular head height, facial height and breadth, nasal height and width, stature, height sitting and bodily proportions, from which various indices are derived. Nonmeasurable traits such as color of hair, eyes and skin, the form of the hair, the presence or absence of the epicanthic eye-fold, the degree of prognathism, are also noted. In addition traits such as cranial capacity, total height of the head, and measurements of the long bones are usually taken on skeletal material. The most complete

set of measurements is that of Martin's *Beobachtungsblatt*, where provision is made for practically all measurements on the skeleton and the soft tissues, for observations of non-measurable traits and for indices derived from the measurements.

One of the anthropologist's important problems is that of guarding against sources of error. The first is that due to the personal factor present in measuring. Another is that arising from the instrumentarium used. Some instruments, such as the spreading and sliding calipers, are of great accuracy, but others, such as the older radiometer, had large observational error. The third source of error is that of the conditions under which measuring is carried on. Thus, in a study of growth, it is important to realize that there is daily variation in stature which might conceivably affect the results. More serious are the errors entailed in the fact that landmarks used in taking many measurements on the living are obscure, due to the soft tissue over the subcutaneous bony structure. On the other hand there is a tendency on the part of some to insist on what may be termed spurious accuracy in measurements, which goes with a failure to realize that a small error in a large measurement need not be significant and that measurements are not to be regarded as ends in themselves.

The relation of the traits measured to the purposes of the study for which they are measured is a point which has been grievously missed. Tremendous emphasis has been placed on the measurement of head length and breadth, and populations have been placed in racial categories mainly on the basis of these traits, with perhaps a correlated series of observations of skin color, stature and color of hair and eyes. It must be obvious, however, that difference in head form is only one of an almost infinite set of differences which may be found between any two peoples, and it has happened too often that other important traits have been omitted. The problem of racial differences, especially in the differences between the European subtypes, has been considered practically solved when differences in head form and stature and color of skin and hair have been shown to exist, and the further fallacy has occurred of then attributing other characteristics to these "types," such as psychological traits. An example of this is a recent study of the "racial" incidence of cancer in Europe which was attacked by correlating numbers of cases in given districts with cephalic index and stature. The feeling at the present is that the traits which should be measured are those which fit the problem in hand and, as a rule of thumb, that the more numerous the traits measured, the greater the validity of results obtained from the study, other things being equal. Thus, in a study of differences between long headed north and broad headed central Europeans, the form of the head would be of considerable importance, while in a study of the differences between long headed north and long headed south Europeans, head form would be of very little significance. As a matter of fact the classificatory method is being discarded for the more empirical one of studying a given group in an endeavor to describe it as it is and to understand the processes involved in its formation, rather than to make it fit into more or less arbitrary schemes of classifications. Among the earliest work of this type was that of Franz Boas, who studied the influence of change of environment on physical form, and of Eugen Fischer, who studied the south African Bastaards to obtain insight into the processes of human race crossing.

It is only seldom, as in the cases of prehistoric finds, that measurements on one individual are undertaken, but here they are of major significance. The data of anthropometry are generally such that statistical treatment must be given the material gathered. There are certain anthropologists, however, notably Hrdlička, who feel that statistical handling of results befogs them. Students who follow this opinion are for the most part more interested in problems of morphology than in those of a larger social nature which anthropometry may help to solve, and in the United States and England they are in the minority. On the continent most anthropometric work is of this nature, and it is only recently that the importance of statistical handling of mass data has been realized. Statistical analysis of physical measurements characterizes the work of most American anthropologists, such as Boas, Todd, Hooton and others. This group feels that the element of selection is highly important and that only recognition of the laws of chance will tell whether the results of a study are representative.

The most important problem to be studied is the differentiation of human groups, both the larger ones termed races, and the smaller groups which have become dissimilar in physical form. This was the first work done by anthropologists, and today we have not inconsiderable data on the basis of which the races of man and

the subtypes within them can be distinguished. Much attention in earlier times was given also to criminal anthropometry, but interest in this phase of the work has today largely lapsed. Then came the problems involved in racial crossing: problems of great social significance such as the results of race crossing and its desirability or undesirability. The processes of human heredity, to the consideration of which Boas, Davenport, Lundborg, Fischer and others have outstandingly contributed, pose the next large group of problems. Whether Mendelian heredity in its simpler forms is operative among human beings has yet to be solved by the anthropologists, but its social importance for a knowledge of human behavior as influenced by the crossing of different peoples is obvious. The fact that man is a slow breeding animal makes the study of human inheritance a matter for involved statistical treatment, and makes it necessary that material should be gathered from large numbers of parents and their children.

The effect of social conditions on growth is another problem which the anthropometrist is attempting to solve. The work of Baldwin, Boas, Martin, Todd and others stands out in this line. The establishment of criteria of physiological as against chronological age is involved in this, and measurements of the bones of the hand, wrist and forearm in children, as shown on radiographs, constitute one recent method of attacking the problem. Differential rates of growth in different environmental conditions, holding the racial factor constant, involve another type of problem which anthropometrists have attempted to solve, a problem to the understanding of which the research of Martin on the German "famine-children" greatly contributed. Repeated measurements on the same children are also being stressed; the feeling being that we have sufficient mass data on growth to go as far as such material will allow, and that intensive study of the same individuals will yield enlightening information which will again give new leads for further research. The problem of heredity versus environment is the last great problem which faces the anthropometrist. That man is a flexible organism seems established, and the problem resolves itself into determining the limits beyond which adaptation is not possible. Bauer's concepts of idio-variations and para-variations have helped to clarify the problem, and further measurements under what simulates control conditions may in time bring a solution of this puzzling and important question.

MELVILLE J. HERSKOVITS

See: ANTHROPOLOGY; ARCHAEOLOGY; STATISTICS; RACE; ADAPTATION.

Consult: Haddon, A. C., *History of Anthropology* (New York 1910); Hrdlička, A., *Anthropometry* (Philadelphia 1920); Martin, R., *Lehrbuch der Anthropologie in systematischer Darstellung*, 3 vols. (2nd ed. Jena 1928); Boas, F., "The Cephalic Index" in *American Anthropologist*, n. s., vol. i (1899) 438–46, and *Changes in Bodily Form of Descendants of Immigrants* (New York 1912), and "Report of an Anthropometric Investigation of the Population of the United States" in *Journal of the American Statistical Association*, vol. xviii (1922) 181–209; Fischer, Eugen, *Die Rehobother Bastards* (Jena 1913); Bauer, E., Fischer, E., and Lenz, F., *Grundriss der menschlichen Erblichkeitslehre und Rassenhygiene*, 2 vols. (2nd ed. Munich 1923); Statens institut för rasbiologi, Uppsala, *The Racial Characters of the Swedish Nation; Anthropologia Suecica MCMXXVI*, ed. by H. Lundborg and F. J. Linders (Uppsala 1926); Baldwin, B. T., "The Physical Growth of Children from Birth to Maturity" in *University of Iowa Studies in Child Welfare*, vol. i, no. i (1920) 261 *et seq.*; Todd, T. Wingate, and staff, numerous papers appearing principally in *The American Journal of Physical Anthropology*.

ANTICLERICALISM is the term applied to the movement peculiar to Latin Catholic countries that aimed to free politics from intervention by the clergy and to establish the supremacy of the lay state over all religions. Indirectly anticlericalism was a result of the Protestant Revolution which, wherever it succeeded, subordinated the church, in doctrine as well as government, to the control of civil authorities. Even those countries that remained Catholic submitted no longer to the church in civil matters as they had done during the Middle Ages. By a system of agreements, known as "concordats," between the Catholic kings and the pope, the former managed to obtain a definite recognition of their claims to nominate bishops and to regulate church taxes.

In Catholic countries the church had so many privileges, judicial, financial, educational, that it was almost a separate body; the government merely had some rights in its affairs. When absolute monarchy finally managed to establish itself, however, a movement began in these countries to subject the church to royal control. In France it was known as "Gallicanism." It failed because the Catholic masses were "ultramontane" and regarded the pope, not the king, as the supreme ruler of the church.

The French Revolution is as important in religious as in secular history. The *philosophes*

who inspired its ideals were animated by a bitter hatred of Catholicism, and with the revolution a struggle began between church and state that resulted in confiscations, suppressions, proscriptions and finally separation. When Napoleon assumed power he entered into an agreement with the pope, the famous Concordat of 1801, which reestablished the church but completely subordinated it to the government. Gallicanism was now triumphant.

"Clericalism" and "anticlericalism" first appeared during the Restoration, though the terms were not commonly used until the sixties of the nineteenth century. Anticlericalism originated in France, where its ideas were most clearly formulated and its policies most persistently followed. It is therefore the movement in that country that will be considered here. The anticlericalism of Italy, Spain and Portugal was to a large extent inspired by that of France.

In France the restored Bourbons maintained the Concordat because they were loath to lose the control over the church that it provided, but they did everything in their power to encourage the spread of Catholicism. They relied upon the church to counteract the influence of the French Revolution. In parliament the Bourbons were supported by the "clericals," known as the *parti prêtre*, who put through a number of laws in the interest of the church, the most notable being the Sacrilege Law (1826) which punished with death the profanation of holy vessels under certain circumstances. The country was greatly aroused, and an anticlerical sentiment grew up bitterly hostile to the alliance between Bourbonism and Catholicism. The anticlericals proclaimed the doctrine of the lay state (*l'état laïque*), favoring separation of church and state, civil marriage, divorce and secular education. They were generally known as *libres penseurs* because they rejected the authoritarian spirit of Catholic teaching.

Throughout the history of nineteenth century France the opposition to absolutism was animated by the spirit of anticlericalism. It was the one bond of union between constitutional monarchists and republicans during the first half of the century, and between radicals and socialists during the second half. The famous secret societies, the *charbonnerie* (similar to the Carbonari) and the Free Masons, were also active in fomenting opposition to clerical governments. Catholicism was not, however, in the first half of the century considered synonymous with clericalism, and there were Catholic anticlericals, like Royer-Collard and Montlosier, Gallicans in religion and liberals in politics, who bitterly criticized the clerical policies of the Bourbons as a violation of the spirit of the Concordat. More radical in their anticlericalism were those who inherited the deistic traditions of the eighteenth century, like the historians Michelet and Quinet and the philosopher Jules Simon, who sought to isolate the church from all contact with public life. At the extreme left of the movement were those who, like the socialist Blanqui and the anarchist Proudhon, inherited the Jacobin tradition of war to the death against the church; in their view there was a fundamental incompatibility between the Catholic church and the French Revolution, the one authoritarian, the other libertarian, in spirit. The anticlericals of that period seldom advocated the separation of church and state, though in theory they favored it. So influential was the church that they feared to set free the "one power in France which does not emanate from the central government" (Simon).

Anticlericalism found its chief supporters among the bourgeois, who opposed the church as the protagonist of aristocracy and royalism. With the growth of revolutionary socialism among the working class, however, the bourgeois turned to the church as the bulwark of social conservatism. It was believed that the teaching of religion would inspire among the poor a respect for the institution of private property. Thiers, the representative of the freethinking bourgeois, frankly admitted that the priest was "an indispensable rectifier of the ideas of the people." Largely through his influence the *loi Falloux* was passed (1850), which in effect gave to the clergy the control of primary and secondary education.

During the latter half of the nineteenth century anticlericalism underwent a marked change. It became definitely anti-Catholic, which, in France, meant anti-Christian. The papal encyclical, *Quanta cura*, and the *Syllabus of Modern Errors* had the effect of convincing moderate anticlericals that no distinction could be made between Catholicism and clericalism. Another influence was the advent of the Marxian socialists whose materialistic philosophy was opposed to religion. After 1850 the socialists regarded the church as the protector of bourgeois society, and they were consequently its uncompromising enemies.

The greatest battle between clericals and anticlericals occurred during 1871–79, the critical period in the history of the Third French Republic when royalists and republicans struggled for control. The church supported the royalists so ardently that "Catholic" and "royalist" became synonymous terms. In opposition were the republicans led by Gambetta, whose famous cry, "Le cléricalisme, voilà l'ennemi," roused all France. Anticlerical journals appeared, notably *Dix-neuvième siècle*, edited by the brilliant journalists About and Sarcey, that denounced and ridiculed the church in true Voltairean fashion. The Third Republic and the church were soon engaged in bitter conflict. The Ferry laws (1881–82) established a national system of free, secular, primary education which encountered the uncompromising opposition of the church. Divorce was instituted in 1884.

But the anticlerical republicans paused before the more serious step of separating church and state. They had come into power chiefly as a result of division among the royalists, and they feared that a move toward separation might lead to the overthrow of the republic by an aroused Catholic sentiment. The question came to the front several decades later during the Dreyfus affair, when the royalist-clerical combination again menaced the republic. During this crisis the radicals and socialists formed a Republican bloc that put through the most famous anticlerical laws in the history of France, the Association Law of 1901, which resulted in suppressing nearly all the Catholic orders in France, and the Separation Law of 1905, which separated church and state. These laws were the work of the anticlerical ministers Waldeck-Rousseau, Combes, Clemenceau and Briand. In the Chamber they had the powerful support of the socialist statesman-orator Jaurès. Bourgeois radicals and proletarian socialists were now in alliance against the church because they had a common interest in maintaining a democratic republic.

Anticlericalism became an "extinct volcano" after the Separation Law. The radicals were left without their chief issue, and the socialists had cleared the ground of the religious question which had distracted the nation from the more important social question. During the World War Catholics and anticlericals forgot their religious differences in their common hatred of the German invaders. After the war the fear of clericalism had so far subsided that the republic reestablished relations with the Vatican and modified certain clauses in the Separation Law in deference to the wishes of the church. During the Herriot ministry (1924–25), which was supported by a bloc of radicals and socialists, anticlericalism again flamed forth in the attempt to apply the secular education laws to the schools of Alsace-Lorraine. But the attempt failed, as there was no desire to revive an issue that would distract France from post-war problems.

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See: CHURCH; CONCORDAT; CLERGY; PAPACY; SECULARISM; FRENCH REVOLUTION; CARBONARI; FREE MASONS.

Consult: Aulard, F. V. A., *Le christianisme et la révolution française* (Paris 1925), tr. by L. G. Frazer (London 1927); Debidour, A., *Histoire des rapports de l'église et l'état en France de 1789 à 1870* (Paris 1898), and *L'église catholique et l'état sous la troisième république*, 2 vols. (Paris 1906–09); Lecanuet, E., *L'église de France sous la troisième république*, 2 vols. (Paris 1907–10); Waldeck-Rousseau, René, *L'état et la liberté*, 2 vols. (Paris 1906); Seippel, P., *Les deux Frances et leur origines historiques* (Lausanne 1905); Weill, G. J., *Histoire de l'idée laique en France au XIXe siècle* (Paris 1925); Bert, P., *Le cléricalisme* (Paris 1900); Faguet, E., *L'anticléricalisme* (Paris 1906); Buisson, F. E., *La foi laique* (2nd ed. Paris 1913); Ryan, J. A., and Millar, M. F. X., *The State and the Church* (New York 1922).

ANTI-CORN LAW LEAGUE. Long before the formation of the league which brought about the abolition of the Corn Laws there had been steady if not systematic agitation against these statutes. In the course of years absolute import prohibition had been abandoned and later sliding scales of duties had been introduced as palliatives for increasingly intolerable conditions, while in famine time the ports were opened. The league was unique in being the first powerful organization whose efforts were concentrated on repeal, complete and permanent. For some time events had been forcing the government to face a reorientation of fiscal policy. The impetus came chiefly from the continued distress of the laboring class, kept at a low standard of living by the dearness of a staple foodstuff, the periodical dearths which intensified suffering and discontent, the growth of population, the expansion of industry, particularly in the North, and the need for larger foreign markets. What had been lacking hitherto were minds and wills capable of coordinating the forces which were making for reform and using them as weapons in a great offensive movement against land monopolists and their privileges.

The league had been preceded by the Anti-Corn Law Association, formed in London in 1837. That body, however, consisted less of practical men than of theorists, and its policy did not go beyond a reduction of the existing duties. Such a concession could not meet the needs of the industrial North, and accordingly the Manchester Chamber of Commerce took up the question in December, 1838. Richard Cobden, then a manufacturer of the city, stood for complete repeal and obtained the adoption of his plan. So in January, 1839, was formed the National Anti-Corn Law League for promoting the total and immediate abolition of the duties. The league lost no time in setting in motion a powerful mechanism of propaganda, adopting as its organ a sheet called *The Anti-Bread Tax Circular*, which later gave place to *The League*. The effective arena of agitation, however, consisted of the House of Commons, the political platform, the public press and the pamphlet. Of this agitation Cobden was the director, although many able and devoted colleagues joined him, notably John Bright.

The task which the league had to face was not only to convert a nation but to overturn enormously powerful interests which had long controlled both the electorate and the legislature. Branches of the society were formed in all parts of the country. Trained lecturers were poured into the industrial towns, the rural villages and the open countryside, and as many as a million tracts and other publications were distributed in a single year. Money flowed in freely, and on one occasion a fighting fund of £250,000 was raised. Throughout the agitation the men of the "Manchester school" had to encounter gross misrepresentation and obloquy. They were reviled as bagmen and egoists who exploited the toilers of the factory and mine and preached philanthropy for profit. But these tactics failed of their purpose, and the time came (1843) when even the *Times*, the mouthpiece of the classes, which had begun by ignoring and continued by abusing the league, ended by proclaiming that it must be accepted as "a great fact."

Meanwhile Peel had come to power in 1841, the head of a Tory-protectionist ministry and party, and in the following year he introduced a new sliding scale. Nevertheless he was wavering, for at heart he was a Whig and the Whigs were rapidly coming over to repeal. His formal capitulation came in January, 1846. The three traditional allies of reform—famine, distress and disaffection—once again fought on the side of repeal. Something had to be done, and instead of playing any longer with emergency measures he determined to end, instead of mend, a hopelessly unsatisfactory system. Accordingly he introduced a bill for total repeal, to come into operation on February 1, 1849, and a moderate sliding scale to continue until that date. The measure became law without encountering serious opposition. In the House of Commons nearly all the Whigs and over a hundred of the Tories voted with the majority. Simultaneously the duties on many other articles—food, farm produce, raw materials and manufactured goods—were either repealed or reduced, and the Navigation Laws were also abandoned.

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See: CORN LAWS; FREE TRADE; CHARTISM.

Consult: *The League*, organ of the Anti-Corn Law League (September, 1843, to July, 1846); Cobden, R., *Speeches on Questions of Public Policy*, 2 vols. (London 1870); Prentice, A., *History of the Anti-Corn Law League*, 2 vols. (London 1853); Ashworth, Henry, *Recollections of Richard Cobden and the Anti-Corn Law League* (London 1877); Morley, John, *The Life of Richard Cobden*, 2 vols. (London 1896); Dunckley, H., and others, *Richard Cobden and the Jubilee of Free Trade* (London 1896); Jordan, H. D., "The Political Methods of the Anti-Corn Law League" in *Political Science Quarterly*, vol. xlii (1927) 58–76.

ANTIMILITARISM is the theory and practise of the struggle against militarism conceived as a policy of the modern state carried out through the institutions centering around the army and navy. The term has been applied at the one extreme to a mild advocacy of a retardation in the race for armaments and at the other to agitation for a general strike against war. It is therefore not identical with pacifism, although some of the more radical groups of pacifists share views akin to those of outspoken antimilitarists, but is more definitely related to anticapitalism. Antimilitaristic ideas were first openly and clearly discussed at the congresses of the First and Second Internationals, and some socialists, e.g. Karl Liebknecht, carried on an active antimilitarist propaganda before 1914. But as a coherent theory and concerted movement antimilitarism results from the writings and work of the anarchists and of the revolutionary syndicalists. It was the French Confederation of Labor, under the special influence of such anarchists as George Yvetot and Émile Pouget, which after 1900 started in the French army a vigorous campaign for gen-

eral strikes and military insurrections as a means of preventing war. The French Confederation of Labor created the Sou du Soldat, for the purpose of giving economic aid to soldiers in the army and maintaining contacts between trade unions and conscripted trade union members. In 1901 the confederation published an antimilitaristic tract under the title *Manuel du soldat*, which went through many editions.

At present there are three main varieties of the antimilitaristic movement. Socialists and such international labor organizations as the "Amsterdam" International carry on propaganda against war and in favor of immediate steps toward general disarmament. Their point of view is that militarism and war are inevitable results of competitive capitalism and can disappear only with the triumph of socialism. Certain of the organizations under socialist influence, especially the socialist youth societies, encourage their members in some countries to pledge themselves to refuse military service in case of war.

The most outspoken and vigorous opponents of militarism today, as before the World War, are the anarchists and the syndicalists. From their point of view, war is not only a horrible result of capitalism but an inherent element of the state which claims the monopoly of the right to kill. Anarchistic and syndicalistic propaganda today, as before the war, centers around the ideas of the general strike and of military insurrections as means of defeating war. In most countries the followers of these doctrines evade military service and stir up discontent among military recruits. For purposes of propaganda and agitation the syndicalists and anarchists maintain the International Anti-Militarist Commission with headquarters at The Hague, Holland.

An intermediate place between the socialists and anarchists is held by the communists. While agreeing with the anarchists that the ultimate ideal of society is one from which the state and all military organizations have disappeared, the communists emphasize the importance of the transitional stage of the "dictatorship of the proletariat," during which the workers as a ruling class will have to maintain an army for self-defense. For the immediate future the communists elaborate the idea of a "socialist fatherland," which is Russia, and insist upon the necessity of gaining influence in the armies of the "capitalist" countries in order to prepare for the social revolution. Their aim is thus not so much to disorganize existing armies as to "capture" them, and for this purpose communists are exhorted to organize cells and nuclei in the army, navy and all other military institutions. Communist antimilitarist activities are especially widespread at the present time in France and in England.

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See: PACIFISM; PEACE MOVEMENTS; SOCIALIST PARTIES; SYNDICALISM; YOUTH MOVEMENTS; GENERAL STRIKE.

Consult: Levine, Louis (Lorwin, Lewis L.), *Syndicalism in France* (2nd ed. New York 1914); Lorwin, Lewis L., *Labor and Internationalism* (New York 1929).

ANTIRADICALISM. In its most general sense this term covers all sentiment and action aiming at the suppression of agitation or doctrine regarded as subversive of existing institutions. Antiradicalism commonly conceives of itself as allied to the state, but when the latter has been captured by the radicals, as in the case of the French and the Russian revolutions, the antiradicals compose a counter-revolutionary movement seeking to reestablish the institutions overthrown by revolution.

As the institutions subject to radical attack vary with time and place, so also do the objectives of antiradical movements. The specific objective of antiradicalism in early modern times was the defense of the church against heresy; through the eighteenth and the early part of the nineteenth centuries antiradicalism was occupied with the defense of monarchical and aristocratic political institutions. Defense of the institution of private property has been the predominant element in recent antiradicalism. Other elements, however, enter into the complex: defense of the church and religion, of traditional family institutions, of established political and juristic forms, of conventions in morals and manners, even of the traditional canons of art and letters.

In ordinary times antiradicalism is implicit in the attitudes of various social groups, but does not work itself out into a consciously formulated body of principles and rules of action. The heretic or the political or economic "dreamer" is ridiculed, ostracized, occasionally expelled from the community, but no extensive mass emotional disturbances are involved. The situation changes entirely when radicalism develops to the point of becoming a serious challenge to existing institutions, as in times of prolonged economic depression, during or after an exhausting war or in a period of rapid economic

development which effects serious changes in the distribution of wealth. In such circumstances implicit antiradicalism awakens into self-consciousness and may develop into a general panic. In Russia the political radicalism which flourished after the Russo-Japanese War evoked a powerful antiradical reaction which drew into its circle extensive groups of the population, as, for example, the class of small traders and peasants, whose only animating interest was aversion to all change. After the World War and the Russian Revolution economic radicalism became a factor of importance throughout the world. It was attended, naturally, by an equally extensive development of antiradicalism.

At the outset of an antiradicalism movement the issues are usually definite and leadership is in the hands of those whose interests are actually involved. When heresy first became a problem in early modern times its suppression was left to the church; only after a long period of propaganda was the work of suppression taken over by the congregations. The suppression of abolitionist tendencies in the South was at first undertaken by the slave holders; only after decades did they succeed in animating the non-slaveholding townsmen and small farmers with a hatred of the abolitionists as enemies of the existing order. Post-war radicalism, with its attack upon an institution so general as private property, naturally aroused against itself especially those to whom private property bears a quasi-sacred character—the small merchants and manufacturers, the farmers, investors in safe securities, officials and employees enjoying security of tenure. While the dominant capitalist class contributed resources for the attack on radicalism, post-war antiradicalism was essentially a middle class movement.

All antiradicalism movements derive their force ultimately from the classes whose status has been fixed for a time sufficiently long to have lent them a certain moral quality. While the newly enriched or ennobled may fight radicalism out of naked self-interest, those who hold a hereditary property or status have as a rule assimilated it to the body of natural rights; when it is attacked they are capable of developing a high degree of moral energy in its defense. Hence the paradoxical fact that in the struggle against radicalism it is most often the classes of modest fortune—often classes of waning fortune—that are most zealous in the repression of proponents of change. The Fascist movement in Italy, the dictatorships in Spain and Hungary, drew their essential support from the small bourgeoisie, just as antiradicalism in America is strongest among the smaller business men who are struggling to hold their own against the encroachment of the great aggregations of capital in trade and industry.

Post-war antiradicalism has been distinguished by the extensive application of the arts of propaganda developed during the war. By the wide circulation of leaflets and pamphlets, by tendential articles in the magazines and daily press, by conferences and lectures, the menace of radicalism has been brought home to the potentially antiradical masses. Emphasis has been laid upon the alleged relation between economic radicalism and heterodox attitudes in respect to other moral values. A professional leadership has arisen, skilled in creating a sense of panic and exploiting it to the leaders' advantage.

In the end an antiradicalism movement loses its momentum chiefly through the flagging of the moral energy it has evoked. The antiradical masses grow weary of hearing of menaces which are not realized in action. What at first gives force to the movement, the assimilation to radicalism of a wide range of attitudes having no direct bearing on the problem, tends finally to bring on disillusionment. While the recent movement was gathering strength it was no doubt helped along by the propagandist identification of industrial unionism, pacifism, social insurance, agrarianism with economic radicalism. In the later phases of the movement this massing together of unrelated phenomena has operated to break down the credulity of the antiradical rank and file.

Like any social-political movement which draws heavily upon moral energies and avails itself of fears and suspicion, antiradicalism makes frequent application of violent means. Lynching, deportation, flogging are frequently resorted to by antiradicalism in countries without a well established tradition of legality, such as the United States, Italy, China, the Balkan states. Blacklisting and boycotting are freely employed. Often the governments are forced by the fervor of antiradical public opinion to enact laws for the suppression of radical activities which become dead letters when the movement loses force. More frequently the public authorities—especially the local authorities—are drawn into cooperation with unofficial bodies in the lawless suppression of radical or allegedly radical activities.

The chief interest for political science in antiradicalism lies in the evidence it affords of the failure of the modern state to develop into a true polity. Antiradical behavior proves that even those classes which are generally assumed to be most loyal to the state and the institutions which it defends are prepared at any time when their emotions are aroused to abandon the political and legal means supplied by the state and revert to force and violence.

ALVIN JOHNSON

See: RADICALISM; CONSERVATISM; TRADITIONALISM; APOSTASY AND HERESY; ALIEN; ATHEISM; INTOLERANCE; CIVIC EDUCATION; PATRIOTIC SOCIETIES; SECRET SOCIETIES; KU KLUX KLAN; FASCISM; ACTION FRANÇAISE; ESPIONAGE; TERRORISM; LAWLESSNESS; CONFLICT, SOCIAL; CHANGE, SOCIAL; PUBLIC OPINION; CIVIL LIBERTIES; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Wolfe, A. B., *Conservatism, Radicalism and Scientific Method* (New York 1923) ch. v; Veblen, T., *The Vested Interests* (New York 1919) ch. viii; *Professional Patriots*, ed. by N. Hapgood (New York 1927); Irwin, W., *How Red is America?* (New York 1927) ch. i; Chafee, Z., Jr., *Freedom of Speech* (New York 1920), and *The Inquiring Mind* (New York 1928); Seagle, W., "The Technique of Suppression" in *American Mercury*, vol. vii (1926) 35–42; Post, Louis F., *The Deportation Delirium of 1920* (Chicago 1923); Lyons, E., *The Life and Death of Sacco and Vanzetti* (New York 1927); Salvemini, G., *The Fascist Dictatorship in Italy* (New York 1927); Barbusse, H., *Faits diverses* (Paris 1928), tr. by Brian Rhys as *I Saw It Myself* (New York 1928); Sinclair, Upton, *The Brass Check* (Pasadena, Cal. 1919), and *The Goose Step* (Pasadena, Cal. 1923).

ANTI-SALOON LEAGUE. This organization, "The Church in Action against the Saloon," is a league of churches and temperance societies growing out of the Ohio Anti-Saloon League, which was organized at Oberlin, Ohio, May 24, 1893, under the leadership of the Rev. H. H. Russell, of Berea. The success of the Ohio league led to the establishment of similar organizations in other states, and in December, 1895, at a convention of forty-nine separate temperance and religious groups in Washington, D. C., the Anti-Saloon League of America was formed. The object of the organization, as stated in its constitution, is "the extermination of the beverage liquor traffic," although the name Anti-Saloon League was adopted to direct attention primarily to the evil of the open saloon.

Stated briefly, the distinguishing features of the organization are: active cooperation of the churches, with the individual congregation constituting the basic unit, comparable to the precinct organization of the regular parties; paid professional officers and workers under centralized control; a financial system which is based on monthly subscriptions; a program of widespread education and propaganda; concentration upon the liquor question—refusal to be sidetracked by any other issues; political agitation directed toward the defeat of "wet" and the election of "dry" candidates; legislative lobbying in behalf of restrictive legislation and a constant demand for adequate enforcement.

The Protestant evangelical churches have always constituted the backbone of the league. During its campaign for national prohibition, 1912–1918, upwards of 50,000 churches regularly threw their pulpits open to Anti-Saloon League speakers of which there were at times as many as 20,000 in the field. In Pennsylvania alone more than 5000 churches cooperated.

Theoretically democratic in structure, the organization in fact has always been controlled by the small group of officials comprising the national executive committee and national board of directors, the personnel of which has changed but slightly in twenty years. The national board of directors is composed of two representatives from each state league, with additional members for states with over a million population. The real governing authority resides in an executive committee of nineteen members chosen biennially by the board of directors. A general superintendent appointed by the board of directors nominates state superintendents and has general supervision over both national and state leagues. Within each state there is a board of trustees representing the various churches. State superintendents are appointed by the local boards upon nomination by the general superintendent. Local ad hoc committees are formed from time to time. Each state league and the national organization employs a legislative agent and attorney who aids the state superintendent as political lobbyist.

Funds are secured through an elaborate pledge system. From 1912 to 1923 over $16,000,000 was pledged to the national league alone, and in the years 1915 to 1917 the league, in all its branches, was spending about $2,500,000 annually. Except for a few large contributions, the overwhelming bulk of the income is paid in small sums varying from a few cents to several hundred dollars. The number of contributors in 1922 was estimated at 700,000. Between 80 and 90 percent comes

in as the result of direct appeals to church congregations.

The league is primarily a propagandist agency, and for carrying on this work it maintains a thoroughly modern printing establishment, the American Issue Publishing Company, at Westerville, Ohio. From October, 1909, to January, 1923, this company turned out 157,314,642 copies of temperance papers. In addition a total of 244,782,296 books, pamphlets, leaflets, window cards, etc., were printed and circulated. Literature was distributed through the mails to a regular subscription list of over 500,000 as well as through the churches, schools and temperance societies. Through the cooperation of many large industrial concerns league leaflets were placed in the pay envelopes of the workers.

During the early days the league trained its guns on the saloon, going so far as to disavow any desire for complete prohibition. Its literature, however, made no such distinction but depicted the entire liquor traffic as the enemy of society, the home, the individual, the church, law, order and humanity. During the war it capitalized heavily on the fact that many brewers and liquor dealers bore German names and that large quantities of foodstuffs were being wasted in the manufacture of liquor. Unlike the Prohibition party the Anti-Saloon League rarely places a candidate of its own in the field. The constitution of the organization, moreover, pledges it to "avoid affiliation with any political party as such." Its object has always been to hold the balance of power, throwing its support to the candidate most satisfactorily answering its questionnaire. The league has always been indifferent to other issues and party labels. In the South it has consistently supported dry Democrats and in New England dry Republicans.

League lobbying is of a piece with tactics employed by other political pressure groups. Special legislative agents are employed to appear before committees, cooperate with representatives in drafting legislation, keep the local organizations informed as to the conduct of public officials, and to add that personal touch in matters of law making which experienced lobbyists know to be of incalculable value. The national and state leagues organize delegations to wait upon politicians and office holders, from city councils to congresses, from policemen to presidents. When antiliquor legislation is pending, they supervise the sending of memorials, petitions, letters and telegrams appealing for favorable action and threatening political reprisals if the legislator fails to heed. So powerful did the league become in the national Congress that in 1917 President Wilson made a formal request in writing for its support of food control legislation then pending. The legislative program of the league began with local option for college towns, followed successively by demands for county option, state wide prohibition, the regulation of interstate liquor shipments and, finally, national prohibition. The bulk of our temperance laws were not only enacted under pressure from the Anti-Saloon League but, in a considerable number of cases, were actually drafted by league attorneys and agents. The Webb-Kenyon Act, the Eighteenth Amendment and the Volstead Act are instances.

The Anti-Saloon League does not usually take a direct part in the enforcement of liquor laws. Its activities in this connection are confined to recommending for appointment persons friendly to the law, electing public officers pledged to rigorous enforcement, strengthening existing laws, procuring adequate appropriations for enforcement, exposing inefficiency in enforcement, and counteracting agitations for a relaxation of existing laws.

Since 1926 the league has been turning its attention increasingly to the problem of educating the public concerning the evils of alcoholic beverages *per se* and the danger of wholesale disrespect for law. It has recently been given some $500,000 for this purpose, and it has created a department of education to direct the work.

PETER H. ODEGARD

See: LIQUOR TRAFFIC; ALCOHOL; TEMPERANCE MOVEMENTS; PROHIBITION; LOBBY; PARTIES, POLITICAL.

Consult: Odegard, Peter H., *Pressure Politics, The Story of the Anti-Saloon League* (New York 1928); Cherrington, E. H., *A History of the Anti-Saloon League* (Westerville, Ohio 1913); Steuart, T. Justin, *Wayne Wheeler, Dry Boss* (New York 1928).

ANTISEMITISM. In its concrete meaning the word is synonymous with anti-Judaism and denotes social and political agitation, sentiments and acts directed against Jews. The term is only fifty years old, having been put into circulation by Wilhelm Marr in 1879, and has specific reference to a doctrine of race which was intended to be the theoretical justification for modern anti-Judaism. It involves the assumption that the cultural and social group differ-

ences between the Jews and the peoples among whom they reside are to be viewed as an antithesis of Semitic and Aryan racial characters, and that the Aryan peoples form a superior group which needs to protect itself against cultural and racial contamination by the inferior Semitic Jews. Were antisemitism nothing but a doctrine of race it would long ago have been discarded as a scientific superstition. But the doctrine is simply the reflection of an underlying situation which is very important both on its own account and for its bearing on many other political and social problems. Anti-Judaism (to call the phenomenon by its true name) is a reality and a fact even if the racial theory of antisemitism be dismissed as a figment of the imagination.

For an impartial understanding of antisemitism it is of course necessary not only to put aside the antisemitic theory of race (except as part of the phenomenon to be studied) but also to guard against any one-sided approach to the problem. One must, in other words, study not the "Jewish problem" but the joint problem of Jewish-Christian relations.

We are accustomed to regard the Jewish-Christian antithesis as a religious antithesis, and we accept as a matter of fact the mediaeval history of Jewish persecutions and Jewish disabilities. But with the growth of toleration in modern times and the general waning of interest in religious issues one might suppose that the Jewish-Christian problem would gradually disappear. It is on this assumption that the states of western Europe put through the program of the civil emancipation of the Jews during the eighteenth and nineteenth centuries. This assumption continues to guide most of the states of the world, and even today in Germany, a country which is the fountainhead of the antisemitic movement and philosophy, the state as a state does not recognize a Jewish problem or a Jewish-Christian problem. It is only the antisemitic parties and groups which seek to alter the present political status and to repeal, or to mitigate as far as possible, the Jewish emancipation laws.

Correct as may be this political assumption, one must dissociate from it the philosophy of social optimism which generally goes with it. To the thinkers of the seventeenth and eighteenth centuries who fought so nobly for political equality and the rights of the citizen, the emergence of the social and class struggles of the nineteenth century would have appeared as the defeat of all their highest aspirations. Nevertheless the eighteenth century conquest of liberty may be accepted as a sound achievement, even though we now appreciate how formal and abstract in many concrete social situations political liberty really is. So, too, with antisemitism. The recognition of the social reality of a Jewish-Christian problem does not necessarily impugn the validity of the political principles of the emancipation movement.

In the face of the strong revival of anti-Jewish agitation in the second half of the nineteenth century, the purely religious interpretation of the Jewish-Christian group conflict is seen to be manifestly inadequate. Certainly the Jewish-Christian opposition is not an opposition of religion in the same sense in which the opposition between the various Protestant sects, or even between Protestantism and Catholicism, may be regarded as an opposition of religious doctrine. In the examples mentioned the conflict disappears as soon as the religious issue wanes—unless, as is the case with the Catholic situation in certain countries, the religious controversy cloaks or produces a deeper social opposition. Tragically important as has been the role assigned to the Jew in the Christian gospel and the Christian philosophy of history, the underlying sociological factors were even more important in creating the Jewish problem, both before and after the spread of Christianity. In the Roman Empire the Jews were often gravely discriminated against, even persecuted, as aliens whose devotion to their religion and ritual made complete assimilation with Roman culture an impossibility. When Christianity came upon the scene, their peculiar position as an internationally scattered minority was confirmed.

It is not necessary to review the whole mediaeval history of the Jews, but merely to recall a few incidents which produced more or less lasting social effects. Chief among these were the enactment of laws forbidding the Jews to own land and their consequent restriction to mercantile pursuits and the lending of money The Jews were not the only traders or usurers but, as an alien element and as the people who crucified Christ, they were made the target of a peculiar combination of economic class hatred, religious passion and distrust of the stranger which has never been equaled in all history. Add to this the hermetical social isolation of the Jews in the ghetto, and one begins to understand the magnitude of the Jewish-Christian

gulf which the mediaeval period has passed on to modern times.

The moral charges and countercharges exchanged between the Jews and Christians do not concern us here. From a sociological point of view these ethical judgments, which may be true or false when each is considered in and for itself, are all absorbed in the underlying sociological determinism. More significant than these moral economic charges is the blood ritual accusation, which affects the Jews not as an economic class but as an ethnic and religious community. This charge, continuing down to recent times—the most recent examples being the Tisza-Eszlar affair in 1878, the Xanten accusation in 1891 and the Mendel Beiliss case in 1912—most truly reflects the strangeness and ignorance characterizing the mediaeval Christian view of the Jewish community. The ritual murder accusation was first leveled by the Romans against the Christians, and even today in China, whenever a Chinese child disappears, the common people believe that he has been kidnaped by a Christian missionary and his eyes extracted for use in Christian magic. The charge was not made against the Jews until the eleventh century, but from that time on there has been a long and dismal record of such incidents—an amazing example of the persistence of human ignorance and superstition.

If there has been a change in the Jewish-Christian situation since the Middle Ages, it is due to modern economic and political forces. The evolution of the secular state has made it possible to regard Jews as citizens and not as aliens kept alive as witnesses to the historicity of Christianity. On the other hand the passage from an agricultural state regulated by the canonist view of economics to the modern capitalist and industrial state has made it possible to absorb the Jews as ordinary individuals in the economic machine. Many of their presumably capitalistic virtues even came to be admired by their Christian neighbors. Neither the political nor the economic forces have affected all countries equally, and even where they have had fullest play, as in Anglo-Saxon countries, they have not completely broken up the heritage of mediaeval traditions, especially among those groups which themselves represent the survivals of an agricultural-handicraft society in an economy of full blown capitalism.

The norm and archetype of modern antisemitism is to be found in Germany. Further east are to be found more of the physical excesses and legal discriminations characteristic of the Middle Ages. Further west antisemitism becomes a more sporadic and fugitive phenomenon, if it does not disappear entirely. In Germany antisemitism, in its peculiarly modern sense, has been developed as a philosophy and as a political movement; there it was even launched as an international movement with international congresses and representatives from Austria-Hungary and other countries.

It is customary to date modern antisemitism in Germany from the period of 1870. The date is of course significant. It was not until the unification of the German Empire that Jewish emancipation was completed and all existing restrictions on the basis of religion were abolished. These reforms marked the end of religious antisemitism—that is to say, of that antisemitism where religious application formed the basis of legal discrimination. But so little did the abolition of religious disabilities affect the underlying social situation that we find the phenomenon of antisemitism breaking out in a new form and even with increased vigor. In a sense it may be said that the same train of ideas which brought about the Jewish emancipation (and the theoretical abolition of antisemitism) actually promoted the real development of the new antisemitism. Liberalism brought with it the granting of full equality to Jews, but it also facilitated the passage of Germany into the stage of vigorously developing capitalism, the brunt of the transformation falling on the handicraftsmen and peasants, while the Jews appeared to be in the vanguard of the new capitalistic bourgeoisie. The conflict of economic forces thus engendered was but one of the factors fostering anti-Jewish feeling. In addition antisemitism drew sustenance from the repugnance which middle class morality entertained for the financial excesses of capitalism and for advanced radicalism, with both of which the Jews as a group were identified in loose thinking because of the prominence of individual Jews.

In the Germany of the 1870's socialism had not as yet been declared to be Jewish in origin but the public mind had already come to believe that the Jews were responsible for the abuses attributed to capitalism. And when an orgy of financial speculation following the payment of the French indemnity resulted in a disastrous crash, the latent anti-Jewish hatreds flamed up and antisemitism became an organized political and social agitation. The public remembered the

prominence of a certain Jewish capitalist, Bethel Strousberg, in the group of speculators, and forgot that the financial abuses were first denounced in the Reichstag by Edouard Lasker, a Jewish leader of the National Liberals.

In the meantime there had been developing the racial doctrine of antisemitism which soon replaced the outworn religious arguments as the rationale of anti-Jewish agitation. The doctrine developed when the rather innocent literary and philological speculations of Ernest Renan and Max Müller were taken up by strongly nationalistic German agitators and popularizers. In the course of his studies on Semitic languages the French historian had allowed himself to make a number of sweeping generalizations on Semitic race and Semitic traits. Similarly in the writings of Müller, the doctrine of a common Aryan tongue as a basis of all the Indo-European languages was upheld, the writer going so far as to posit a race which spoke the original language, the Aryans (*q.v.*). Although both Renan and Müller denied the significance which was attached to their doctrines, the mischief was done and the precedent was established of discussing Jews and Christians as an antithesis of Semites and Aryans. In the writings of the popular German ethnologist, Friedrich von Hellwald, we see the complete doctrine in action. In an article "Zur Charakteristik des jüdischen Volkes" (in *Das Ausland*, vol. xlv, 1872, p. 901–06 and 951–55) he writes: "In the case of the Jews we have to do with an entirely different ethnic group. . . . This people, scattered and settled in Aryan Europe, is purely Semitic. From an anthropological point of view, the Jew who lives in our midst stands quite as far apart from us as the Arab, and the emphatic contrast between the two, usually indicated by the opposites Christian and Jew, is for the most part exactly the same as the opposition which exists between Aryanism and Semitism. The European feels so to speak instinctively in the Jew who stands over against him the foreigner who has immigrated from Asia.... The so-called prejudice is a natural sentiment. Civilization will overcome the antipathy against the Israelite who merely professes another religion, but never against the racially different Jew. . . ." Von Hellwald then goes on to repeat the familiar charges of Jewish business cunning, which he explains as a racial trait and which he puts forward as the reason why the Jew gets the best of the honest Aryan. "We cannot do otherwise," he continues, "than to designate the Jews as the very canker from which the lands of Eastern Europe suffer. No means (provided they are not violent, for everything for which personal courage is demanded is opposed in general to the Semitic and especially to the Jewish character) are too wicked for them to use in order to secure a material advantage."

This pseudo-scientific doctrine was eagerly seized upon by Marr, Glogau and Eugen Dühring, and exploited in a flood of pamphlets. It became a political issue through the interplay of certain forces in German domestic politics. The court preacher Adolf Stöcker had organized a Christian Socialist party with principles paralleling those of Catholic Socialism and with the purpose of appealing to working men on the basis of a moderate program of social reform. All evidence seems to show that the party was not organized originally as an anti-Jewish party. But when Bismarck broke with the National Liberals (a bourgeois democratic party with a number of Jewish leaders), who had supported him in his *Kulturkampf* against the Catholics, circumstances conspired to turn the Christian Socialist party into an antisemitic party. Bismarck spoke of a *Kulturkampf* against the Jews (1879) and immediately a vast storm of anti-Jewish agitation was unloosed. Stöcker put himself at the head of the movement and called for a crusade against the Jews (1880–81). There were riots, and a petition was signed by 300,000 Prussian citizens calling upon Bismarck to exclude Jews from all national schools and universities and from all public offices. In the elections of 1881 the Conservative party was captured by the Christian Socialists and won over to antisemitism.

The political movement soon burned out, the antisemitic parties gradually breaking up into their constituent elements. There was a revival in the period around 1890, when Hermann Ahlwardt headed the movement, and of course a much greater revival after the World War. What is significant, however, is that through all the interchange of parties from 1880 to the present there have always been one or more parties frankly professing antisemitic principles. After the war, as a result of the prominence of Jewish names in the Russian and German revolutions, the identification of Jews with subversive radicalism was more emphasized than their identification with capitalistic abuses. Frequently, however, the two were combined, as in the propaganda of Hitler's National Socialist party. In Austria, where basic conditions have been

similar to those in Germany, there has been a strong Christian Socialist party, with principles sometimes mildly and sometimes violently antisemitic.

The complexity and intensity of German antisemitism are shown by contrast with the situation in France. There antisemitism has had a more theatrical history but less enduring roots. In 1883 Renan congratulated France that the ethnological theories about Semites and Aryans had no practical application in that country. Antisemitism, however, flared up in France as a side issue to the conflict of clericalism and anticlericalism. The political history of France since 1870 had been largely dominated by the struggle to make the Third Republic a lay state with a lay educational system. In this struggle the French Jews were naturally identified with the democratic and advanced parties of secular reform while the conservative, Catholic and royalist factions fought to maintain as far as possible the old order of things. The Jewish issue was introduced by the agitation carried on by a group of journalists with Catholic and clerical sympathies, who identified the Jews both with the abuses of high finance and with the "unpatriotic" socialist and anarchist propaganda. This clerical use of the Jewish issue, first introduced by Drumont in his *La France juive* (2 vols., Paris 1886) and in his newspaper *La libre parole* (1892), gradually gained the attention of more authorized representatives of the clerical parties. Drumont himself was chosen honorary president of the congress of Christian democrats, a group of young priests, journalists and politicians interested in Social Catholicism, which assembled at Lyons in 1895. The author of a work on Social Catholicism, Paul Lapeyre, described the Jews as a "devouring canker" in France and demanded their expulsion and transportation to some fertile but distant country where they would have to "reform their habits or die of want." A direct appeal to religious prejudice was made when he called the modern Jews "the descendants of those who crucified Jesus" (Moon, P. T., *The Social Catholic Movement in France*, New York 1921, p. 207). In the Chamber of Deputies a clerical deputy, Viscount d'Hugues, made the sensational charge (1894) that the Jewish financier Rothschild had given money to anarchist agitators in order to disorganize and corrupt the labor movement.

This clerical flirtation with antisemitism was turned into a boomerang by the Dreyfus case. This isolated incident, willed by no organized party, committed the conservative parties to an official policy of antisemitism while it made pro-Dreyfusism the slogan which united the bourgeois anticlerical parties and the socialists. The victory of the Dreyfusards destroyed antisemitism as a political issue in France and damaged the clerical parties. Antisemitism was left as a social prejudice, exploited occasionally by the royalist Action Française group, and by the obscure periodical *La vieille France*. This agitation was revived to a certain extent after the publication of the Protocols of the Elders of Zion but otherwise it has been quiescent.

Turning to Russia and eastern Europe one beholds a type of antisemitism quite different from those described thus far. Both because of the concentration of the Jewish population and because of the economic and social conditions of these countries, the Jewish problem is mediaeval in character. In the Russia of the old regime the Jews were considered a separate economic and religious class and their status was regulated accordingly. For the most part they were forbidden to reside outside of the territories of the old kingdom of Poland, which thus constituted their Pale of Settlement. The political reaction which followed the assassination of Alexander II (1881) further increased their disabilities. Under the celebrated May Laws (1882) a pale was created within a pale—that is to say, even within the Pale of Settlement the Jews were forbidden to reside outside of the towns—with the object of preventing the Jews from owning land. In addition a *numerus clausus* or fixed quota varying from 3 to 10 percent was enacted to govern the admission of Jews to the universities and schools of higher education. In the meantime there had taken place a series of bloody pogroms, in large part stimulated by the reactionary government in power as a distraction to the political discontent of the masses. These were the forerunners of greater pogroms in 1903 and 1906 when the Black Hundreds were organized by the government as a deliberate method of combating the revolutionary movement.

Aside from physical excess Russian antisemitism under the old regime is chiefly significant for its cold blooded political exploitation of anti-Jewish hatred. This use of anti-Jewish feeling was of course not unknown in the Middle Ages, when more than one king incited the populace against the Jews in order to avoid paying his debts or in order to plunder them for

their money. But it was reserved for the Russians to organize this sort of propaganda as a fine art. Their most notable achievement—and one that had sensational international consequences—was the perpetration of the forgery of the Protocols of the Elders of Zion. This forgery was finally and conclusively exposed by the London *Times* (*The Truth about the Protocols*, London 1921) but not until the story of an extensive conspiracy to bring the world under Jewish dominion had been circulated in all countries and had played an important role in stimulating antisemitic agitation in countries hitherto relatively free from public antisemitism, such as England and the United States.

The protocols first appeared in Russia in 1905, when they were published by Sergey Nilus, who claimed that they were obtained by a woman who stole them from "one of the most influential and most highly initiated leaders of Freemasonry . . . at the close of the secret meeting of the 'initiated' in France, the nest of Jewish conspiracy." In the edition of 1917, which was circulated after the Bolshevist revolution by Russian monarchists in England and the United States, Sergey Nilus added new details. He claimed that the manuscript had been given to him by the Russian official Sukhotin, and that the protocols were notes of a plan submitted to the "Council of Elders" by Theodor Herzl at the First Zionist Congress at Basel in 1897. Like the blood ritual accusation the protocols were seen to be obviously fraudulent by every one acquainted with Jewish life. The motivation of the fraud was evident on its face, and its use in both Russian revolutions was sufficient to make one suspect its origin. Nevertheless the protocols were widely credited and were actively circulated by reactionary groups who either "willed to believe" or willed to make others believe in their truth. By fortunate circumstance the London *Times* correspondent at Constantinople was able to put his finger on the actual origin of the protocols and to demonstrate that not only were they a hoax and forgery in the ordinary sense but in addition a literary plagiarism. The greater part of the text of the so-called protocols was shown to have been taken from a political tract published in 1865 and 1868 by a French republican and aimed at Napoleon III (who had the author imprisoned for his offense). All that the anonymous forger—evidently a Russian secret police official—had done was to change the text here and there and add a Jewish and Marxian flavor.

The episode of the protocols throws into relief the public situation of the Jews after the World War and the Russian Revolution. It also ties together in a curious way the tangled affairs of eastern Europe with the problems of America. The circulation of the protocols in the United States coincided with a wave of feeling against the recent immigrant stocks in which for the first time antisemitism came to the surface as a public phenomenon. The World War had produced, or at least crystallized, a reaction against the "melting pot" policy of welcoming all races, maxims and creeds to the land of freedom, and this reaction was directed against the Jews along with the rest of the so-called "newer immigrants." This reaction was increased by the impact of the Russian Revolution, which was at first welcomed even by the conservative element as a victory of democracy over czarist absolutism but which was soon felt to be a menace to American institutions. The distrust of the foreign born was magnified by a fear of radicalism, and in the latter respect the Jews found themselves singled out even more than other foreign stocks because of the prominence of Jewish names among the Russian Bolshevists.

This is not to say that American antisemitism is altogether the product of post-war conditions. Even before the war antisemitism existed as a basic social-psychological sentiment. This sentiment found its expression in the exclusion of Jews from fashionable hotels and summer resorts and in discrimination against Jews as employees in the business world. Along with these manifestations may also be mentioned a certain discrimination against Jews as students and faculty members in the colleges and universities. But it was not until the period of 1917–25 that people began to talk openly of antisemitism. It was in this period that the agitation against the "international Jew" was carried on by the *Dearborn Independent*, owned by Henry Ford, who later publicly disavowed the attacks on the Jews. It was also in this period that the Ku Klux Klan was revived to function against Negroes, Catholics and Jews. Finally the same period saw the enactment of the new immigration laws which had as one of their purposes the limitation of Jewish immigration from eastern Europe.

For a few years it looked as if America were soon to find itself in a class with Germany and east European countries in respect to its Jewish problem. But these surface indications were belied by the underlying socio-economic conditions. While antisemitism primarily operates

as a psychological sentiment, it must not be forgotten that this psychological sentiment is conditioned in various ways by the physical structure of social life. Despite the discrimination against Jews in the business world, economic opportunities remained wide open, and in the long run it is this freedom of economic opportunity—particularly remarkable in a growing country like the United States—which counts for more than even the most deep rooted psychological sentiment.

People who approach the Jewish problem without a sense of history and without a sense of the whole are prone to erect a metaphysics of race and nationalism which eventually becomes an obstructive factor in the situation. The real but relative state of facts which is behind the system of Jewish-Gentile group sentiments is transformed by such persons into transcendental entities which forever preclude change and development. Jews, they say, are a different race, a different national group, and cannot be assimilated. Now it is one thing to use the categories race, nation and group as concepts describing distinctions in a given social or biological context, but it is quite another thing to extrapolate these categories into the timeless world of logical necessity and to assume thereby that the distinctions of the present will hold and ought to hold in the future.

As a matter of fact the very sociological situation which reveals the distinctness and rigidity of such categories also reveals their interaction and interpenetration. There is no biologically pure race, there is no 100 percent nation to be found anywhere in the world. There is always a crisscrossing and conflict of categories. Here it is religion which cuts across nationalism, there it is biological and cultural kinship; somewhere else it is economic and class loyalty. And finally there is even the spirit of internationalism, which for many men commands a certain loyalty over and above some of the other loyalties.

The conflict of group lines represented by antisemitism is thus in no wise unique. Basically the same social problem is repeated over and over again in other group clashes—some of which are nearer and some of which are even farther away from permanent solution than the Jewish problem. Geographic nationalism and its quota of hatreds seem to us more normal than antisemitism only because the phenomenon is more usual. Color lines too seem to us more rational only because the imagination has something visible and palpable to point to as the cause. In the case of antisemitism the cause of the group distinctions is buried in historical tradition and the ever changing combination of economic and social forces, but the phenomenon is otherwise the same. Perhaps antisemitism will lose its mysteriousness when it is realized that there is nothing specially abnormal or unnatural in the existence of a Jewish group among the various groups which constitute a society.

BENJAMIN GINZBURG

See: JUDAISM; RACE; RACE PREJUDICE; SOCIAL DISCRIMINATION; INTOLERANCE; ALIEN; ASSIMILATION; SOCIAL; GHETTO; BLOOD ACCUSATION; JEWISH EMANCIPATION; ANTIRADICALISM; CATHOLIC PARTIES; KU KLUX KLAN.

Consult: "Antisemitismus" in *Encyclopaedia judaica*, vols. i–v (Berlin 1928–30) vol. ii, p. 956–1104; Wawrzinek, Kurt, *Die Entstehung der deutschen Antisemitenparteien, 1873–1890* (Berlin 1927); Brunner, Constantin, *Der Judenhass und die Juden* (2nd ed. Berlin 1919); Bloch, Joseph S., *Israel und die Volker* (Berlin 1922); "Antisemitismus und jüdisches Volkstum," Sonderheft 1 (1925) of *Der Jude*; Zweig, Arnold, *Caliban oder Politik und Leidenschaft* (Potsdam 1927); Leroy-Beaulieu, Anatole, *Les juifs et l'antisémitisme* (Paris 1893), tr. by Francis Hellman as *Israel among the Nations* (New York 1895); Lazare, Bernard, *L'antisémitisme; son histoire et ses causes* (Paris 1894), Eng. tr. (New York 1903); Dixon, R. B., Kallen, H. M., Gannett, L. S., Smertenko, J. J., Lowenthal, M., and Hallinan, C. T., articles in *The Nation* (New York) vol. cxvi (1923) 207–08, 240–42, 330–32, 409–11, vol. cxvii (1923) 547–49, and vol. cxviii (1924) 81–82; Levinger, L. J., *The Causes of Antisemitism in the United States* (Philadelphia 1925).

ANTITRUST LAWS. *See* TRUSTS.

ANTON, KARL GOTTLOB VON (1751–1818), German writer on legal and economic subjects. As a young man he engaged in the study of ancient German law, translated Tacitus' *Germania* (Leipsic 1781) and published *Über die Rechte der Herrschaften auf ihre Unterthanen und deren Besitzungen* (Leipsic 1791). He was an ardent German patriot (see his *Geschichte der teutschen Nazion*, Leipsic 1793), and manifested a special interest in the Slavs of his home province and in their national regeneration (see the exchange of letters between Anton and Dobrowsky, reprinted in Oberlausitzische Gesellschaft der Wissenschaften, *Neues Lausitzisches Magazin*, in 1841 and 1843). As a result of this interest Anton published *Erste Linien eines Versuches über der alten Slawen Ursprung, Sitten, Gebräuche* (2 vols., Leipsic 1783–89). His chief work is the *Geschichte der*

teutschen Landwirtschaft von den ältesten Zeiten bis zu Ende des XV. Jahrhunderts (3 vols., Görlitz 1799–1802), a work of cultural history which has furnished valuable material for later students. In it he attempted to present the history of agriculture on the basis of contemporary sources, and it is important to note that he assumed, even at the time of Tacitus, the existence not only of individual property in arable land but also of manorial estates. In the course of preparation of this work he had occasion for philological research also, and this led to his publication of *Uber Sprache in Rücksicht auf die Geschichte der Menschheit* (Görlitz 1799).

ALFONS DOPSCH

ANTONINO, SAINT (1389–1459), Florentine churchman and writer on economics and morals. Antonino became prior of Cosimo de' Medici's San Marco in 1439 and archbishop of Florence in 1446. He was canonized in 1522. As archbishop he established the Provveditori dei Poveri Vergognosi (now known as the Buonomi di S. Martino), a society of social workers who provided the needy with medical attention, gave dowries to marriageable girls who would not otherwise have been provided for, paid apprenticeship fees, redeemed pawn tickets and supplied money, food, bedding and clothes to the poor. In laying down the rules for the government of this society Antonino forbade the funding of moneys received, as well as the assumption of the administration by any civil or ecclesiastical authority. He also reorganized the Spedale degli Innocenti for illegitimate children, reestablished the Bigallo orphanage and advocated the establishment of public schools and the construction of public roads and fine buildings.

More important than Antonino's social practises are his social theories. His *Summa moralis* (4 vols., Verona 1740) is a mine of information on matters economic as well as moral. He treats of production, distribution and consumption and views each of these from the general standpoint that everything man does should have a purpose which directs and limits it. All ills of social life come from a neglect of the important principle that man should earn to live and not live to earn. Trade, although marked by many malpractises, is in itself a unifying principle in the *corpus mysticum* of Christendom, since it allows each national unit to contribute its particular wealth to the benefit of all. International commerce, therefore, should be based on the moral principle of cooperation and not on the false principle of competition. In analyzing price Antonino distinguished between value based on inherent, objective properties of a commodity and value resulting from the rarity, utility and pleasurableness of the commodity to the individual using it. It is this latter type of value which is the determining factor of price. In the regulation of prices account must be taken of demand and supply, of the value of the commodity to the purchasers as well as of its cost of production and of social as well as of individual considerations.

Antonino was a realist who passed moral judgments on the basis of close observation of actual conditions. Living in a period of great commercial development he admitted the productivity of capital while denying the productivity of coin and thus justified some form of interest. He analyzed and evaluated the activities of the *montes* and the claim of their shareholders to profits. Because of the distress in Florence he favored the fixation of prices and wages by a government appointed committee of prudent men, which should not include ecclesiastics. While he believed that the inequalities of property are inevitable he insisted that decent living conditions should be provided for all. In return the state should compel men to work, if they would not do so of their own accord.

BEDE JARRETT

Consult: Ilgner, C., *Die volkswirtschaftlichen Anschauungen Antonins von Florenz* (Paderborn 1904); Jarrett, B. S., *Antonino and Mediaeval Economics* (London 1914).

ANTONOVICH, VLADIMIR BONIFATIEVICH (1834–1908), Russian historian, ethnographer and archaeologist. A scion of Polish gentry of the province of Kiev, he renounced as a youth his Polish nationality and joined the Ukrainian nationalist movement. In his opinion the intelligentsia could better serve the masses if it accepted their national tradition as its own (see his "credo" in the St. Petersburg magazine *Osnova*, 1862). After graduating from the faculty of medicine (1855) and from the faculty of history and philology (1860) of Kiev University, he taught history for three years in the secondary schools and in 1863 joined the staff of the Governmental Temporary Commission for the Investigation of Ancient Records. He soon became chief editor of its publications and retained this post until 1880. In 1878 he was appointed

professor of Russian history at the University of Kiev. His publications in *Arkhiv Yugo Zapadnoy Rossii* (Annals of Southwestern Russia), an organ of the commission, include reprints of a large number of historical records and a long series of articles relating largely to the history of the struggles between the native population of the southern and western provinces and Poland from the fifteenth to the eighteenth century. The more important of these are: "The Cossacks," "The Uniat Church," "The Last Days of the Cossacks on the Right Shore of the Dnieper" and "History of the Grand Duchy of Lithuania." A follower of Kostomarov in his interpretation of Ukrainian history, he belonged to the populist school. By encouraging research in the history of separate Russian territories he is responsible for the creation of an entire group of local historians. As a result of his interest in folklore he published "Records on Witchcraft," based on archive material, and, with M. D. Dragomanov, a collection of historic songs of little Russians (*Istoricheskiya pesni malorusskavo naroda*, 2 vols., Kiev 1874–75). The later part of his life was devoted largely to archaeological work. He directed many excavations of graves and town sites in Ukraine and was active in regional and international archaeological congresses. His activity as a nationalist was primarily cultural: he delivered privately historical lectures in Ukrainian, he issued a formal protest against the prohibition of printing in the Ukrainian tongue (1876) and was one of the founders and important collaborators of *Kievskaya Starina* (Kiev Antiquities), a magazine for the study of Ukrainian history. He is also given credit for the reconciliation effected about 1890 between Ukrainian and Polish leaders of Galicia; it made possible the establishment of several Ukrainian chairs at Galician universities.

V. MIAKOTIN

Consult: Dorošenko, D., "Die Entwicklung der ukrainischen Geschichtsidee vom Ende des 18. Jahrhunderts bis zur Gegenwart" in *Jahrbucher für Kultur und Geschichte der Slaven*, n. s., vol. iv (1928) 363–79, and references given there.

ANUCHIN, DMITRY NIKOLAYEVICH (1843–1923), Russian anthropologist and archaeologist. He was graduated from the University of Moscow in 1867. At first he specialized in zoology, but he soon became interested in anthropology, prehistoric archaeology and geography. After several years' study in the universities of England, France, Germany and Italy he was appointed in 1880 professor of anthropology, when the chair of anthropology was founded in the University of Moscow. He lectured also on ethnology and geography in the university and on archaeology in the Moscow Archaeological Institute.

During his long career as a teacher Anuchin trained several generations of well known specialists in various lines of anthropology and related sciences as teachers, writers and field workers. Many of his works are magnificent contributions to the history, palaeoethnology and archaeology of Russia. For about half a century he was president of the Moscow (former Imperial) Society of Friends of Natural Sciences, Anthropology and Ethnography, and chairman of its anthropological and geographical divisions.

Anuchin was not only a prominent scientist but was also actively interested in the political life of his country. For many years he was connected with the outstanding liberal daily paper in Russia, the *Russkiya Vedomosty* (Russian Gazette), as one of its publishers, editors and contributors.

WALDEMAR JOCHELSON

Important works: *Luk i streli* (Bow and arrows) (Moscow 1887); *K istorii oznakomleniya s Sibir'u do Yermaka* (Contributions to the history of relations with Siberia before Yermak) (Moscow 1890), German tr. by H. Michow in Anthropologische Gesellschaft in Wien, *Mitteilungen*, vol. xl (1910) 1–21; *Sani, ladiya i koni, prinadlezhnosti pokhoronnavo obriada* (Sledges, boats and horses as accessories at burial ceremonies) (Moscow 1890), summarized by J. O. Wardrop (London 1892).

ANZANO, TOMÁS DE (died in 1795), Aragonese public official and writer on economic subjects. Using terms he would not have recognized, we may classify Anzano as a pragmatist, relativist, nationalist and mercantilist. Evincing little ability or inclination to reason abstractly, he treated value vaguely, omitted distribution and had no conception of a general price level or of the connection between money and prices. He condemned luxury, forestalling, indiscriminate almsgiving, laissez faire, the corvée, métayage and depreciation of agriculture, and advocated government intervention in economic matters, the use of oxen in plowing, the extension of irrigation, diversified agriculture and the organization of a company to aid agriculture and small manufactures. Some of Anzano's schemes were visionary but others proved practicable.

EARL J. HAMILTON

Works: *Reflexiones económico-políticas sobre las causas*

de la alteración de precios (Saragossa 1768); *Discursos sobre los medios que pueden facilitar la restauración de Aragón* (Saragossa 1768); *Elementos preliminares para poder formar un sistema de gobierno de hospicio general* (Madrid 1778); *Ensayo sobre la policía general de los granos* (anonymous work translated from French with Anzano's commentary and analysis of the grain trade) (Madrid 1795).

Consult: Colmeiro, Manuel, "Biblioteca de los economistas españoles" in Real Academia de Ciencias Morales y Políticas, *Memorias*, vol. i (1861) 73–74; Latasa y Ortin, F. de, *Biblioteca nueva de los escritores aragoneses que florecieron desde el año de 1795 hasta el de 1802*, 6 vols. (Pamplona 1798–1802) vol. vi, p. 5–7; Sempere y Guarinos, Juan, *Biblioteca española económico-política*, 4 vols. (Madrid 1801–21) vol. i, p. 112.

APORTI, FERRANTE (*c.* 1792–1858), Italian educator. After studying at Cremona he was ordained a priest in 1815 and went to Vienna to complete his theological education. There he made the acquaintance of G. Wertheimer, who popularized Wilderspin, and attended the lectures of V. E. Milde, a follower of Pestalozzi. In 1821 he was charged with the direction of the larger elementary schools of Cremona and in that capacity discovered his true vocation—infant education. About 1829 he founded the first real pre-school institution or kindergarten in Italy, which he called an "infant school." This was followed in 1831 by a free infant school for children from three to six years of age, and in fifteen years' time the number of "infant asylums" established by his efforts had grown to one hundred and seventy-eight.

The value of his infant asylums consisted essentially in the idea of play as a formative occupation for the child and in the organization of material for primary instruction in such a form that it could be mastered in informal conversation with the mother. He knew the works of the Englishman Wilderspin, the man who put Owen's educational theories into practise, but his institutions were fundamentally Italian. In Piedmont he had as coworkers Boncompagni and Cavour; in Tuscany, Raffaello Lambruschini. The popular reform movement of the period in Italy included in its program the establishment of infant asylums modeled after Aporti's schools.

In the Revolution of 1848 Aporti ranged himself against Austrian domination. He was banished in 1849 and took refuge in Piedmont, where he continued his educational work.

GIUSEPPE LOMBARDO-RADICE

Important works: *Manuale di educazione ed ammaestramento per le scuole infantili* (Cremona 1833, Lugano 1846, new ed. Turin 1927); *Elementi di pedagogia* (Rome 1847).

Consult: Gambaro, Angiolo, *Discorso su Ferrante Aporti*, with appendix "Bibliografia Aportiana" (Mantua 1928), and "I due apostoli degli asili infantili in Italia" (Aporti and Lambruschini) in *Levana*, vol. vi (1927) 1–194.

APOSTASY AND HERESY. Apostasy in classical Greek was a term signifying a defection or revolt from a military commander. Thus from the beginning it was used in an opprobrious sense. It has been most commonly used to describe the complete renunciation of the Christian faith, although it may also be applied to other religions. In recent times it has been employed abusively as a term of reproach for sudden changes in political opinions. However applied, apostasy has consistently signified a desertion of the standard of the group at some point considered vital to the well-being, if not the actual existence, of the group. Apostasy belongs in the class of serious violations of the mores rather than of variations in the folkways of society.

The idea of apostasy emerges in the literature of the Jews in the period of the Maccabees. The persecution by Syria and the more subtle onslaught by Hellenism were the twin perils of Israel at that time. From the situation of the Jews, apostasy was doubly serious because it involved a desertion of both the religious and the national cause at a time when Israel was in a precarious situation in both respects. The vehemence of the rabbinical language on the subject is therefore easy to understand. The *Jewish Encyclopedia* quotes rabbinical statements of the time which declare that "no sacrifice is accepted from the apostate," and add: "nor have they any respite from eternal doom in Gehenna."

In the early years of the Christian church converts were led by persecution or the fear of violence into denying the faith. Their defection was thus due to the unworthy motive of self-protection, and apostasy struck at the very life of the church. The apostate was the renegade who deserted his brethren in their time of need, signifying his return to paganism by some outward act such as offering incense to a heathen deity.

Heresy, which in latter centuries was identified with apostasy for practical purposes, had a much milder origin, the Greek equivalent signifying free choice. Used for a time to apply

to philosophical schools, it later referred to religious parties such as the Sadducees, Pharisees and Essenes. Christianity was termed by its opponents a heresy. The term formerly had much the same meaning as schism and was applied to theological errors. As organization of the church proceeded, doctrine became more important and heresy was restricted to any departure from the recognized creed. In the ante-Nicene period the Christian church was in serious danger of pollution or destruction by the pagan and Jewish elements which threatened to become blended with the faith. At this time the punishment of heresy was by reproof and excommunication. In the post-Nicene period heresies became less significant differences in interpretation of Christian truth. As long as the church was persecuted by the pagan empire it advocated freedom of conscience, but almost immediately after Christianity was adopted as the religion of the Roman Empire the persecution of men for religious opinions was undertaken by the church. By canon law heresy became not only an error but a crime to be detected and punished. Just as apostasy carried the common conception of unworthy motivation, so heresy came to be associated with wilful and persistent opposition to truth.

Apostasy was the overt act of deserting to the enemy; heresy was the insidious danger which threatened to split the group into warring factions. Apostasy depends upon a conflict of religions; heresy may develop at the center of the religious order. The Emperor Julian deserted Christianity for paganism and became known as "the Apostate"; Martin Luther challenged certain practises of the Catholic church, and the Reformation itself was a heresy from the standpoint of the Roman Catholic. The heretic may deny only one of the doctrines of revealed religion, while the apostate denies the religion itself. As church and state became closely allied, the dangers of severe punishment for minor differences brought heresy and apostasy closer together, since the heretic might find himself driven into the more complete denial of all the practises and beliefs of the group threatening him.

Apostasy was at first included in the class of sins for which the church imposed perpetual penance and excommunication without hope of pardon on this earth. In 251, however, the right of the church was admitted to remit the sin of apostasy. When the Roman Empire became Christian, apostates were punished also by deprivation of all civil rights. They could not give evidence in a court of law and could neither bequeath nor inherit property, while to induce anyone to apostatize was an offense punishable with death. In the Middle Ages civil and canon law classed apostates with heretics, and the same punishments were applied.

As the church grew in power and in the refinement of its canon law, ways multiplied in which Christians could become apostates, and the church became increasingly skilled and zealous in detecting the offense. An elaborate system of tribunals was gradually developed for passing judgment and awarding punishment. The major instrument developed by the Catholic church for dealing with apostates or heretics was the Inquisition. Various plans and practises were used, most of them far milder than the famous Inquisition in Spain. The papal states maintained councils which rarely if ever inflicted the death penalty. In the northern countries houses of bishops were assigned the work of examination. In the thirteenth century, however, the technique and theory of the Inquisition had made such progress that Gregory IV entrusted the Dominicans with the task of running down heretics and handing them over to the civil authorities for execution. The Spanish Inquisition, so fierce that it was tolerated rather than sanctioned by Rome, was directed principally against backsliders among the Jews and Moors who had been ostensibly converted to the Christian faith out of fear for their lives and property. In general the force of the Inquisition and other tribunals for judging and punishing apostates and heretics was spent when the various nations took over all rights of punishment with the exception of such spiritual sentences as excommunication. With the full development of civil judiciary systems the excitement over apostasy rapidly waned.

Not only did apostasy and heresy cease to be clear cut conceptions among non-Catholics following the Reformation, but the churches of all sects found themselves facing larger problems than the disciplining of erring individuals. It is true that nonconformists in England and on the continent and, later on, in New England found themselves victims of sporadic persecutions and Protestant inquisitions, but the back of the movement to compel regularity in religion was broken by the multiplicity of orthodoxies and by the successive revolutions caused by the discoveries, the inventions, and their offspring,

the economic revolution. The period was one of mass apostasies, with no church great enough to stem the movement. The first of these mass apostasies was from the state church, and took place in defiance of the Protestant as well as the Catholic church. Following close on this separation of church and state came the apostasy of the economic world from allegiance to church authority. None protested more loudly than the Lutheran, Calvinist and English clergy against the usurers, merchants and employers who defied the law of God, yet the age passed rapidly into an almost complete separation of the economic from the church world. The loss of the church's political and economic provinces would have seemed to her disastrous enough. But society itself, in its vaguer definition, embarked upon an apostasy from ecclesiastical authority which, with temporary checks by Calvinist or Puritan societies, has progressed to the point where at present only vestigial traces of the old direct church laws remain.

The Roman Catholic church still imposes penalties for heresy, particularly in the case of desertion of a religious order after vows have been taken, but all religious groups have become less eager to hunt out the milder heresies. Desertion of the faith no longer appears as a vital blow against the survival of the group. The development of a new religion, however, with a tight religious organization struggling for existence against a hostile world, would put a new importance upon the apostate, as exemplified in the last century by the terroristic practises of the Mormons. At present the apostate in Protestant circles is subjected to slight discrimination if any, dependent upon the customs of his locality and particular group.

JOHN W. HERRING

See: CONFORMITY; INTOLERANCE; SOCIAL DISCRIMINATION; PROSELYTISM; CONVERSION, RELIGIOUS; PERSECUTION; INQUISITION; CANON LAW; THEOCRACY; CHURCH; RELIGION.

Consult: Lea, Henry C., *A History of the Inquisition of the Middle Ages*, 3 vols. (2nd ed. New York 1906); Vacandard, Elphège, *L'inquisition: étude historique et critique sur le pouvoir coercitif de l'église* (2nd ed. Paris 1908), tr. by B. L. Conway (New York 1908); Turberville, A. S., *Mediaeval Heresy and the Inquisition* (London 1920); Coulton, G. G., *The Death Penalty for Heresy, from 1184 to 1921 A.D.* (London 1924); Cozens, M. L., *A Handbook of Heresies* (London 1928).

APPANAGE. This term is used to designate the territory in vassal hereditary possession held by a member of a ruling dynasty. The appanage system was of some importance in France and of even greater importance in Russia. With the establishment of primogeniture in the succession to the throne of France there arose the custom of endowing the younger sons of the king with feudal estates, or appanages, and from the time of the testament of Louis VIII in 1225 the system was practised on a large scale. The creation of these appanages tended to diminish the domain of the Capetian kings and to favor the formation of a new feudal aristocracy which stood in the way of royal centralization and which became particularly troublesome during the reign of Louis XI (1461–83). On the other hand the distribution of members of the royal family throughout France resulted in the introduction of language, customs and administration similar to those of central France and thus facilitated the ultimate acceptance of Capetian domination. By successive measures the transfer of appanages by inheritance was restricted and the possibilities for their reversion to the crown so expedited that they became relatively unimportant after the sixteenth century.

In Russian history the appanage system flourished from the end of the twelfth to the end of the fifteenth century, the period of transition from the supremacy of Kiev to the unification of the country under the Moscow princes. Its characteristic feature was extreme division of territory into large and small princely possessions enjoying sovereign rights and claiming independence.

In the Kiev period the dynasty had kept the whole territory in collective undivided possession, every member of it holding a respective part of the territory according to priority of birth. There was thus a correspondence between the genealogical hierarchy and the hierarchy of holdings which were ranked in the order of their comparative revenue yield. The oldest member of the family had the title of grand prince and the residence of Kiev, which after his death passed to his next brother (not son); the other brothers and after them their sons each moved one step nearer to Kiev. This order of succession, founded in 1054 by the Russian Charlemagne, Yaroslav, soon gave way to the system of succession from father to son. Even as early as the conference of princes at Liubech (1097) direct succession was sanctioned as a general principle. However, it took root not in the southwest but in the newly settled regions of northeastern Russia dominated by Suzdal and Vladimir.

In those provinces there soon appeared several local dynasties, each of them establishing within its own territory hereditary appanages which in turn were divided into still smaller ones and which gradually became indistinguishable from mere *seigneuries* (*boyarshchina*). The holder of an appanage exercised the powers of a sovereign in matters of taxation and administration of justice and in addition was free to render military service to whomsoever he pleased. If he served the prince of his own lineage, the older relationship of elder brother or father was preserved. If, however, he chose to transfer his military strength to some outside prince, his property still remained under the sovereignty of the head of his own line.

As time went on, the more powerful among the possessors of appanages acquired complete independence from the principal grand prince and founded their own grand princedoms (e.g. Tver, Riazan). By mutual agreement they forbade the free transfer of allegiance by their vassals. When the grand prince of Moscow annexed other grand princedoms and small princedoms he imposed a similar restriction. With the completion of this process of annexation the only remaining choice was to transfer allegiance to the enemies of the "whole Russia," such as the Polish-Lithuanian state. Finally John IV (1547–84) confiscated the appanages of remaining great and small (*kniazhata*) princes, exchanged them with other properties in the remote parts of the unified Russia and deprived the princes of all rights of their sovereignty. The Middle Ages in Russia, so similar to the period of feudalism in western Europe, thus came to an end.

PAUL MILIUKOV

See: FEUDALISM; PRIMOGENITURE.

Consult: Mignet, F., *Essai sur la formation territoriale et politique de la France* (Paris 1839); Luchaire, A., *Manuel des institutions françaises* (Paris 1892) p. 481–87; Glasson, E., *Histoire du droit et des institutions de la France*, 5 vols. (Paris 1887–93) vol. v, p. 491–519; Kliuchevsky, V. O., *Kurs russkoy istorii*, 4 vols. (Moscow 1906–22), tr. by C. J. Hogarth as *A History of Russia*, 4 vols. (London 1911–26) vol. i, chs. xv–xviii; Pavlov-Silvansky, N. P., *Feodalizm v udielnoy Russi* (Feudalism in appanage Russia) (2nd ed. Moscow 1922).

APPEALS. Appeal in modern law signifies the judicial process whereby error in an inferior tribunal is corrected in a superior one. In its earlier sense, however, "appeal" meant an accusation. The derivation from *appellare* shows that it was first understood as the individual's outcry against injustice. The allowance of appeals is very uncommon in early stages of legal development. Where justice has a popular basis (as in the clan) an appeal would be anomalous. When administrative, legislative and judicial functions begin to be separated, the process is equally unfavorable to appeals. The extreme formalism and rigidity of early legal procedure put the emphasis merely upon the observance of the proper rules. Since in early stages of legal evolution the judge is essentially an arbitrator appointed by the parties to decide a single controversy, it is considered that they have specifically agreed to abide by his decision. When he has rendered it, moreover, his authority is conceived to have been extinguished so completely as to make recourse impossible. When a multiplicity of courts and magistrates does come into existence, they are not related in a hierarchy but represent independent jurisdictions arising from the differentiation of various administrative functions. A consciousness of a difference between "criminal" and "civil" appeals also comes later, although where democratic sentiments have prevailed some form of appeal has been invented in the interest of the life of the individual. Above all, appeals imply a sophistication of outlook with respect to the judicial process and a conception of authority alien to early communities, in which judgment was considered such a solemn act that it must stand even if wrong. At first appeals consisted not in seeking the judgment of a higher court but were rather a personal remedy against the individuals who had abused their office; thus they charged the judge personally with wilfully giving a false judgment, or the witnesses to the facts with perjury.

These tendencies may be observed in the development of Greek and Roman law. In Athens as long as the judicial business was divided among the archons each was supreme in his own field. With the advent of democracy, in which the people claimed to exercise all the functions of government, it was seen to be impossible to allow magistrates to render final judgment. Thus one of the reforms of Solon was to allow a right of appeal from magisterial decisions to the people assembled in the Heliaea, the judicial assembly. But to appeal beyond the assembly would imply a negation of popular sovereignty. In fact, Clisthenes finally made the heliastic courts courts of first resort rather than courts of appeal. While, strictly speaking,

no appeal could be taken from the judgment of a heliastic court, a new trial could be had by the successful prosecution of a witness for perjury which included illegal as well as false evidence. It was not till Pisistratus set up itinerant circuit judges for the Attic townships that some forms of appeal developed. Similarly in Roman law the right of *appellatio* was not recognized until after the establishment of a magisterial hierarchy under the empire. Under the formular procedure great difficulty was experienced in allowing appeals. As far as the magistrate was concerned his *imperium* interposed. The arbitral character of the *iudex*, for the very reason that he was without *imperium*, had the same effect. The way out was found in the contractual nature of the formula. While there could be no mistake in the judge's sentence, actions of restitution might be based on mistakes in the formula. As far as "criminal" cases were concerned in which death or corporal punishment might be inflicted on a Roman citizen, there was developed the right of *provocatio*, which permitted the condemned to appeal from the magistrate's sentence to the people assembled as the Comitia Centuriata.

The development of appeals in early English law is somewhat similar to this course of evolution. Appeal in its modern meaning is probably not older than the end of the thirteenth century, and is derived from ecclesiastical sources. However, for several centuries the common usage of appeal denoted an accusation of felony by aggrieved private individuals as in "appeals of murder," which remained indeed the common way of prosecuting this crime until the end of the fifteenth century and was not formally abolished until 1819. Appeal as a method of correcting error was at first probably inspired as much by a desire to establish the royal prerogative in the period of centralization which witnessed the decay of feudalism as by a desire to prevent injustice to individual suitors. Appeal was implicit in the hierarchy of the feudal system and was bound to be elaborately organized as soon as local and private jurisdictions gave way before the royal claims. There had developed before the end of the fifteenth century a system of royal courts —the Common Pleas, the Kings' Bench and Exchequer on the law side, and Chancery on the equity side. Ancient local courts continued to operate, as did certain ecclesiastical tribunals, although they were of decreasing importance. The royal encouragement of seeking relief in Chancery against unjust although strictly legal judgments of the common law courts was essentially the encouragement of a way of appeal which, without formally invalidating judgments that had been obtained in the common law courts, rendered them unenforceable.

It was inevitable that conflicts of jurisdiction should arise and that dissatisfied litigants should seek a reexamination of their cases. In the common law courts writs were invented to remove litigation from the local to the royal courts and to prevent undue meddling in temporal matters by ecclesiastical courts. Means for reviewing unsatisfactory decisions in the royal courts were devised. The alleged error might lie in the verdict of the jury. If so, the original remedy was by attaint of the jury for its misfeasance. The defeated litigant secured another jury of greater number and higher dignity, to which the original question was submitted. If its finding was contrary to the first verdict, that verdict was invalidated and the jurors who had rendered it were heavily punished. The severity of the penalty inflicted upon the attainted jurors operated to prevent the attaint from developing into a satisfactory device for correcting mistaken verdicts. Although it was not abolished until 1825, it was of little use after the middle of the seventeenth century. The justices from the beginning rejected or set aside verdicts from jurors who had been guilty of misconduct. But they had much greater difficulty in interfering with verdicts as unfounded in fact, since until the early eighteenth century jurors were entitled to rely upon their own private knowledge. It would be a rare case in which the judges could be sure that such facts as indisputably appeared in court might not be counterbalanced by something known privately to the jurors. Yet the failure of the attaint and the competition of equity compelled the common law judges to extend their control over the jury. Consequently from the latter part of the seventeenth century erroneous verdicts have been nullified by granting new trials.

Similarly, unsatisfactory decisions of a local court might be reexamined in a royal court under a writ of false judgment. This writ originally predicated fault on the part of the court, as the attaint did on the part of the jury. By a similar process the judgments of itinerant justices and justices of assize were brought under review. The King's Bench assumed the power to rectify errors of the Common Pleas. Any

error of record in form or substance caused reversal, but rulings respecting evidence and instructions to the jury were not of record until legislation of 1285 and later permitted them to be preserved for review. Subsequent enactments forbade reversal for unsubstantial errors. Until the erection in 1858 of a Separate Court of Exchequer Chamber with jurisdiction in error over the King's Bench, the only tribunal superior to the King's Bench was Parliament. In 1357–58 a Court of Exchequer Chamber had been created to correct the errors of the Exchequer. In 1830 the two courts of Exchequer Chamber became a single court of appeal from the common law courts, and the King's Bench was deprived of appellate jurisdiction. In Chancery, where trial was without jury and all proceedings from an early date were required to be in writing, there was elaborate reexamination within the court. When the Master of the Rolls rendered a decree, it might be reopened before him by a petition for rehearing; it might then be heard and again reheard by the Chancellor, and at each hearing new evidence might be received. Before 1851, when a Court of Chancery Appeals was established, there was no appellate review short of the House of Lords. The House of Lords exercised a jurisdiction in error over the courts of common law, over the law side of Chancery and, after the middle of the seventeenth century, over the equity side. In equity appeals it took no new evidence. In 1873–75 the courts were consolidated by the Judicature Act; law and equity were fused and writs of error were abolished. A Court of Appeal was erected which, following the Chancery practise, entertains appeals by way of rehearing. Final resort is to the House of Lords and in a few categories to the Privy Council.

Thus was evolved the system of review in civil cases; in criminal cases progress was slower. An acquittal was final. There was no attaint. There was no new trial after conviction of felony, although it might follow erroneous conviction of a misdemeanor. For errors of law appearing strictly of record, a writ of error was obtainable. A trial judge might also in case of conviction exercise his discretion to reserve a doubtful point of law for consideration by his brethren and, after 1848, by the judges of the Court of Crown Cases Reserved. If it were resolved in favor of the prisoner, a pardon followed. It was not until 1907 that the Criminal Appeal Act provided for a rehearing by an appellate court. The Court of Criminal Appeals reviews the entire case and may receive new evidence. A final appeal to the House of Lords may be made only when the attorney general certifies that the case "involves a point of law of exceptional public importance and that it is desirable in the public interest that a further appeal should be brought." Since 1875, therefore, in civil cases and since 1907 in criminal cases, England has enjoyed a system of appellate review wherein the scope of the reexamination is not substantially hampered by technical restrictions.

It is apparent that until the reforms of the Judicature Act the appellate jurisdiction of the various English courts was often largely the result of historical accident. The right to review exercised by various courts was based rather on functional than hierarchical considerations. As we approach modern times, however, we find systems of courts more consciously created in a relation of lower and higher degree. This logical hierarchy is based, it is true, on subject matter and the magnitude of controversies, but the exigencies of appeal are also a very determining influence. When, after the separation from England, a hierarchy of courts was created in the United States, the existing English procedural devices were naturally adopted or continued. The appellate courts reviewed the judgments of inferior common law courts by writ of error and the decrees of equity courts by appeal. The appellate jurisdiction of the hierarchy of courts assumed great importance in view of the federal structure of the government.

At present the appellate judicial power of the United States government is vested in the several Circuit Courts of Appeal and in the Supreme Court. For each of the nine judicial circuits and for the District of Columbia there is a Court of Appeals, which has appellate jurisdiction over the respective district courts, save where a direct review by the Supreme Court is authorized, and over certain quasi-judicial boards and commissions. It may, to secure aid for reaching a correct determination, certify to the Supreme Court specific questions of law. It may be required by that court to transmit any pending case for decision or any decided case for review. If it holds any state statute invalid as repugnant to the constitution, treaties or laws of the United States, the defeated litigant may, as of right, resort to the Supreme Court. Besides exercising this supervisory power over these courts of appeal, the

Supreme Court directly reviews, by appeal, the decrees of the district courts in suits to prevent the enforcement of state statutes or orders of certain boards and commissions, and in suits by the United States to enforce the antitrust and interstate commerce laws, and decisions of district courts adverse to the United States in certain criminal cases. If a state court of last resort decides against the validity of a treaty or statute of the United States, or sustains the validity of a state statute against a claim that it is repugnant to the constitution, treaties or laws of the United States, an appeal lies to the United States Supreme Court. In all other cases where a federal question is decided by such a court, the Supreme Court has a discretionary power of review. It exercises appellate jurisdiction also over the Court of Claims, the Court of Customs' Appeals and the Supreme Court of the Philippine Islands. The appellate courts in reexamining decrees in equity cases rehear the case on the record as made in the court of first instance. In reviewing judgments or appealable orders in law cases, they determine questions of law only. When considering a decision of a state court of last resort the Supreme Court confines itself to a determination of the federal question of law presented by the record.

The pertinent state enactments are so variant that it would require volumes to expound them. Generally speaking, three methods of appellate treatment are prescribed. First, the appellate tribunal may have to retry the entire controversy. In such event it handles the case like a court of first instance. This method is often required in appeals from the judgments of justices of the peace to courts of general original jurisdiction. It sometimes obtains also in the reexamination of decisions of probate or surrogate courts. It is rarely, if ever, used in courts of last resort. Second, it may be directed to rehear the cause on the record made in the lower court, either alone or supplemented by new evidence. Here it makes its decision as it would have done had the questions of fact and law been originally presented to it. This is substantially the original English Chancery procedure and is frequently used in the review of decisions in equity. Very rarely, however, is any provision made for taking any substantial testimony in the appellate tribunal. Third, it may be authorized to review every ruling of law made by the trial court, including its decision on the question whether the verdict or finding has any evidence to support it. If reasonable men might draw different conclusions from the testimony, the verdict or finding will stand, even though it be against the preponderance of the evidence. The trial judge may usually grant a new trial because errors of law occurred during the trial or because the verdict is contrary to the great weight of the evidence. In the former case his action is in many states reviewable; in the latter, if reviewable at all, it is reversible only for abuse of discretion. In a few places express authority to reverse is given where on the whole record manifest injustice appears to have been done. This third method is generally provided for the review of cases tried by jury or by a judge where jury has been waived.

The system of appeals now prevailing in continental Europe bears a general resemblance to that of England and America. They also pass through a hierarchy of courts at the bottom of which there is usually a court of limited jurisdiction for the adjudication of comparatively unimportant cases, such as the Juges de Paix in France or the Amtsgericht in Germany. A court of general original jurisdiction, like the Kreisgericht of Austria or the Civil and Penal Tribunals of Italy, is established for the trial of ordinary litigation and is invested with appellate powers over the inferior tribunal. Next in order comes a court of the character of the Oberlandesgericht of Germany or Austria, the jurisdiction of which is chiefly or exclusively appellate. At the summit, with powers restricted to the correction of errors of law, is a supreme court, of which the Reichsgericht of Germany and the Court of Cassation of France and of Italy are types.

All final judgments and certain interlocutory orders and judgments of courts of inferior instance are everywhere subject to review by some superior tribunal. In criminal cases the review is usually confined to matters of law, as in Germany, Austria and Italy; only rarely, as in Switzerland, are the facts reexamined on appeal. Provision is ordinarily made for setting aside a conviction, on the showing of specified facts such as a later conviction of another for the same act which is irreconcilable with the first conviction, or conviction of a material prosecuting witness of perjury against the prisoner, or discovery of new evidence of a character to demonstrate the innocence of the prisoner, or, in a homicide case, the continued life of the alleged victim. Application therefor is

made in some places to the trial court; in others to the court of last resort.

The final judgment in a civil cause resulting from a trial in a court of first instance is reviewable on appeal. In most countries on such appeal both the law and the facts are tried: the parties are not confined either to the allegations or the proof offered or considered below, though generally no new claim or demand may be introduced. In Austria, however, the appellate court will not receive new matter except in explanation or refutation of the points of appeal. It may nevertheless cause the proof taken below to be amplified, and it may receive evidence offered and rejected below. No judgment rendered on appeal is subject to reexamination on the facts by a higher court. For instance, if the Landgericht of Germany renders a judgment on appeal from the Amtsgericht, its decision on the facts is final. All such judgments, however, as well as other non-appealable judgments, are subject to review for errors of law in the highest court of the land. In France and Italy the Court of Cassation, when quashing a judgment, cannot order final disposition but must send the case for retrial, not to the court which rendered the questioned judgment, but to another court of equivalent rank. This court is not bound to follow the decision of the Court of Cassation. If it refuses to do so, and the case again comes before the Court of Cassation for revision, it is heard by the full bench. If the full bench adheres to the decision on original revision, it remands the case to a third court of proper grade, which is required to make final disposition in accord with the opinion of the Court of Cassation.

As in former times, appeals still have administrative values quite apart from the necessity of securing justice to individual suitors. The first requisite of judicial social engineering is that the same factual situation shall uniformly create the same legal relations. The second is that this principle be effectually applied to litigation with a minimum of expense and delay and without discrimination. To effectuate these results there must be, for the formulation of non-legislative rules and the interpretation of legislative rules, a single authoritative tribunal which shall also either apply them or supervise their application to individual cases. For any such tribunal of manageable size to try all litigated questions of fact and law in a modern state would be a physical impossibility. Its function must be supervisory; the task of trial must be assigned to inferior courts whose action shall be subject to correction.

The methods of appellate review current in the United States adequately secure the recognition of all rules thus established by the superior tribunal and their application both to the method of determining the facts and to the facts as found in the trial court. Uniformity and impartiality are to this extent attained. Delay and expense in the process have, however, not been reduced to a minimum. Though the general tendency is to disregard non-prejudicial errors, in some states there remains a disposition to reverse for mistakes the effect of which upon the merits is merely speculative and which allow an astute lawyer defending a bad case to exert himself in jockeying for points on appeal with which he can secure reversal in the appellate court and wear out the opposition. And constitutional provisions sometimes prevent desired expedition. The Federal Courts, under the Seventh Amendment, must order a new trial in reversing a judgment based upon a jury's verdict, even though the record clearly indicates which party must finally prevail. Still, as to matters of law the existing system is capable of functioning with reasonable efficiency.

As to matters of fact the appellate court necessarily has less control. On the one hand it may prevent the trial tribunal from avoiding the application of pertinent rules by making merely colorable or fictitious findings. A verdict or finding based on mere conjecture cannot stand. On the other hand it is impracticable for the court of last resort to retry cases de novo. Wherever such a plan has obtained, it has been vigorously condemned. It makes the first trial a pure economic waste, and results in a practical denial of justice to impecunious litigants. The original equity procedure, when applied to current practise, has at least two serious defects. First, it puts too great a burden upon the appellate court. A reexamination of all the evidence in every appealed case would overwhelm the justices. Second, it overlooks the impossibility of evaluating oral testimony by an examination of the printed page. And today much of the testimony in equity, like most of it at law, is presented orally. The present tendency is not to disturb the decree or order except where the original finding is rather obviously against the weight of the evidence. This furnishes a practicable means of counteracting local prejudice and idiosyncracies of particular judges.

But it cannot be used in those numerous cases where there is a constitutional right to trial by jury. Because of the accident of its composition or because of peculiar temporary local conditions, a jury may go badly astray on the facts. The prevailing corrective, a new trial granted in the discretion of the trial judge, is not sufficient, for he may himself be prejudiced or otherwise improperly motivated. The rule which makes his action non-reviewable, or reversible only for abuse of discretion, leaves open the door for fatal partiality and discrimination in the application of recognized legal rules. It is true that appellate courts have an uncanny way of finding errors of law on which to base a reversal when convinced that the result below is obviously wrong on the facts. But it should be unnecessary for them to resort to subterfuge. They have, and possibly should have, no power finally to determine the facts in such cases. But they should have the unquestioned right to require a new trial whenever for any reason they are convinced from the record on appeal that substantial justice has not been done.

E. M. MORGAN

See: COURTS; JUDICIARY; PROCEDURE, LEGAL; WRITS, LEGAL; EQUITY; CRIMINAL LAW; JUDICIAL REVIEW; JURY; PARDON.

Consult: Bonner, Robert J., *Lawyers and Litigants in Ancient Athens* (Chicago 1927); Schisas, P. M., *Offences against the State in Roman Law* (London 1926); Engelmann, Arthur, and others, *A History of Continental Civil Procedure*, tr. and ed. by R. W. Millar, Continental Legal History series, vol. vii (Boston 1927); Pollock, F., and Maitland, F. W., *The History of English Law*, 2 vols. (2nd ed. Cambridge, Eng. 1899) vol. ii, ch. ix; Thayer, J. B., *Preliminary Treatise on Evidence* (Boston 1898) ch. iv; Levy, J. H., *The Necessity for Criminal Appeal* (London 1899); Frankfurter, Felix, and Landis, James M., *The Business of the Supreme Court* (New York 1927).

APPLEGARTH, ROBERT (1834–1924), English trade union leader. By trade a carpenter, he was appointed (1862) general secretary of the Amalgamated Society of Carpenters and Joiners, which he rapidly developed into a union of foremost importance. He led the movement for full legalization of unions, and the evidence which he and other leaders produced of the efficient administration and moderation of the larger unions broke down public opposition. This opened the way for the act (1871) by which unions were legalized and their funds protected. He had a much wider conception of the scope of trade unionism than his fellow unionists and was foremost in inducing the unions to take the important step of entering politics as a principal means of improving the workers' status. He supported legislation extending the franchise to the town artisan (1867) and providing a national system of elementary education (1870). In 1871 he resigned his general secretaryship as a protest against a too narrow interpretation of his duties by his executive. He entered commerce but continued his active interest in the workers' movement and lived to see trade unionism make great progress along the road which, in critical years, he had pioneered.

J. H. RICHARDSON

Consult: Humphrey, A. W., *Robert Applegarth* (Manchester 1913).

APPLETON, NATHAN (1779–1861), merchant and capitalist, the business genius of the American industrial revolution. His recognition of the necessity of systematic, double entry bookkeeping, his insistence on maintaining at least a third of a company's capital in liquid form for running expenses and his organization for mass distribution were largely responsible for the success of America's first large scale industry. He perceived and exercised the function of the promoter in assisting in the organization of most of the major Massachusetts textile corporations (*Introduction of the Power Loom and Origin of Lowell*, Lowell 1858).

Efficiency and sound policy formed the basis for his frequently expressed views on public questions. Regarding business as purely private, he opposed such government interference as the taxing of insurance companies and bank capital and the regulation of manufacturing corporations. He supported the tariff, however, as a constructive aid to industry, representing the Boston protective interests in Congress in 1831 and again in 1842 and defending the tariff of 1832, of which he was a principal author, in a famous speech against McDuffie of South Carolina (*Speech . . . in reply to Mr. McDuffie*, Washington 1832). He entered conspicuously into banking controversies, leading an attack in 1808 on the unsound Massachusetts country banks, supporting the Suffolk Bank system, advocating the monopolization of note issue by large banks and its limitation to a small proportion of their capital and insisting that specie payment be maintained at all costs (*Examination of the Banking System of Mas-*

sachusetts, Boston 1831). After striving to counteract the ill effects of Biddle's manipulation of the second United States Bank currency, he came to the conclusion that such a bank placed too much power in the hands of one man and should not be rechartered (*Remarks on Currency and Banking*, Boston 1841, 3rd ed. 1857).

In business methods and attitudes he was the prototype of the modern American capitalist promoter, but in his own mind he never ceased to be a merchant, proud of the liberal traditions of that ancient New England calling. In fact he combined in himself these two types, bringing the merchant's point of view to manufactures which had previously attracted only craftsmen and establishing business methods so modern that the textile industry has taken a hundred years to outgrow them.

CAROLINE F. WARE

Consult: Winthrop, R. C., "Memoir of Hon. Nathan Appleton" in Massachusetts Historical Society, *Proceedings*, vol. v (1861) 249–308, which contains Appleton's autobiographical memoir, lists his printed writings and mentions his chief contributions to the periodical press.

APPOINTMENTS. With the expansion of governmental activities, the importance of the appointing power has naturally increased. An ever enlarging number of official relationships must somehow be established and appointment is the normal mode. In the United States the "more democracy" movement of the two middle quarters of the nineteenth century had spread the blighting and decentralizing influence of extensive popular election in state and local governments, but under the slogan of the "short ballot" reaction ultimately set in with the result that in some states and many cities the number of elected officers has been diminished in recent years. Fortunately the national constitution has from the beginning required that all officers beneath the president shall be appointed, and the difficulty of amending that instrument saved the executive branch of the federal government from the misguided fate that overtook the iesser units.

The power to appoint, coupled with the power to remove, is the quintessence of executive responsibility, but since it is peculiarly liable to misuse, checks are sought. The most important and the most far reaching of these is the merit system, with which we are not here concerned (*see* CIVIL SERVICE). In no country has that system been applied to all officers, and especially have the directive officials of the upper grades been excepted. Even as to these, however, there are some checks on the executive power. For example, the United States Senate must ratify most presidential appointments. A somewhat analogous system spread generally, though not universally, in the state governments as the power of appointment passed from legislatures to governors, and a similar system was introduced at one time in many American cities. However occasionally valuable as a check on executive indiscretion, such a system has, generally speaking, produced more evil than good. It scatters and conceals responsibility; it promotes backstairs politics; it fosters unhealthy relations, sometimes amounting to bitter discord, between the executive and the legislative body. As applied to federal officers having local jurisdiction in the states, it amounts almost to a devolution of the executive power of appointment to individual senators or other politicians. Politics, operating through the medium of what is generally but not altogether accurately described as "senatorial courtesy," makes appointments a matter of local patronage. Although this system might be abolished root and branch by mere act of Congress (except as to judges of the Supreme Court, diplomatic and consular officers and heads of departments) there is small possibility of any such event. In no European country is anything comparable found.

In the states centralization of local appointments was not infrequent in the earlier days of the republic. But the spread of a thin population over a vast territory, apart from the individualistic spirit that indispensably accompanied the "rugged pioneer," led to decentralization. There have been recrudescences of central appointment since, prompted sometimes by local inefficiencies and scandals but quite as frequently by politics. A few states have eliminated senatorial confirmation of gubernatorial nominations, while a goodly number of cities vest the power of appointment exclusively in an elected mayor or in a city manager chosen by the council. Certainty of concentrated responsibility is preferred despite the risk of abuse.

Another restriction upon the appointing authority is the imposition of statutory qualifications for various offices. Such restrictions are by no means universal but they are sufficiently numerous, both in Europe and in America, to seem worth noting. They do not of course necessarily result in installing competent offi-

cers, but they often assist in preventing outrageously unfit appointments. A plumber cannot be made a legal adviser or prosecuting attorney; a butcher cannot be put in charge of engineering construction.

In the United States the qualification of residence in the state or local unit of jurisdiction —a qualification that is attached to many appointive offices—has been a serious handicap not only to the development of administrative efficiency but also to the development of careers in the public service. A large city may not take over at higher compensation an experienced and competent official in some smaller city. Nor may the states compete with one another for public servants. Even where the law does not expressly require residence, politics and custom often do. In the national postal service, for example, postmasters are never promoted from city to city. For many, if not for most, branches of the public service this requirement of residence is absurd. It prevails to a much smaller extent in European countries than in the United States, where there are, however, signs of its waning, especially noticeable in the fields of educational administration and city managership.

Another scheme for holding the appointive authority in leash is to place administrative services in charge of boards or commissions the members of which are appointed for relatively long and overlapping terms with varying degrees of protection against removal. The object is not only to secure continuity of policy but more especially to prevent the too active play of politics in appointing and removing officials. Although there has been some drift away from the board plan of organization toward the single headed office, this type of organization still prevails on a wide scale in many American states and in a considerable number of cities. In the national government it is found chiefly, although not exclusively, in those branches of administration that are vested with quasi-judicial powers. With the ostensible purpose of further lessening the force of party politics, membership in these boards is not infrequently required to be divided between the two major parties. The purpose is seldom realized. Bipartisanship does not often result in nonpartisanship. This is not surprising; for the requirement of party membership manifestly exalts party fealty and regularity above all other qualifications.

There are many critics of this board plan of organization. Like the scheme of senatorial confirmation it obscures and weakens the responsibility of the appointing authority. Practise seems to justify its existence only when the functional nature of the administrative work to be done calls for collective rather than individual judgment and action.

Most of the countries of continental Europe stand in contrast to England and the United States in the matter of centralized control over appointments to offices of local jurisdiction. The highly centralized administrative systems of the Latin European countries place large political power in the hands of the central appointing authorities. Centralization of authority in the officials of Prussia and the lesser German states is almost as complete. In England there is relatively little appointment of local officers from London except in so far as strictly national services are concerned. In the United States every appointment in the national services is in theory centrally controlled; but such services are largely divorced from the spheres of action that are locally reserved. But even where appointments are made to the federal service, the process of appointment by "senatorial courtesy" sees to it that the appointees to local jurisdictional spheres are not merely parts of an inexorably pyramided hierarchy.

HOWARD LEE MCBAIN

See: PUBLIC OFFICE; CIVIL SERVICE; SPOILS SYSTEM; ELECTIONS; PARTIES, POLITICAL; ADMINISTRATION, PUBLIC; SEPARATION OF POWERS; BOARDS, ADMINISTRATIVE; SHORT BALLOT MOVEMENT; COMMISSION SYSTEM OF GOVERNMENT; CITY MANAGER.

Consult: Salmon, Lucy M., "History of the Appointing Power of the President" in American Historical Association, *Papers*, vol. i (1886) no. 5; Myers *v.* United States, 272 (1926) U. S. 52; Springer *v.* Philippines, 277 (1927) U. S. 189; Corwin, E. S., "Tenure of Office and the Removal Power" in *Columbia Law Review*, vol. xxvii (1927) 353–99; Beard, Charles A., *American Government and Politics* (4th ed. New York 1924) p. 195–200, 508–11; Holcombe, Arthur, *State Government in the United States* (2nd ed. New York 1926) p. 297–306, 395–404; Mathews, John M., *Principles of American State Administration* (New York 1917) ch. viii; Anderson, William, *American City Government* (New York 1925); Sait, E. M., *Government and Politics of France* (New York 1920); Blachly, F. F., and Oatman, M. E., *Government and Administration of Germany*, Institute for Government Research, Studies in Administration (Baltimore 1928) p. 377–80.

APPORTIONMENT, as now generally understood, particularly in American constitutional law, is a process of allotting representatives or

taxes on the basis of population. However, in the earlier stages of democratic government, representatives were usually apportioned on the basis of political units or corporate entities, or property considerations were allowed to count, as in the older European monarchies. Apportionment, too, was more occasional and less methodical than it is now.

The Constitution of the United States originally provided in Article 1 that representatives and direct taxes should be apportioned among the several states according to their respective numbers except that only three fifths of the slave population was to be counted. The "three-fifths" clause, which represented a compromise of the interests of the slave and free states, was abrogated, however, by the Fourteenth Amendment. But the further provision of the amendment for the proportional reduction of the basis of representation where the right of citizens might be in any way abridged has not been enforced against the southern states. The Sixteenth Amendment further abrogated the necessity of apportioning income taxes among the several states according to population. The other provisions of Article 1 have remained unchanged. Thus representatives and direct taxes, with the exception of income taxes, are apportioned among the states according to their respective populations. A census of the population must be taken every tenth year for use as a basis of reapportionment in the House of Representatives. The number of representatives cannot exceed one for every thirty thousand, but each state must have at least one representative. This provision has been based on the theory that the representative body should be a reflex of opinion throughout the country. The well known sectional problem prevented the application of the same principle to the Senate.

In the earlier state governments, representation in the lower houses was based largely upon geographical areas, such as the county, except in New England where it has been the town. In the upper houses, the basis of large single member districts formed by grouping or dividing counties has prevailed. This was not grossly unfair, because great inequalities in their populations did not exist. But the growth of urban centers has since changed the situation. The lower houses of Connecticut, New Hampshire and Vermont, and both houses in Rhode Island, are based upon town representation, and with the growth of cities this basis has become highly unequal. In New Jersey the provision giving to the counties equal representation in the senate discriminates greatly against the larger cities of the state. The more common plan today is to provide for the periodical reapportionment of membership in the two houses upon the basis of population.

The first House of Representatives in the United States consisted of sixty-five members chosen from districts of approximately 30,000 inhabitants. Following the census of 1790, the number of representatives rose to 105 chosen from districts of approximately 33,000 inhabitants. Thereafter until 1920, following each decennial census, Congress undertook a reapportionment of the representation, increasing the number of members of the House of Representatives to 435 and the average size of the districts to 211,877. The constituencies are thus much larger than in England, where the ratio of representatives to population is one to 71,045, and in Germany, where the ratio is one to 126,854 inhabitants.

The actual districting of the states after a reapportionment is vested in the state legislatures. Until 1842, Congress left the states to their own devices in election methods, and representatives were often elected in the state at large; but the Apportionment Act passed in that year provided that the legislatures in each state should divide the state's territory into as many districts as there were representatives to be elected. These congressional districts were to be of "contiguous and compact territory containing as nearly as practicable an equal number of inhabitants," each district electing one representative. If, however, the state legislature failed to carry out this provision, some or all of the members might be elected at large on a general ticket. The practise of districting by the state legislatures has not been without evils, leading often to gerrymandering.

While it is easy to define apportionment as a process of allotment based on population, the application of the principle raises many difficulties of a mathematical nature in cases where the size of a legislative body for constitutional or practical reasons cannot be increased; this is true particularly in federal governments. If fractional voting were permitted in the legislative body, the exact number of representatives with whole votes, and the size of the fractional vote for an additional representative to which each state would be entitled in a theoretically perfect apportionment, could be readily cal-

culated. It would be necessary only to work out the following proportion: the number of votes for any particular state is to the total number of votes for all states as the population of the particular state is to the total population of all states.

If, however, this simple proportion were calculated, the result in nearly all cases would be that the number of representatives for each particular state would consist of a whole number and a fraction. Fractional voting, however, is not permitted. Therefore it is necessary to reach a solution of the apportionment problem in whole numbers. This fact alters fundamentally the mathematical nature of the problem. Even when the exact number of votes, including fractions, belonging theoretically to a state is precisely known, this knowledge is not of itself sufficient to determine the proper number of representatives to be apportioned to that state. The proper apportionment of integral numbers of representatives to a particular state may differ by several units from the number obtained by simple proportion. This is true no matter which of several known methods of apportionment is adopted.

There are five methods of apportionment which lead to a workable solution: method of smallest divisors, method of the harmonic mean, method of equal proportions, method of major fractions and method of greatest divisors. The first two methods tend to favor states having small populations and the last two methods tend to favor states having large populations. Political factors usually lead to considerable debate when a choice among these alternatives is involved. Apportionment may mean the abolition of the offices of some members. The desire to maintain sectional influences may also cause trouble.

The failure of Congress to follow the census of 1920 by a reapportionment, which caused much criticism, perfectly illustrates these considerations. Since the taking of the decennial census is mandatory, it was argued that Congress could neither postpone nor refuse a reapportionment. But population movements in the United States during the decade prior to 1920 created a difficult situation for Congress. The growth of population was very unequal. The steady flow of population from rural to urban districts was complicated by the removal of the textile industry from northern New England to the Piedmont sections of the South and the concentration of the automotive industries in Michigan with the consequent migrations of workers. The growth of New York City as a business center increased the population of New Jersey and Connecticut, where the rise of suburban towns was rapid. Likewise the migration from the Mississippi valley to southern California disturbed still further the equal growth of population.

Congress was confronted with a choice between two alternatives. Additional members could be granted to the House of Representatives, making that body more unwieldy and increasing the cost of government, or the House could continue with a membership of 435 and the seats be redistributed so that the representation would be equalized. The first alternative seemed undesirable because it would increase the unwieldiness of the House, and the second proved difficult of accomplishment. While eleven states would lose and eight states gain in representation, the reapportionment would for some members mean political retirement. In this delicate situation Congress refused to act. Members argued that the condition disclosed by the 1920 census was temporary, that the increasing concentration of population was due to the war, that this tendency would soon reverse itself, and that it would be unfair to the agricultural districts to carry out a reapportionment on the 1920 basis. It was even alleged that since the census of 1920 was taken during the winter months, when many country districts were difficult of access, it was not a proper enumeration. These purely rhetorical reasons for the failure to reapportion are insignificant beside the substantial fact that Congress was willing to apportion, provided that every state retain the number of members then sitting in the body, and that increases be provided in other states. In short, the real obstacle to reapportionment was the necessity of reducing the existing representation in some of the states, which made it impossible to agree upon the method of apportionment to be pursued, although the method of equal proportions was endorsed by the advisory committee to the director of the census and by a specially appointed committee of the National Academy of Sciences. Sectional feeling also intruded in a proposal aimed at the eastern states which represents an interesting addition to the Negro problem in apportionment: the exclusion of unnaturalized aliens from the number to be used as a basis of representation.

The agitation for reapportionment continued until in the special session of Congress called by President Hoover to meet April 15, 1929, a law was passed providing for the taking of the fifteenth census and subsequent decennial censuses and the apportionment of the membership of the House of Representatives according to those censuses. Reapportionment under this law will follow automatically on the census, with the number of members of the House fixed at 435. The president is directed to report to the short session of Congress, following the count, what the reapportionment would be according to two methods; one the method known as major fractions and the other the method of equal proportions. The first was the one employed in the last reapportionment. If Congress fails in the short session to enact legislation for reapportionment, the representation reported by the president automatically goes into effect in the election of the next Congress.

In European countries, historic associations have played a greater part in the creation of election districts. The distribution of seats is not always made periodically, and often only approximate mathematical equality prevails. European governments have also tended to adopt the principle of population as the basis of representative districts, but the wider adoption of proportional representation has complicated matters. Periodic apportionment is not required in England, but since 1865 representation in the House of Commons has on the whole tended to be apportioned in accordance with population densities. Constituencies of approximately equal size have replaced the former notoriously over-represented boroughs. In France a periodic redistribution takes place every five years. After experimenting with a system of geographical distribution upon which was superimposed a form of proportional representation France has since 1927 reverted to the old *scrutin d'arrondissement*. Germany follows the principle of population in fixing the number of votes in the Reichsrat and in determining the number of districts from which members of the Reichstag shall be chosen by a scheme of proportional representation. Most of the constitutions in the new states of central Europe, having adopted systems of proportional representation, provide for the distribution of seats to the several parties within each electoral area so that each party obtains one representative for every quota of voters which it can rally to its support. All fractions of quotas are disregarded, but in the matter of establishing the electoral districts of constituencies it is uniformly the practise to consider the principle of population.

WILLIAM SEAL CARPENTER

See: CENSUS; ROTTEN BOROUGHS; GERRYMANDER; PROPORTIONAL REPRESENTATION; FUNCTIONAL REPRESENTATION; REPRESENTATION; ELECTIONS.

Consult: For state apportionment: Reed, Alfred Z., *Territorial Basis of Government under the State Constitutions* (New York 1911). For the history of federal apportionment, see various congressional hearings, speeches, debates and reports on apportionment in the different Congresses and also United States, Library of Congress, Division of Bibliography, *Apportionment of Members of the House of Representatives*, Select List of References, no. 1072 (mimeographed, Washington 1928). For the distribution of seats in European countries, see Ogg, F. A., *The Governments of Europe* (revised ed. New York 1920) and authorities there cited.

APPRECIATION is used in a variety of senses to refer to any increase in the value of a right, commodity or service. Variations of the concept seem to turn on two points—the time element and value meaning. Loosely and popularly it is used to describe price increases of relatively short duration, notably in the case of securities. Defined more strictly, the term denotes relatively permanent or enduring price increases of particular items or classes of property. It must be admitted, however, that the exact shade of meaning is variable and a matter of convenience to the user. The term is seldom used by theoretical economists, but it is found appropriate by many who deal with practical phases of the science. On the whole, however, it denotes price movements that outlast the business cycle or run counter to the downward swings of the price cycle. Or, more precisely, appreciation is an upward swing of the prices of particular rights, goods or services, after eliminating the effects of seasonal and cyclical factors and of the depreciation of the monetary standard.

At least two concepts of value—use value and exchange value—have been read into appreciation. Professor John D. Black, in analyzing the process of production, describes as appreciation an increase in the want-satisfying utilities of a commodity or an increase in the dexterity and experience of a human agent. His usage seems to be in harmony with that of wine makers whose product ripens with age or with that of engineers when they refer

to the seasoning and adaptation of a railway roadbed.

In contrast with this physical concept, the majority of writers identify appreciation with a concept of value derived from the market place. To the accountant appreciation of assets means the converse or offset to depreciation, in the economic not the physical sense. Likewise economists generally in referring to increments in the values of land, capital goods, money, securities or other economic goods contemplate potential or actual marketability at higher prices.

From the standpoint of an owner of property appreciation is based upon an increase in net earnings from use of property beyond the potential earnings discounted in the purchase price. In acquiring the right to appreciation when, as, and if it occurs, the purchaser ordinarily pays to the former owner some of the potential appreciation, in so far as the sale price exceeds an amount upon which current net earnings afford a competitive return. In other words, accrued appreciation and also a certain amount of unrealized and unaccrued but anticipated appreciation are normally discounted in the price of the property. Appreciation, therefore, is often conjunctural in nature; it may be accrued but not realized, and anticipated but not accrued.

The accrual of appreciation depends upon a reduction of costs, income remaining constant; or an increase in revenues, costs remaining the same; a more rapid turnover, the margin of net income remaining the same; or a decline in the rate of capitalization, net income remaining the same. Sometimes, however, the owner is not able to realize the accruing appreciation owing to use of the property at its existing capacity, or he may forego realization until sale of the property to another. The admission of non-owners to a share of prospective appreciation, as in the split of stock hitherto closely held, is customarily on such terms as will assure to current owners the realization of accrued appreciation and a certain proportion of the anticipated appreciation.

The distinctions between anticipated, accrued and realized appreciation direct attention to the limitations of the accrual of appreciation. In general these limitations are of three types, physical, legal and economic, and in any one item of property they may be combined and interrelated. For example, some commodities are more likely to appreciate than are others, owing to peculiarities of the commodity itself. The durability of the good, the degree of mobility or immobility with respect to other goods or activities of men, are such factors. The degree of uniqueness, illustrated by pictures, rare books and personal services, is influenced by the physical composition of the good or nature of the service as well as their market position. Thus a great work of art may not be physically reproducible, but the possibility of appreciation is affected by the rise and fall of schools of art in popular favor. Expressed differently, appreciation is less likely to occur when goods or services are subject to competition with duplicates, easily and quickly made, or substitutes. Similarly when appreciation has been made possible by legal protection of certain privileges, the withdrawal or lessening of such protection, illustrated by the expiration of patents, tends to check appreciation. Moreover, effective public regulation of prices, as in public utility services, tends to curtail appreciation by limiting the net earnings which are its base.

The economic limits of appreciation may come from either or both sides of the old supply and demand formula. The popularity of an author or artist may decline; closely held stock may be split up and distributed to a wider public; sites in one locality may fall in value as new transportation facilities open up new territory. As Professor Black points out, "at any given time a piece of land may be either appreciating or depreciating; or it may be appreciating from one cause and depreciating from another."

Among the most important economic limits of appreciation is cost. This is frequently overlooked in the common statement that in a growing country the increase of population causes increased land values. Technological improvements check this tendency through their effects upon costs. Though averaging land values over a considerable area or comparison of widely separated years may disclose price advances in response to population growth, appreciation thus measured is apt to prove fictitious when costs are taken into account. Moreover, when the movement of land values is traced for smaller areas and intervening years, the price tendencies appear wavelike in both territorial and time dimensions, suggesting other influences than mere growth of population.

These influences are more apparent in con-

sidering particular tracts of land under single ownership. Whatever may be the course of land values generally, there is no assurance that a particular site will appreciate or depreciate synchronously. The accrual of appreciation of the particular site depends not only on the uses to which it can be put and the demand for those services but also upon the costs of putting the land to a given or new use and upon the cost of holding the land in present use until a new, more profitable use ripens. Generally speaking, the costs limiting appreciation may be described as the operating expenses incident to the existing use of the property and "ripening costs." The latter type of costs especially tends to rise as the demand for a site improves, with the result that these costs may drastically curtail the accrual of anticipated appreciation.

In considering the effects of appreciation, much depends on the point of view—whether that of owner, lessee, prospective investor, etc. —and on the uses of the appreciating property. If a commodity necessary to production appreciates, the effect is likely to be, to prospective investors or lessees, an increased cost of doing business, unless appreciation can be offset by economies in other directions; but existing owners or lessees may benefit from the appreciation. Similarly appreciation of consumers' goods, residential land, for example, tends to increase the cost of living, but the owner of such property may eventually benefit if he can realize the appreciation. Taking the price structure as a whole, if we eliminate business cycle and money standard appreciation, the effect of appreciation of some items of property ordinarily tends to be offset by declining prices of others.

One would suppose that appreciation would induce more efficient use of property. This indeed may be the result, but not necessarily so. A site may ripen to a higher use, commanding a higher price, if sold, but the more intensive or profitable use may be postponed because of inertia or because the site is encumbered with a structure that must be replaced at a cost which will wipe out the greater profits in the immediate future from the more efficient new use. In short, the more efficient use may not be economical when full consideration is given to costs.

This situation is more clearly seen in considering the effects of appreciation upon the problem of maintaining the investment. Many owners of real estate adopt the rule-of-thumb principle of relying on the accrual of appreciation of the site to offset depreciation of the structures. That this is a perilous method of using appreciation is evident, for the appreciation of a particular site is uncertain in both amount and time of accrual; the rate of appreciation is variable; "the higher the ratio of improvement value to site value, the greater must be appreciation if it is to offset depreciation" and the smaller is the opportunity for appreciation; and the appreciation may be unrealizable, "unearning," owing to the cost of scrapping existing improvements of the site. Despite these uncertainties, the hope or the prospect of appreciation is an impelling factor in the distribution of investment funds.

Appreciation has also markedly influenced tax policies and tax programs. At the present time in the United States, accrued appreciation of land is taxed by the federal government as a capital gain at a rate of 12½ percent in the year in which it is realized. Moreover the general property tax based on assessed sales values frequently takes part of the appreciation as it accrues but before it is realized. Finally the taxation of bare-land values, as sponsored by Henry George and his followers, is a proposal to take all appreciation of that form of property, or at least more than is taken by existing taxation.

Appreciation complicates the problems of cost analysis, especially in price regulated industries. The value at which land should be included in a rate base illustrates the problem, though similar difficulties are met in treating appreciated securities in a rate base, as in Massachusetts. Considerable areas of land for, or adjoining, railroad rights of way have been acquired by gift or sale at low prices and have risen greatly in value, partly as a result of the utility's services in developing the community. Should such land be carried in the rate base at its original cost to the utility, at its present appreciated value or at some figure between the two extremes? The general practise is to allow the utility owners to retain at least some of the appreciation, recognizing, however, that first, not all the appreciation is attributable to the utility's efforts, and second, appreciation of the right of way measured by the values of adjoining tracts is partly unrealizable and "unearning," even if permission to sell the right of way were granted. Strict adherence to the cost basis of land valuation, omitting all appreciation, is confiscatory under the federal

constitution as interpreted by the Supreme Court in the *Minnesota Rate Cases*, 230 U. S. 352 (1913).

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See: PRICES; BUSINESS CYCLES; INFLATION AND DEFLATION; VALUE; PRICE; COST; ACCOUNTING; DEPRECIATION; VALUATION; CAPITALIZATION; SPECULATION; LAND SPECULATION; LAND VALUATION; LAND TAXATION; SINGLE TAX; ASSESSMENT OF TAXES; UNEARNED INCREMENT.

Consult: Fisher, Irving, *Elementary Principles of Economics* (3rd ed. New York 1913) ch. vii; Black, John D., *Introduction to Production Economics* (New York 1926) p. 421–28; Ely, R. T., and others, *Outlines of Land Economics*, 3 vols. (Ann Arbor 1922) vol. ii, chs. iii–v; Ely, R. T., "Land Income" in *Political Science Quarterly*, vol. xliii (1928) 408–27; Dorau, H. B., and Hinman, A. G., *Urban Land Economics* (New York 1928) chs. xiv, xxx; Arner, G. B. L., "Land Values in New York" in *Quarterly Journal of Economics*, vol. xxxvi (1921–22) 545–80; Loucks, W. N., "Increments in Land Values in Philadelphia" in *Journal of Land and Public Utility Economics*, vol. i (1925) 469–77; Shannon, H. L., and Bodfish, H. M., "Increments in Subdivided Land Values in Twenty Chicago Properties" in *Journal of Land and Public Utility Economics*, vol. v (1929) 29–47.

APPRENTICES, STATUTES OF. *See* LABOURERS, STATUTES OF.

APPRENTICESHIP

APPRENTICESHIP is a method of passing on acquired trade skills and of maintaining a supply of craftsmen. It is a mutual relationship under which a novice, who is generally a minor, is taught the art of a trade by one who is engaged in it. The apprentice in return pays either in whole or in part for this instruction by work on objects destined for consumption or sale by the master.

Contrary to the usual impression, apprenticeship did not originate in the Middle Ages. The Babylonian Code of Hammurabi makes explicit provision that artisans shall teach their handicrafts to those sons whom they may adopt, and that if this is not done the boys may return to their fathers' houses. Not only was apprenticeship thus legally regulated at this early date but the relationship between master and apprentice was modeled upon that of father and son. The records of Egypt, Greece and Rome show that apprenticeship was an integral part of the industrial systems of those cultures. Nor has apprenticeship been confined to the Occident. It is still the predominant means of learning a handicraft in the Orient, and is there regulated by the guilds in much the same manner as by the European guilds during the mediaeval period. Such a system is in fact an inevitable feature of handicraft production since the growth of industry very frequently exceeds the ability of a craftsman's family to man it. Other boys must be taught the trade in order to provide a sufficient supply of skilled craftsmen and to insure continuity of management.

The respective rights of apprentice and master were generally stated in an indenture signed not only by these two parties but also by the parent or guardian of the apprentice. The period of time prescribed for apprenticeship by the mediaeval guilds and provided for in the indentures varied quite widely. In France it usually ranged from three to five years, but in England seven years was the more common term.

In addition to training, the masters generally furnished board and lodging to the apprentices and agreed to supervise their morals and habits. The apprentices on their part agreed faithfully to serve the masters, and in some cases their families agreed to give payments in cash or in kind as an added compensation for the training furnished. The master was given the power to discipline the apprentices, but the guilds and the civil authorities were empowered to supervise the relations between them and to protect the apprentices from abuse.

As long as handicraft production was carried on in small units, the relationship between apprentices and masters was intimate and promotion into the ranks of the masters was fairly certain after the service of an intermediate period as journeyman or *compagnon*. The number of apprentices who could be trained was limited by the guilds in order to protect the masters from the severe competition which would necessarily result from the presence of large numbers of trained craftsmen. The period of apprenticeship was also probably longer than was required to master the trades of the time; by these methods something of an artificial monopoly was maintained by the town workers which enabled them to raise the value of their goods in comparison with those of the countryside and thus obtain a differential advantage over the agricultural population.

As the size of the producing unit increased, the lot and prospects of the apprentices became much less favorable. The masters were more likely to be merchants, capitalists and employers than fellow craftsmen. Not only was personal contact between the two groups lessened but entrance into the ranks of the masters was made

increasingly difficult for the rank and file of the apprentices. This was caused in part by the increasing amount of capital needed to purchase the raw materials and to set up a shop and in part by the policy of the more well-to-do masters, and of the guilds which they had come increasingly to dominate, to erect artificial barriers. Although sons of masters were quite generally admitted to the upper ranks without having served the full term of apprenticeship, others were required to pay large fees in addition, and the actual numbers who were thus taken in came to be more and more restricted. All these factors increased the ratio of journeymen to masters. It had then become advantageous for the masters to increase the number of the apprentices, since a large supply of the latter could be used to lower the wages of the journeymen and thus to increase the employers' profits. The journeymen in self-protection frequently shirked teaching the apprentices the full secrets of the trade. With the increasing splitting up of crafts the apprentices suffered further hardships, since they were compelled to serve the same length of time as before, although less time was actually required to learn the processes.

Although the regulation of apprenticeship originated in the guilds, with some municipal supervision, France and England developed also a system of national regulation. The Statute of Artificers, enacted by Elizabeth in 1562, nationalized the provisions of the London craft guilds which permitted only householders to take apprentices, required a minimum period of seven years and fixed twenty-four years as the minimum age at which the apprentice could come out of his service. In order to check the drift of labor to the towns, to preserve the privileges of the townsmen and to insure a plentiful supply of agricultural labor for the landlords, it was provided that only the sons of townsmen might be apprenticed to craftsmen within a particular town. Some of the more lucrative trades, such as those of merchants and goldsmiths, were reserved for the children of propertied persons. The enforcement of this statute was in the main entrusted to the guilds and municipalities, and with the decay of the guild system, due to the increased practise of trades by non-members, and with the rise of new industries, it gradually became obsolete.

Apprenticeship was, however, also used in both England and America as a means of poor relief for children who were charges upon the community, although the poor law authorities were in general more concerned with getting the children off their hands and having them maintained than in making sure that they were adequately taught a trade. While the apprenticeship system, as a method of caring for children who were a state charge, produced flagrant evils, it was a step in advance of herding them in general mixed workhouses with paupers of all ages and classes.

With the advent of the factory system, involving still further subdivision of labor and the development of automatic machinery, the amount of technical skill required of the artisans was appreciably reduced, and youthful and untrained workers were brought into the crafts in increased numbers. The hand workers, in order to protect themselves against this new competition, sought to have the law enforced and extended to the new trades, but instead the House of Commons in 1814 repealed the act. In France the guilds had been legally abolished during the revolution (1791), and although a law regulating apprenticeship was passed in 1851 it was virtually ineffective. Germany, Austria and a number of other European countries instituted a more thorough legal regulation of apprenticeship; but despite these efforts, as the factory system continued to replace the handicrafts and as large scale production became more general, apprenticeship necessarily declined. The principal reason for this decline was the reduction in the amount of skill required of the great mass of the workers, rendering a prolonged period of training unnecessary for all save a small proportion of engineers, designers and similar highly skilled persons. But while this latter group needed much greater skill than the craftsmen of former times, their work became so complicated and technical that it could not be mastered by the old method of learning on the job. Schools of engineering and of other applied arts and trades were established to furnish that basic training in mathematics, chemistry, physics, etc., upon which so much of modern production rests.

In occupations which remain on a primarily handicraft basis, particularly in the building trades and in machine repairing, or in industries where production is unstandardized and varies appreciably from unit to unit, as in custom tailoring, pattern making and some molding and printing work, or where the responsibility for machines and lives is great, as is the case in engineering, a considerable period of practical preparation is needed at the job itself. Here

apprenticeship remains, although in a diminished form from that which formerly prevailed. But the custom of domiciling apprentices with the employers disappeared in western Europe and America during the nineteenth century because of the increasing size and the increasing impersonality of industry. The former provision of board and lodging was then commuted by the employers to the payment of a small monetary wage which was generally graduated according to the length of time which an apprentice had served.

In some of the trades there has been actual difficulty in securing an adequate number of apprentices. This has been caused in part by the restrictive policies of a few of the trade unions of skilled workers in the United States and Great Britain, where a rather rigid limitation of the number of apprentices and a prolongation of the period of apprenticeship beyond that required to attain competence have served to reduce the numbers below what they would have been had free competition prevailed. This has in turn maintained the wages in these trades at a higher level than would otherwise have been the case. But that these restrictions have seldom been the main cause for the paucity of apprentices in these trades is demonstrated by the fact that the employers have almost universally not availed themselves of the privilege of accepting as many apprentices as has been permitted by the union rules and that this failure to absorb the union maximum is almost as characteristic of non-union as of union establishments. There are several more fundamental factors which limit the effectiveness of apprenticeship in these trades. First, there is the reluctance of the employer to go to the expense of moving the apprentice about from job to job when there is no surety that he rather than another employer will be able to reap the benefit of an apprentice's skill once the latter has become a journeyman. The freedom of an apprentice to transfer his services to another employer when he has completed his term of apprenticeship therefore causes employers to depend more on hiring apprentices away from other employers than on training them, but this policy when generally pursued obviously defeats itself. A second factor is the common reluctance of journeymen to train the apprentices adequately since they do not wish to raise too many competitors for themselves. Finally, because the apprentice's wages during most of the period of his apprenticeship are lower than those which he could receive as an unskilled worker, there is a strong temptation for children to avoid the apprenticeship openings in order to obtain the immediately higher earnings.

In recent years efforts have been made in the United States, most notably in the printing and building trades, to put apprenticeship training on a firmer footing, and joint committees of employers and unionists have been formed in a number of cities, notably New York, Chicago, Cleveland and Niagara Falls. Indentures are drawn up specifying the types of training to be given and the length of time to be devoted to each, an interchange of apprentices is provided if full or adequate training cannot be furnished by a given employer, the apprentices are given instruction in special classes, and in some cases special supervisors have been appointed to stimulate the system and to inspect the work done and training offered, while diplomas are granted to those who satisfactorily complete their work. The International Typographical Union also has prepared an excellent set of correspondence courses which are widely used by apprentices in union printing shops. The state of Wisconsin also has created a position of supervisor of apprentices, who works under the state's Industrial Commission and whose duties are similar to those outlined above.

During the last half century efforts have been made to provide for the vast majority of juvenile workers who are employed at unskilled jobs and who are not apprenticed some form of public instruction and supervision analogous to that afforded by the apprenticeship system in its more favorable aspects. The most important development along this line has been that of part time continuation schools where employed juveniles are given training a few hours each week, out of their working time, not only in the work in which they are engaged at the time but also in work which they hope to do and in general preparation for citizenship and life. There has also been an appreciable extension of vocational guidance to enable children to select the lines of work which they will enter with a better knowledge of the opportunities that are open to them than was formerly the case.

PAUL H. DOUGLAS

See: INDUSTRIAL EDUCATION; POOR RELIEF; HANDICRAFT; JOURNEYMEN'S SOCIETIES; INDENTURED LABOR; LABORERS, STATUTES OF; TRADE UNIONS; PROFESSIONS; CHILD LABOR; CONTINUATION SCHOOLS; VOCATIONAL EDUCATION; PERSONNEL MANAGEMENT.

Consult: Dunlop, O. J., and Denman, R. D., *English*

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APPROPRIATIONS. *See* BUDGET; PUBLIC FINANCE.

AQUINAS, THOMAS (*c.* 1226–74), scholastic philosopher. He was born near Aquino, in the territory of Naples, of a distinguished noble family, entered the Dominican order at sixteen and studied at Cologne under Albertus Magnus, subsequently following his master to Paris. He taught philosophy and theology at Cologne, Paris and various places in Italy.

The political, economic and social doctrines of St. Thomas exemplify two general characteristics of his writings: acceptance, so far as it was consistent with Christianity, of the philosophy of Aristotle, and systematic presentation of the traditional Catholic teaching. Following Aristotle, St. Thomas held that men are impelled to live in society by their needs of life and development. Although it is not the earliest nor the most spontaneous form of association, the state is nevertheless universally necessary. Civil authority derives ultimately from God and ordinarily becomes lodged in particular persons through the consent of the people. Although the subjects owe loyalty and obedience to the legitimate ruler they have the right to resist, both passively and actively, a government that has become gravely and incorrigibly oppressive. The ideal form of government is a combination of monarchy, aristocracy and democracy. The monarch should preferably be elected, the aristocracy should consist of picked men chosen by and from the people, and all the citizens should have some share in the government.

Civil society functions primarily through legislation. Law in the true sense is an ordinance of reason for the common good. Hence civil statutes have no moral validity when they are contrary to the natural law. The common good means not only the public welfare, as a whole, but the well-being of all classes and even of all individuals, in due proportion. Welfare comprises goods of the mind and soul, goods of the body and goods of fortune. Peace, health, natural beauty, labor, commerce, education and virtue are all proper objects of civil legislation. However, the state cannot wisely attempt to suppress all sin, but only those grave offenses which injuriously affect society. When the ordinary sources of public revenue do not provide sufficient funds, the rulers are justified in levying taxes upon their subjects, but not for their own avarice nor in greater amount than is required by the common welfare.

The state exists for the individual, and not vice versa, and for all individuals, since all are persons and are equally endowed with certain natural rights. According to Aquinas, however, slavery is in accord with the natural law because it is better for some men, and for society, that they should be under economic domination. It is uncertain whether St. Thomas meant to apply this principle without qualification to the serfs of his own time in Europe. At any rate he declared that since all persons are by nature equal, the slave has certain natural rights which the master may not violate; for example, the right to life, sustenance and normal family relations.

In his economic as in his political doctrines St. Thomas is representative of mediaeval thought. While private property is in accord with, it is not absolutely required by, the natural law. Nevertheless it has been proved necessary by the experience of all peoples. Ownership should be private, but the use of goods should be common so that they may be readily shared with the needy. Trading is morally lawful if directed to lawful objects; for example, when the trader seeks moderate gain as a means of livelihood or in order to assist the poor or for the public good, and when he regards the gain not as an end in itself but as the reward of labor. In the second place, merchandising should be honest in its methods. The just price can be established through public regulation, custom or the judgment of upright men. Taking interest on loans is unjust because it is an attempt to sell the same thing twice, that is, to exact payment for a use which is inseparable from the thing used. Since it passes from the borrower at its first use, money loaned is

in reality money sold. Any gain made by the borrower is the fruit not of the loan but of his own industry. The only recognized titles to income are labor and risk. The sole specific reference which Aquinas makes to wages is that they are subject to the same rule of justice as prices. And it may be assumed that he accepted the current principle of his time, that the just price of goods would always enable the producer to live in conformity with the customary standard of his class.

An important social conclusion which Aquinas drew from the principle of common use was that a man's superfluous goods or income are due by natural law to the needy. Poverty is undesirable because it is the occasion of many sins. Both state and church should strive to provide such conditions of family life that children will be born with sound bodies. Education is essential to the welfare of the individual and of the state. It comprises training of all the faculties in due proportion, which means that greater attention should be given to the soul than to the body. So far as necessary it should be fostered by legislation. Birth control is against nature and therefore morally wrong, and divorce is wrong because it is harmful to the children and to society and forbidden by the words of Christ. Woman should be subject to man because the latter possesses "greater discretion of reason."

The authority of the works of St. Thomas among Catholics is far greater than that enjoyed by the social teachings of any other writer, especially since they were commended by Pope Leo XIII in his encyclical *Aeterni patris*, August 4, 1879. Recently there has been an active revival of interest in his philosophy—a neo-Thomist movement—which has had some currency throughout Europe and especially in the French speaking countries, where the works of Cardinal Mercier, Étienne Gilson and Jacques Maritain are representative of it. A growing dissatisfaction with the dominance of empiricism, a desire for the fixity and clearness of scholastic philosophy and a hope that in it will be found a guide for the vexing problems of modern life have been among the factors contributing to this revival.

JOHN A. RYAN

Works: *Opera omnia*, ed. by S. E. Fretté and Pauli Maré, 34 vols. (Paris 1871–80), and the most authoritative edition, the Leonine, not yet complete, vols. i–xiv (Rome 1888–1926). See especially *Summa theologica* (Eng. tr. by the English Dominican Fathers, 3 pts. in 20 vols., London 1911–25); also *Summa contra gentiles* (Eng. tr. by the English Dominican Fathers, 3 vols., London 1923–28), *De regimine principum, De regimine judaeorum, Commentaria in politica* and *Commentaria in ethica*. Excerpts in German translation of *De regimine principum* and *De regimine judaeorum* are found in *Ausgewählte Schriften zur Staats- und Wirtschaftslehre des Thomas von Aquino*, ed. by F. Schreyvogl, Herdflamme series, no. 3 (Jena 1923).

Consult: Grabmann, Martin, *Thomas von Aquin* (Munich 1926), tr. by V. Michel (London 1928); Schilling, Otto, *Die Staats- und Soziallehre des heiligen Thomas von Aquin* (Paderborn 1923); Gosselin, A., *La doctrine politique de Saint Thomas d'Aquin* (Paris 1928); Murphy, E. F., *St. Thomas' Political Doctrine and Democracy* (Washington 1921); Hearnshaw, F. J. C., *The Social and Political Ideas of Some Great Mediaeval Thinkers* (London 1923) ch. iv; Jarrett, Bede, *Social Theories of the Middle Ages* (Boston 1926); O'Brien, George, *An Essay on Mediaeval Economic Teaching* (London 1920). For neo-Thomism see bibliography for SCHOLASTICISM.

ARABI, AHMED (1841–1911), Egyptian nationalist leader. He was the son of a village sheikh in the Nile delta. He received a smattering of education at El Azhar University in Cairo, was conscripted into the army and soon became an officer. He was not a very capable soldier but he made his mark as an orator and a "barrack-room lawyer." In the troublous times at the end of the seventies he voiced the discontent of the army and especially of the native Egyptian officers, who were bitterly hostile to the Turkish ruling caste. In 1881 he openly and successfully defied the khedive, and before long was made minister of war. In June, 1882, the general disorder and agitation led to a massacre by the mob in Alexandria and the bombardment of the city by British warships. The khedive was now a mere pawn and Arabi, at the head of the army, appeared to be the master of Egypt, menacing the foreigners as well as his enemies at home. Within a month or two, however, a British force under Wolseley completely routed the Egyptians at the battle of Tel-el-Kebir, and Arabi was taken prisoner. He was tried by court martial and condemned to death, but at the instigation of the British government the sentence was commuted to perpetual exile in Ceylon. He was allowed to return to Egypt in 1901 and remained there until his death in 1911.

Arabi was not the stuff of which great leaders are made. He was a simple minded and ignorant man, an honest and zealous patriot, but weak in judgment and action. His revolt was not, as it was generally regarded at the time, a mere military rebellion. It was a genuine, though

premature and abortive, movement of nationalism, and was widely supported by the Egyptian people. Modern opinion criticizes Gladstone's government for misreading the situation in Egypt and the motives of the "rebels." A more far sighted statesmanship might well have backed Arabi and made him a partner with Great Britain in the rehabilitation of Egypt.

C. M. LLOYD

Consult: Blunt, W. S., *Secret History of the English Occupation of Egypt, being a Personal Narrative of Events* (London 1907); Broadley, A. M., *How We Defended Arabi* (London 1884); Sabry, M., *La genèse de l'ésprit national égyptien (1863–82)* (Paris 1924) with an appendix, "Mémoire d'Arabi Pacha à ses avocats."

ARAI HAKUSEKI (pseudonym of Kimiyoshi) (1657–1725), Japanese scholar and statesman. Hakuseki was a product of the era of Genroku (1688–1704), the heyday of art and culture of old Japan. He was born of a *samurai* father, impoverished and obscure, but distinguished himself as a Confucian scholar and was appointed tutor to the lord of the province of Kōfu, who in 1709 became the sixth shogun under the name of Iyenobu. Invited to accompany his illustrious pupil to Yedo (Tokyo), the seat of the shogunate, and as official lecturer and trusted counselor to the new ruler of Japan, Hakuseki came to occupy a position of high honor and commanding influence, which he continued to hold during the brief rule of the seventh and infant shogun, Iyetsugu (1713–16), son of Iyenobu. During these few years under the two shoguns Hakuseki carried out a number of reforms. It was his sound practical sense that enabled him to combat successfully a proposal to debase the currency, or to regulate the foreign trade at Nagasaki so as to curtail the outflow of gold and silver. But, on the other hand, his punctilious notions of Confucian propriety led to unnecessary elaborations of etiquette and ceremony which were not relished by the seventh shogun. Arai retired and wrote in 1716 his memoir, *Oritaku Shiba No Ki* (In the Hour of Burning Faggots), a unique piece of autobiography in Japanese literature.

Hakuseki was a voluminous writer with more than 170 works to his credit, of which *Hankan Fu* (Annals of Feudal Houses, 30 vols., written 1701), *Koshi Tsu* (Through Ancient History) and *Tokushi Yoron* (Gleanings from History, written 1712) constitute his lasting achievements from both scholarly and literary viewpoints. He has left a few books, including *Seiyo Kibun*, on western countries and civilization, of which he learned from a Jesuit missionary, Father Sidotti, brought to Yedo as prisoner.

SHIGEYOSHI OBATA

Works: *Oritaku Shiba No Ki*, tr. by G. W. Knox in Asiatic Society of Japan, *Transactions*, vol. xxx (1902) pt. ii, containing also an introductory biographical sketch; *Seiyo Kibun*, tr. by S. R. Brown in Royal Asiatic Society, North China branch, *Journal*, n. s., vol. ii (1865) 53–84, and vol. iii (1866) 40–62.

Consult: Aston, W. G., *A History of Japanese Literature* (New York 1899) p. 244–57; Florenz, K., *Geschichte der japanischen Literatur* (Leipsic 1906) p. 427–29; Lönholm, L., "Arai Hakuseki und Pater Sidotti" in Deutsche Gesellschaft für Natur- und Völkerkunde Ostasiens, *Mitteilungen*, vol. vi (1894) 149–89.

ARANDA, PEDRO PABLO ABARCA DE BOLEA, CONDE DE (1718–99), Spanish soldier, diplomat and statesman. For a time he served his country in the office of ambassador at the court of King Augustus III of Poland. On his appointment by Charles III of Spain as president of the Council of Castile—then the supreme consultative body of the monarchy—he began his career as head of the government. He was an enthusiastic admirer of the *encyclopédistes* and of their doctrines, and promulgated the famous decree of February 27, 1767, expelling the Jesuits. Aranda's anti-English policy impelled him to favor actively immediate recognition of the independence of the United States. As Spanish ambassador at Paris (1773–87) he was a partisan of the revolution; and when he became president of the Council of Castile for a second time in 1792, his prorevolutionary sentiments incurred the enmity of Godoy, the favorite of Charles IV, and resulted in his removal from office in the same year.

Aranda's views on internal colonization are of great interest to students of the social sciences. His principal measures in this regard are the royal decrees of May 26, 1773, and of May, 1793, which may be summarized as follows: national, municipal and uncultivated lands were made subject to colonization and distribution (this ruling, however, not to apply to certain portions of municipal land set aside as a commons for all the inhabitants); lands were granted in emphyteusis (perpetual lease) on condition that they be maintained in cultivation and that the canon fee be paid, and were distributed on the basis of the number of yoke of oxen at the holder's disposal; the decree of 1793 declared

that uncultivated land belonged to him who cleared it; colonized lands were to remain exempt from all taxation, even the church tithe, for ten years, and from the canon fee for fifteen; sublease or transfer to foreigners was prohibited. While these laws had little effect on the actual situation of land tenures in Spain itself, the ideas involved have played an important part in the development of conceptions of land tenure in Spanish America, notably in Mexico.

FERNANDO DE LOS RÍOS

Consult: Konetzke, R., *Die Politik des Grafen Aranda* (Berlin 1929); Leonhard, R., *Agrarpolitik und Agrarreform in Spanien unter Carl III* (Munich 1909); Costa, Joaquín, *El colectivismo agrario en España* (Madrid 1898).

ARBEITSGEMEINSCHAFT has been used in German speaking countries to designate various forms of association among people working for a common end. In the recent and technical sense *Arbeitsgemeinschaften* are voluntary joint associations of employers and employees for regulating industrial conditions. Such associations appeared before the war, but the industrial truce which followed the outbreak of hostilities gave a great impetus to their spread. By 1915 there were nineteen local associations in various industries. On November 15, 1918, an agreement was concluded by the national centers of the trade unions and of employers' associations which provided for the establishment of the Zentralarbeitsgemeinschaft in order to facilitate "joint dealings with all the economic and socio-political questions concerning German industry as well as with all legislative and administrative matters pertaining thereto." The organization was not actually set up until late in 1919; associations of the same type were organized later in various regions and industries. At the time great hopes centered in these organizations, but in spite of some achievements they were not justified. Contributing causes for failure may have been that German industry was already largely organized in other directions, that the bureaucracies of the older organizations were often not favorably disposed toward the *Arbeitsgemeinschaften* and that the introduction of radical and political aims necessarily limited their possible effectiveness. Moreover the splitting up of the German trade unions into groups that were oriented on the basis of their social philosophy interfered with the *Arbeitsgemeinschaften*. The Zentralarbeitsgemeinschaft was dissolved by the withdrawal of the central trade union executive in 1924, and the local associations followed suit.

The organization of *Arbeitsgemeinschaften* was the expression of a tendency to mitigate opposition between capital and labor and to bring about their collaboration for common ends. These organizations were not the sole manifestation of this tendency, nor was the latter limited to Germany. It is interesting, however, that the term *Arbeitsgemeinschaft*, when related to Tönnies' distinction between *Gesellschaft* and *Gemeinschaft*, implies an inner organic union, far beyond mere association. In a sense the use of this term suggests a reversion from the Marxian insistence on the reality of class divisions, a recognition of organic ties between the various elements of the industrial structure.

In contemporary Germany *Arbeitsgemeinschaft* has become a very popular name for loose associations with the most varied aims in all possible spheres of social life. When people unite for specific purposes, without regard to party or religious divisions, an *Arbeitsgemeinschaft* is now founded in preference to a *Verein*. The word is used for professional associations and suggests a guaranty that the organization will include only those trained in the field. Even the German and Austrian associations founded to work for the union of the two countries call themselves the German-Austrian *Arbeitsgemeinschaft*.

ADOLF GÜNTHER

See: INDUSTRIAL RELATIONS COUNCILS; LABOR-CAPITAL COOPERATION; TRADE UNIONS; CHRISTIAN LABOR UNIONS.

Consult: Lederer, E., and Marschak, J., in *Grundriss der Sozialökonomik*, vols. i–ix (Tübingen 1914–29) vol. ix, pt. ii, p. 237–40, and bibliography given there, p. 232–33.

ARBITRAGE may be defined as the practise of buying a given security or commodity in one market and almost simultaneously selling it in another market with a view to profiting by the difference between the purchase and sale prices. It has its basis in the fact that at a given time securities and commodities often happen to be selling at different prices in various markets. The practise exists in many markets, such as stock and bond, organized produce, marine insurance, money and foreign exchange markets. Most commonly, however, arbitrage refers to the practise in the security, produce and foreign exchange markets.

In the security and produce markets arbi-

traging may be either "domestic" or "foreign." With respect to the former the process is relatively simple. Assuming the necessary equipment for the speedy transmission of orders and their prompt execution in both markets, the arbitrager simply buys in the low market and sells (often in the form of a short sale) the same amount in the high market. Settlement may be made either by shipping the security or commodity purchased, or by reversing the purchase and sale should the quotations in the two markets at some later time stand in a different relation to each other than was the case when the two original transactions were entered into.

In foreign arbitrage the process is more complicated, as may be illustrated by arbitraging between the New York and London stock exchanges. Here speedy communication is not the only requisite. Numerous factors must be taken into account, such as stamp taxes, interest charges, cable tolls, insurance and shipping expenses, foreign settlement systems as contrasted with our own daily settlement, rates of foreign exchange and different methods of quoting prices. The last two factors are especially vital (foreign exchange rates fluctuating continually and London security quotations being given on the arbitrary basis of $5.00, instead of $4.8665, to the pound sterling) and compel the speedy reduction of London and American quotations to a mathematical parity in order to justify opposite transactions, as the margin of profit is usually small. To close the transactions the securities may be shipped from one market to another, but this is avoided, if possible, because of the expense involved.

The pressure of buying in the low market and selling in the high soon tends to level prices in all the markets the world over. A security is thus said to have approximately one price everywhere. The action of numerous arbitragers also tends to make the market more continuous for other buyers and sellers than would otherwise be the case. As between foreign countries arbitraging also facilitates the settlement of international debts, most foreign arbitragers resorting to the practise for this special purpose. In the commodity markets, besides leveling prices and rendering the markets more continuous, arbitraging directs the flow of grain, cotton, etc., from places where the supply is too plentiful to those where the demand is greater, thus assuring an adequate distribution of our staple commodities among all communities.

Through arbitraging, foreign exchange dealers also bring the rates for cables in different markets (as, for example, sterling cables in New York and dollar cables in London) into proper harmony whenever they may diverge from their equivalent quotations. The business is conducted by two parties, each in a different market, with a view to having their transactions offset each other. Both will buy cables should the two market rates appear too low. Each will thus receive a cable transfer from the other and thereby obtain the funds necessary to meet his expenditure for the purchase. The gross profit of the two arbitragers, cooperating for a mutual profit, represents the amount by which the cables diverged from their equivalent quotations. Should the cable rates appear too high, each of the arbitragers will sell a cable drawn on the other, and will then satisfy the other's order with the proceeds obtained from his own sale. As in this illustration of two markets, so quotations in three (or more) markets have a point of equivalence. Thus a foreign exchange dealer with business connections in all the markets under consideration may, with sterling rates higher in New York and lower in Paris, derive a profit by selling a sterling cable in New York and covering the same in London through the purchase of another sterling cable in Paris.

S. S. HUEBNER

See: FOREIGN EXCHANGE; STOCK EXCHANGE; COMMODITY EXCHANGES; MARKET; SPECULATION; EQUILIBRIUM, ECONOMIC.

Consult: Huebner, S. S., *The Stock Market* (New York 1922) ch. vii; Furniss, E. S., *Foreign Exchange* (Boston 1922) ch. iv; Phillips, H. W., *Modern Foreign Exchange and Foreign Banking* (London 1926) ch. xv; Walter, H. C., *Modern Foreign Exchange* (New York 1924) p. 60–64; Deutsch, H., *Arbitrage in Bullion, Coins, Bills, Stocks, Shares and Options* (2nd ed. London 1910); Smith, J. G., *Organized Produce Markets* (London 1922) ch. v.

ARBITRATION, COMMERCIAL, is the process by which business men submit disputes which arise out of their business transactions to one or more persons whom the parties select to decide their particular case. It is a substitute for court litigation. The process is based either upon a clause inserted in a more general contract whereby the parties thereto agree to arbitrate disputes which may arise between them in the future in connection with the general

contract, or upon a contract to submit an existing controversy to one or more arbitrators. The first type of arbitration agreement is called a future-disputes clause; the second type is known as a submission agreement.

The modern development of commercial arbitration in the United States relates chiefly to its use by trade associations and chambers of commerce. Since about 1920 these organizations have incorporated future-disputes clauses into their articles of membership, by-laws or standard contract forms. Their members thereby agree in advance to arbitrate disputes which may thereafter arise between them in their mutual dealings. On January 1, 1928, more than one hundred and fifty national or interstate trade associations had adopted this policy. Similar development has taken place in chambers of commerce and local business men's organizations. This use of future-disputes clauses distinguishes the modern practise of commercial arbitration from its earlier use. Formerly parties ordinarily entered into an agreement to arbitrate only after a controversy had arisen between them. The modern practise of commercial arbitration by American associated business has its precedent in the practise of the trade associations and chambers of commerce of England and the continent. It is correlated with the practise of those countries through the United States Chamber of Commerce, the International Chamber of Commerce, and trade associations with American and foreign members who are engaged in foreign commerce.

The rapid and extensive development of this modern practise is largely due to conditions which surround court litigation. Congestion of trial court calendars has been a factor. Capital is thereby unduly tied up, bankruptcies intervene and witnesses forget, die or move away before the case is tried. The records of a case are promiscuously published, to the prejudice of the credit and trade reputation of the parties. When the date for trial finally arrives, there is frequently delay in proceeding with the case, even if one or more continuances are not granted. The jurymen have often had little experience and no training in the business out of which the particular case arises. Judges are likewise frequently unqualified to try the highly technical matters involved in modern business controversies. Trial court practise seems technical and treacherous, and tends to involve unnecessary bickering. Complex rules of procedure and of the law of evidence, as well as the practise of opposing attorneys to assume no common responsibility with the trial judge to keep the case free from legal errors, often enable the losing party to appeal the case and to procure a reversal and a new trial, with delays and expenses repeated.

Commercial arbitration, on the other hand, contemplates that the parties to a dispute shall choose one or more persons specially qualified to decide their particular case. There are no pleadings. Each party may tell his side of the case and present his testimony and other evidence informally. An arbitral hearing is held in private and at such time and place as meet the convenience of the parties and arbitrators. Experience teaches that an arbitral adjustment of a business dispute leaves the parties susceptible to further business dealings. What is more significant, the use of future-disputes clauses often induces the parties to resolve their own misunderstandings before they require a formal arbitration.

Commercial arbitration in its modern phases has called for legislation which will give new legal effect to arbitration agreements. Common law rules give little effect to such agreements. The courts have held that future-disputes clauses and submission agreements are revocable; that is, that a party to either type of arbitration can maintain an action in court although he has agreed to arbitrate the dispute upon which the action is based, and that either party has the power to revoke his agreement by notice, even after arbitrators have been appointed, provided it is given before an award is rendered. Courts of equity have the same rules of revocability. Furthermore, they will neither decree specific performance of arbitration agreements nor appoint arbitrators when a party refuses to nominate them. Under common law rules an award can be enforced only by an action in court based upon the award.

In 1920 the New York Legislature enacted a new arbitration law which abrogates these common law rules of revocability of written agreements to arbitrate. It provides a summary procedure to enforce specifically those agreements, including appointment of arbitrators by a court in default of action by one of the parties. Awards can be enforced summarily by motion to a court. New Jersey, Massachusetts, the Territory of Hawaii, Oregon, Pennsylvania, California and Louisiana have enacted similar statutes since that time. The United States Arbitration

Act also has like provisions with respect to agreements to arbitrate disputes arising out of transactions in foreign and interstate commerce. A more limited statute has been submitted to the legislatures by the National Conference of Commissioners on Uniform State Laws. This new legislation has received the support of leading American lawyers as well as business men. The United States act was drafted by the Committee on Commerce, Trade and Commercial Law of the American Bar Association and was approved by that association. The Commercial Law League of America, another national organization of lawyers, has formally resolved to aid in procuring the enactment in each state of an arbitration statute patterned after the United States act. The State Bar Associations of New York, New Jersey and Louisiana were also especially active in procuring the adoption of the new arbitration laws in their respective states.

WESLEY A. STURGES

See: COMMERCIAL LAW; COURTS, COMMERCIAL; COURTS; REMEDIES, LEGAL; PROCEDURE, LEGAL; CHAMBERS OF COMMERCE; TRADE ASSOCIATIONS; BUSINESS ETHICS.

Consult: *Selected Articles on Commercial Arbitration*, ed. by Daniel Bloomfield (New York 1927); American Arbitration Association, *Year Book on Commercial Arbitration in the United States*, vol. i (New York 1927); *Internationales Jahrbuch für Schiedsgerichtswesen in Zivil- und Handelssachen*, vols. i–ii (Berlin 1926–28); Sturges, W. A., "Arbitration Under the New Pennsylvania Arbitration Statute" in *University of Pennsylvania Law Review*, vol. lxxvi (1928) 345–93, 498–547, and "Arbitration Under the New North Carolina Arbitration Statute—The Uniform Arbitration Act" in *North Carolina Law Review*, vol. vi (1928) 363–427; Bacon, Roger S., *Commercial Arbitration as Governed by the Law of England* (London 1925); Birdseye, Clarence F., *Arbitration and Business Ethics* (New York 1926).

ARBITRATION, INDUSTRIAL, is the process of referring disputes between employers and employees to the decision of "impartial" adjudicators. It differs from ordinary collective bargaining (sometimes called conciliation) by its use of outsiders not parties to the dispute. It differs from mediation (also frequently called conciliation) in that these outsiders are called upon to make the actual decisions instead of merely using their good offices to bring the contestants to an agreement.

Arbitration is of two main types and owes its growth to two lines of development. In the one case, voluntary arbitration, the parties directly concerned decide to appeal to an arbitrator's judgment as a supplement to their ordinary bargaining practises. In the other case, compulsory arbitration, the movement typically begins outside industry, and the contestants are, if necessary, forced to arbitration by the power of the state. The former practise is of long standing and has been widely used in many countries. Very frequently arbitration is the tactical plea of the weaker party, but time and again it has appeared to be a real convenience to both contestants as a way of ending or averting costly strikes and lockouts. In a number of cases, moreover, it is used not merely as an occasional recourse but as a permanent part of the bargaining machinery. It has particular advantages in the interpretation and application of a collective agreement already in force. More rarely it is employed, as under the present plan for the settlement of American railway disputes, for the much more difficult problem of the terms of a new agreement. The methods of choosing arbitrators show somewhat similar variations. They may be public men—judges, lawyers, clergymen, professors—either chosen for particular controversies or named as permanent arbitrators in the agreement. They may be officials appointed for such purposes by the government, as under the British Industrial Courts Act. In extreme cases, such as that of the Chicago clothing trade, they may be men devoting their full time to service as "judges of common pleas" within the industry. A recent variant of voluntary arbitration has arisen in the provisions introduced in a number of non-union plans of employee representation for the reference of disputed points to outside authorities. The attempt is to answer the objection that the decisions of "company unions" rest ultimately on the balance of power between a powerful corporation and an unsupported group of workers; but so far there is little evidence that these provisions have been used in practise. The older methods of voluntary arbitration, however, represent an admittedly valuable contribution to the technique of collective relationships. Their most obvious shortcomings lie in the fact that they rest entirely upon consent—consent to arbitrate and consent to abide by the decisions—and that they are quite unlikely to cover either the whole of industry or its most embittered sections.

Voluntary arbitration arises within industry. Compulsory arbitration arises by pressure from outside, when voluntary methods fail or when there is other reason for public dissatisfaction.

When workers and employers fail to agree, the "general public" suffers, and this "party of the third part" may intervene to protect its own interest in industrial peace. Or, on the other hand, sympathetic observers may wish the government to intervene in favor of wages and conditions better than unorganized workers are likely to secure by their own efforts. This latter motive has often led to minimum wage and trades boards legislation, whose working sometimes approximates that of arbitrarion proper; and it played a large part in the agitation for compulsory arbitration, at least in Australia and New Zealand. Yet there can be no doubt that the demand for industrial peace has been the chief driving force in the movement. Compulsory arbitration is an expedient that is not likely to be seriously urged until unionism is strong enough to threaten interruptions of the production of necessary services. It has, however, not only been urged but tried, as either a temporary or permanent measure, in a number of countries. In the nation of its first adoption, New Zealand, the system has been in operation since 1894. South Australia also passed a law in the same year, but the serious use of arbitration in Australia did not begin until the first years of the present century. Now, however, four of the six states have complete arbitration systems; the two others have wages boards that with the increasing unionization of the workers tend more and more to approach arbitration in practise; and the most famous of all arbitration tribunals, the Commonwealth Court of Conciliation and Arbitration (established 1904), has become the chief agency of wage determination under a steadily broadening definition of "interstate" disputes. In these two countries the conditions under which the overwhelming majority of wage earners work are set by these bodies; and, in spite of constant criticism on points of detail and occasional sectional attempts to secure their abolition, as for example by New Zealand workers in 1911 and New Zealand farmers in 1928, the broad principles of arbitration are quite generally accepted.

Before the war these experiments stood almost alone. Canada, to be sure, has had its Industrial Disputes Act in force since 1907, and an adverse legal decision in 1924 has limited rather than ended its operation. Yet this law, which was later imitated in Colorado and South Africa, provides for compulsory investigation rather than arbitration proper. Boards are to issue "recommendations" rather than awards, and the parties are at liberty to reject them. Strikes are illegal only during the investigation, and even this modicum of compulsion has in practise been used much less than the conciliatory provisions of the act. During the war, on the other hand, many nations turned to compulsory arbitration. The emergency intensified the demand for uninterrupted production and was felt to justify and make possible the use of unprecedented compulsion. As a result a large number of temporary tribunals were established, among them the American National War Labor Boardand the British Committee on Production. In most cases these bodies were disbanded or lost their compulsory powers shortly after the Armistice, but perhaps an effect of the widespread familiarity with the method has been seen in the number of post-war experiments. In 1920 the state of Kansas created an industrial court with extensive powers over employers and workers in industries of public importance, but its functioning was ended by a series of decisions by the United States Supreme Court (1922, 1924) declaring essential features of the act unconstitutional. In European countries, however, more extensive use has been made of the principle. Norway from 1916 to 1923 employed compulsory arbitration in disputes which the government considered dangerous to the public interest; since that time compulsion has been employed only in the so-called "justiciable" cases of the interpretation of existing agreements. Germany began similar experiments at about the same time, and has retained the principle of compulsion for both types of controversies, though the emphasis is placed on the encouragement of voluntary agreements, and the power to make new and binding awards is severely limited and rarely used. Soviet Russia has naturally emphasized the part of the state in wage regulation and in some cases by forms approximating arbitration in the western countries. At the other end of the political scale, moreover, Fascist Italy has shown itself one of the latest and perhaps the most thoroughgoing of converts to the principle by a 1926 law, which, according to its advocates, "forbids the autodefense of classes" and provides the alternative of a "complete and organic" system of industrial law.

The tribunals established under these diverse laws are often courts presided over by judges drawn from the regular judiciary or with similar qualifications and privileges. They are sometimes assisted, however, by assessors represent-

ing employers and employees respectively; and procedures are frequently simplified and rules of evidence relaxed to fit the somewhat inchoate matters of controversy. In form, then, compulsory arbitration is at least a semi-judicial process. Is it judicial also in the sense of proceeding to its judgments on the basis of precedent and established principle? The claim is made for the more regular forms of voluntary arbitration, and a fortiori for the compulsory type, that they are creating "a common law for industry" and taking over "a new province for law and order." Certainly it is true that argument frequently takes the form of reference to previous decisions, and that particular boards or courts have built up something like common bodies of practise covering a wide range of subjects. Recognized rights and procedures grow up around such matters as discipline and discharge, and a number of "principles" of wage settlement have been enunciated by thoughtful arbitrators or by students interpreting their decisions. Certain of these are admittedly useful but admittedly partial. Wage adjustment with relation to changes in the cost of living of course offers no complete solution, since no one would accept the principle of the permanent stabilization of real wages at the status quo; yet its use, as in the automatic variation of wage rates under Commonwealth awards in accordance with quarterly fluctuations in an index of living costs, may be of real value in eliminating the many disputes that arise simply out of price movements. Similarly the doctrine of standardization, or the equalization of pay for similar work within or between industries, throws no light on the question of how high the general level should be.

A far more ambitious principle is that of the living wage. Wages must be enough to live on: they must make possible the satisfaction of "the normal needs of the average employee regarded as a human being living in a civilized community." A "basic wage" so established must be "sacrosanct" whatever the difficulties of industry. This doctrine has had great influence upon arbitral decisions. Attempts to define how much is "enough" have led to elaborate budgetary studies, and in two of the Australian states special bodies have been established with "the declaration of the living wage" as their principal function. But enough for how many? Living wages for men have commonly been calculated on the "family-of-five" basis, but critics have pointed out that this means paying bachelors and men with small families for "phantom" dependents and at the same time leaving unsupported many "flesh-and-blood" children in larger families. It is therefore not surprising that the first two governments to adopt general plans of family endowment have been those of New Zealand and New South Wales, whose courts have long attempted to apply the living wage doctrine. This principle, moreover, offers no guidance for the payment of the workers above the basic wage; and for them the courts rely largely on customary differentials for skill, training, etc. But if the living wage is thought of as setting a lower limit for wage determination, certainly an upper limit is set by industry's "capacity to pay." In one form or another, perhaps only tacitly in basic wage cases but explicitly in all others, this criterion has appeared in all arguments. Yet on the questions of how this capacity is to be measured, whether by the rough test of unemployment after the fact, or by an elaborate index of national productivity, past and prospective, as suggested by a Queensland economic commission, or by some other means, and as to how far particular businesses or industries may be sacrificed without loss to production as a whole, both arbitrators and theorists are very far indeed from agreement. These doctrines, then, are useful generalizations but hardly a body of established principle. Arbitration is still largely legislation and compromise. The choice among rival and conflicting doctrines leaves ample room not only for the "equity and good conscience" which the Commonwealth act commends to its judges but also for expediency and good policy.

In enforcement, also, compulsory arbitration falls somewhat short of the full force and character of law. It is true that its awards are supposed to be binding; and although in certain jurisdictions "legal strikes" may take place under specified conditions, it is typically of the essence of the system that strikes and lockouts are prohibited. Moreover, violations have been punishable by substantial fines upon both individuals and organizations, and in Kansas and elsewhere even by imprisonment, as well as by certain penalties, oftentimes more effective, that consist of depriving the offending union of some of its privileges under the system. Yet the enforcement of these provisions, as against the workers and their organizations, has rarely been complete. Prosecutions are far less frequent than flagrant violations. It is hardly possible to put the entire body of striking workers in jail, and the imprisonment of their leaders is often felt to be

an undesirable way of making martyrs. Even fines, moreover, are frequently remitted for the sake of future good will. It is this laxity in the earlier systems which the authors of the Italian law were most anxious to avoid, yet it has often been defended as essential to the conciliation which is a vital part of most arbitration systems. "The extent to which compulsion has actually been applied has been insignificant in comparison with the degree of settlement through voluntary processes." Agreements reached directly between the parties, sometimes under the tactful encouragement of the judge, frequently have the force of law; and elaborate awards handed down by the courts are often, save for one or two contentious clauses, entirely the work of the contestants. Rigor of enforcement has often been deliberately sacrificed to the encouragement of this spirit of conciliation.

What, then, have been the results of these experiments on the border line between law and persuasion? Common effects could hardly be expected of such diverse methods, nor is there a consensus of opinion among students in the field. Yet certain suggestions, largely negative, may be ventured. The most obvious is that the system has nowhere brought about complete industrial peace. Even New Zealand is no longer "the land without strikes," though it still appears to be the least strike ridden of modern nations. Australia has many stoppages, although few outside the three turbulent groups of miners, dockers and seamen. It may be significant that Australian workmen strike somewhat more often than those of non-arbitration but largely non-union America, but that Australia loses far less time per worker than non-arbitration but largely union Great Britain. The two arbitration countries, moreover, have had the fewest strikes, in proportion to union membership, in the world. Yet this statement involves some circularity, since arbitration typically encourages the growth of unionism. Its technique rests on the representation of workers by their organizations. In practise it protects and stimulates union membership among the less skilled and less courageous workers. At the same time it involves some degree of public control over the unions—in the Italian case a very stringent one—and there can be no question that its tendency has been to turn them from "militant" to "litigious" and perhaps to political organizations. But what has it done to the wages and working conditions which unions attempt to improve? There is no evidence that it has greatly affected their general level, and trends of wages have been much alike in arbitration and non-arbitration countries. Very likely it has somewhat stabilized wage rates, acting as a brake in times of both rising and falling prices. On the whole it appears to have had a more powerful influence in altering the distribution of income within the working class than between classes. Its most marked effect, both in war time cases and in the longer experience of Australia and New Zealand, seems to have been to reduce the differences between the different grades of labor through its greater emphasis upon the living wage than upon the importance of differentials. As a consequence the rates of pay for skilled and unskilled labor run remarkably close together in the older arbitration countries, with great advantages in the lessening of primary poverty but with danger to the provision of skilled labor. For this last and for other reasons critics charge that the system impedes the proper distribution of the working force between occupations and lessens the incentives to efficiency. Moreover there are many complaints that its lengthy awards fetter industry with innumerable harassing restrictions and that its very structure accentuates the dichotomy of employers and employees. Yet it is by no means clear that either of these objections would apply more forcibly to arbitration than to the strong unregulated unionism which would in many countries seem its most probable alternative.

Current discussion, indeed, appears to recognize that both the merits and defects of compulsory arbitration have in the past been greatly overstated. Conservative critics are now far more likely to attack the system for "rigidity" than for "confiscation," and its radical opponents more often oppose it because of its effect on the morale of the labor movement than because they believe that it robs the workers of much they could otherwise win for themselves today. Similarly very few of its advocates would claim that arbitration can abolish either poverty or industrial conflict, but many would agree that it contributes a useful technique of industrial adjustment.

CARTER GOODRICH

See: CONCILIATION, INDUSTRIAL; COURTS, INDUSTRIAL; COLLECTIVE BARGAINING; TRADE AGREEMENTS; STRIKE; MINIMUM WAGE; COST OF LIVING; FAMILY ENDOWMENT.

Consult: Webb, S. and B., *Industrial Democracy* (London 1920) pt. ii, ch. iii; Burns, E. M., *Wages and*

the *State* (London 1926); Feis, H., *The Settlement of Wage Disputes* (New York 1921), and *A Collection of Decisions Presenting Principles of Wage Settlement* (New York 1924); Soule, George, *Wage Arbitration: Selected Cases 1920 to 1924* (New York 1928); Heaton, H., *Modern Economic History* (3rd ed. Adelaide 1925) ch. xvii; Higgins, H. B., *A New Province for Law and Order* (London 1922); Reeves, W. P., *State Experiments in Australia and New Zealand*, 2 vols. (London 1923) vol. ii, ch. i; Anderson, George, *Fixation of Wages in Australia* (Melbourne 1929); Queensland, Economic Commission on the Queensland Basic Wage, *Industrial Arbitration* (Brisbane 1925); National Industrial Conference 1928, *Report of Proceedings* (Wellington 1928); articles in *International Labour Review*, especially "Conciliation and Arbitration of Industrial Disputes," vol. xiv (1926) 640–59, 833–60, vol. xv (1927) 78–97; and decisions of various tribunals.

ARBITRATION, INTERNATIONAL. Arbitration marks an advanced stage in social organization. The settlement of private disputes by that method rather than by force is essential to any organized society. In private affairs the arbitral process is exemplified in early stages of Greek and Roman law in the obligatory resort to private arbitrators and later to established courts. In the public field arbitration was employed from time to time by the Greek city-states, and it played a considerable part throughout the Midde Ages in the solution of interstate disputes. It is not surprising, therefore, that with the growth of the modern state and with the increasing complexity of international relations the resort to arbitration has within certain limits become institutionalized.

International arbitration was defined by the Hague Convention of 1907 as "the settlement of disputes between states by judges of their own choice and on the basis of respect for law." This definition seems too narrow, for arbitration includes every submission of a dispute to final decision by an impartial judge or court. The method of appointing the arbitrators or judges, whether ad hoc by the parties or by election by some independent body, and whether these judges hold temporary or permanent tenure, is less important than the actual judicial process which determines the issue. Its judicial character is the distinguishing mark of arbitration—a factor which has been deemed to limit the scope of arbitration to only certain types of disputes.

The fact that arbitration before the establishment of the Permanent Court of International Justice in 1920 usually involved the selection of judges by the parties has led to the belief that decision by a fixed tribunal such as the Permanent Court of International Justice constitutes a different process, which has been called "judicial settlement," and that arbitration is not judicial settlement. This is an error. No distinction should be made between arbitration and judicial settlement—for a difference in the method of obtaining judges implies no differentiation in the process of submission and determination. Both may be said to constitute arbitration and both are judicial.

Its judicial character and the finality of the award rendered differentiate arbitration from such diplomatic measures as the offer of mediation and good offices and from such processes as conciliation, inquiry undertaken by international commissions for the investigation of disputed facts, the procedure of making recommendations or the reconciliation of differences without binding finality. The political conclusions of such a body as the Council of the League of Nations, reached not on a basis of law without formal hearing but by independent consideration on a basis of political expediency, must also be distinguished from arbitration.

The Jay Treaty between the United States and Great Britain (1794) marks the beginning of the modern period of international arbitration. Under that treaty three important arbitrations were held. The nineteenth century is replete with arbitrations, involving mainly boundary disputes and pecuniary claims arising out of injuries to aliens. Among the most notable arbitration cases have been those between the United States and Great Britain, including the *Alabama* Arbitration, the Venezuela-Guiana Boundary, the San Juan Water Boundary, the Alaska Boundary Arbitrations and later the Bering Sea Arbitration. Moore's collection of international arbitrations is a repository of the history and awards of the principal arbitrations of the nineteenth century.

The movement for institutionalized arbitration may be said to have begun with the Hague Conference of 1899, from which issued the Hague Convention for the Pacific Settlement of International Disputes (amended in 1907). That convention provided not only for arbitration among the signatory powers of such disputes as they voluntarily agreed to submit, without the exception of any class of cases, but also provided for mediation and international commissions of inquiry. It established the Permanent Court of Arbitration, to be selected by the parties ad hoc from a panel of

some 120 judges nominated by the various countries. To that tribunal, which still exists, some twenty important cases have come. A special agreement (*compromis*) is required in each case, defining the subject matter of the dispute and the powers of the arbitrators. The effort to make arbitration obligatory, a proposal which was voted down at the Hague Conference, has nevertheless been renewed in various forms. The Franco-British Treaty of 1903 was the model for the obligatory arbitration treaties which it was hoped would be adopted, although the obligation was very slight. By this treaty the parties agreed to submit "differences which may arise of a legal nature or relating to the interpretation of treaties . . . provided, nevertheless, that they do not affect the vital interests, the independence, or the honor of the two contracting states and do not concern the interests of third parties."

The United States took an active part in sponsoring the movement for obligatory arbitration in a series of treaties beginning with the Root treaties of 1908. These too, however, excepted disputes involving "vital interests," "independence" and "national honor." The commitment in fact was far behind the actual practise of the United States and Great Britain, for those countries had submitted to arbitration important political questions such as the *Alabama* and Venezuela cases, in the former of which Great Britain had first contended that it affected her "honor" and in the latter that it was "political." However, the United States, in an effort to meet the wishes of persons vaguely desirous of promoting peace, signed similar treaties with Great Britain and six other countries. The Senate amended the treaties so as to require its approval for any special agreement to submit specific questions. President Roosevelt first declined to present the treaties to foreign countries in their altered form; but in 1908, when Elihu Root became secretary of state, they were submitted and ratified. The result is that it is now more difficult for the United States to arbitrate a case than it was in 1794, for special treaties are now usually required as a preliminary to arbitration, whereas formerly an executive agreement sufficed. In the Taft-Knox treaties of 1911 with France and Great Britain respectively, provision was made for the submission of "justiciable" controversies and for a joint commission to pass on the question of justiciability in each case. Justiciability is an alternative term for questions of a "legal nature." The Senate struck out the provision for the joint commission and made numerous reservations concerning so-called "domestic questions," such as the admission of aliens, debts owed by any state, and the Monroe Doctrine. President Taft thereupon abandoned the treaties. In 1913 the so-called Bryan treaties were negotiated with various powers, providing for the submission of all disputes to an international commission for investigation and report. They were known as "cooling-off" treaties, for pending the report war was not to be declared or hostilities begun. Additional treaties of this type have been concluded in recent years, and there are now some thirty treaties in force between the United States and other powers. They have never been actually applied, and as they are practically limited to the determination of disputed questions of fact, they are, contrary to the views of their author, of very limited utility.

After 1919 the United States concluded two treaties on the Root model of 1908 with Sweden and Liberia. The Bryan treaties still remain in force, and in 1928 Secretary of State Kellogg negotiated new arbitration treaties designed to take the place of the Root treaties. The treaty with France, already ratified, has been the model. It provides for the submission of justiciable disputes to arbitration but excepts any dispute which "(a) is within the domestic jurisdiction of either of the High Contracting Parties, (b) involves the interests of third parties, (c) depends upon or involves the maintenance of the traditional attitude of the United States concerning American questions, commonly described as the Monroe Doctrine, (d) depends upon or involves the observance of the obligations of France in accordance with the Covenant of the League of Nations."

The old exceptions of "vital interest, independence, or honor" are thus replaced by new ones believed to be narrower and more precise in scope. The defect of treaties providing for arbitration of legal questions yet excepting from the obligation broad types of issues perhaps not legal in character at all—the existence of the exception to be determined by either of the parties—is that actually they constitute no agreements to submit anything, or at best, agreements to submit everything but that which is important. It is far better for the institution of arbitration to make a positive committal to submit given specific questions without exception.

The effort to make arbitration obligatory was accompanied by an attempt to establish a court with a fixed personnel. The so-called "Court of Arbitral Justice," projected at the Second Hague Conference, failed of establishment because of inability to agree on the selection of a limited number of judges from many states; but that obstacle was overcome in 1920 by the foundation, through a Commission of Jurists acting at the request of the Council of the League of Nations, of the Permanent Court of International Justice. A provision for obligatory arbitration, when recommended by the Committee of Jurists, was modified by the Council of the League on the ground that it involved a departure from the Covenant. The Council provided, instead, that states could *elect* to make arbitration between them obligatory, unconditionally or on condition of reciprocity or for a specified time. Some thirty-five states have signed the so-called "optional" clause (Article 36 of the Statute of the Court), and of these some twenty have ratified. Several of the Great Powers have signed, and Germany has ratified, the clause. Under that clause the signatories agree to permit themselves to be arraigned unilaterally upon the demand of another signatory on any question involving: the interpretation of a treaty; any question of international law; the existence of any fact which, if established, would constitute a breach of an international obligation; or the nature and extent of the reparation to be made for the breach of an international obligation. These are the topics mentioned in Article 13 of the Covenant of the League as "generally suitable for submission to arbitration or judicial settlement." No special agreement is required, and the court determines whether the issue is of a type included in the article. A number of bipartite treaties of obligatory arbitration have been concluded independently. The peace treaties provide that certain types of cases shall automatically go to the Permanent Court; and the court has been given obligatory jurisdiction over certain questions involving aerial navigation, the protection of minorities, the African liquor traffic, communication, the arms traffic convention and the Barcelona waterways convention. Practically none of these provisions has yet been tested, although Belgium has invoked the court's compulsory jurisdiction in its dispute with China arising out of China's denunciation of the treaty of 1865.

Attempts at introducing the principle of arbitration since the war have been made whenever possible in all countries. The Protocol for the Pacific Settlement of International Disputes, drafted at Geneva in 1924, which set up an elaborate scheme for outlawing all aggressive war, with an obligation to submit practically all disputes to obligatory arbitration, may be regarded as dead. On the other hand the European signatories of the Locarno treaties of 1925 have by those treaties agreed to submit to an arbitral tribunal or to the Permanent Court of International Justice any legal question, particularly of the type mentioned in Article 13 of the Convenant of the League, namely: the interpretation of a treaty; a question of international law; a fact which would constitute a breach of an international obligation; and the nature and extent of reparation for such breach. In 1928, with the intention of supplementing the Locarno treaties, the Committee on Arbitration and Security of the League of Nations submitted to the Assembly of the League three "model" arbitration and concilation conventions which attempt to differentiate between "legal" and "non-legal" disputes, the former to be submitted to arbitration, the latter to conciliation; but thus far no state has accepted the model conventions.

The Latin American states have been especially devoted adherents to the principle and practise of arbitration. Their similarity of origin, culture, legal tradition and political experience facilitated the resort to arbitration. Boundary disputes among them have been frequent, but with minor exceptions they have been settled by arbitration. During the nineteenth century these countries have been parties to eighty-four arbitrations.

The First Pan-American Conference in 1889 declared arbitration to be a principle of "American International Law." The second conference in 1901 and the third conference in 1906 similarly expressed adherence to arbitration in principle, but inability to agree on the scope of arbitration arising from the conflict of interest between the United States and Latin American countries prevented the ratification of the actual treaties proposed. The later conferences have been attended by greater success. At the fourth conference in 1910 a General Claims Convention was adopted for the submission to the Permanent Court of Arbitration at The Hague of all claims for pecuniary losses and was ratified by the United States and by eleven Latin American countries. At the Fifth Pan-American Confer-

ence in 1923 the Gondra Treaty was adopted providing for the submission of all except constitutional disputes to commissions of inquiry.

At the sixth conference at Havana, 1928, it was agreed to call a special conference in Washington in December, 1928, for the purpose of adopting a multilateral treaty for the solution of differences of a "juridical character." By the treaty, adopted in January, 1929, the twenty republics agreed to submit to arbitration "differences" arising "by virtue of a claim of right . . . which are juridical in their nature by reason of being susceptible of decision by application of the principles of law." It then specifies these questions as the four contained in Article 13 of the Covenant of the League and Article 36 of the Statute of the Permanent Court, namely: the interpretation of a treaty; a question of international law; a fact which would constitute a breach of an international obligation; and the nature and extent of reparation for such breach. The treaty excepts questions which are within the "domestic jurisdiction" of a state and which international law does not control, as well as those which affect the interest or refer to the action of third states—an exception deemed broad enough to include the Monroe Doctrine, which was not mentioned. Seven states—Brazil, Cuba, Haiti, Nicaragua, Panama, Peru and the United States—signed the Pan-American Treaty of Arbitration without reservations. The other thirteen states made reservations of a somewhat limited character, for the most part simply declaratory of international law.

In 1907 the Central American republics had set up a permanent arbitral tribunal—the Central American Court. After deciding several cases the court was abandoned in 1917 as a result of the rejection by Nicaragua of the court's award regarding the Bryan-Chamorro Treaty. The Central American Conference of 1923 established a new Central American Court, which is to draw its judges ad hoc from a panel of judges appointed by the several states, and which excludes questions affecting sovereignty, independence, honor and vital interests from its jurisdiction.

In the progress of international arbitration some fundamental principles of procedure have been developed which have greatly facilitated the settlement of disputes. Under the Hague Convention of 1907 the two parties must agree upon a *compromis*, which defines the issue in dispute, the mode of appointing arbitrators, the scope of their powers, the language to be employed, the place of meeting and in general the conditions upon which the parties submit the case. Within limits the tribunal may be called upon by the parties to settle details upon which they cannot agree. The duties of arbitrator may be conferred upon one or several persons. If the arbitrator is the head of a state, he is to settle the procedure. Each party may appoint one of its own nationals, in which event there must be an umpire. The parties may appoint agents and counsel to present their cases to the court. The proceedings are in writing, with the submission of cases, counter-cases and, if necessary, of replies, to which exhibits may be attached. Oral argument may supplement the written submission. The tribunal may make rules of procedure for the conduct of the case, deciding the form, order and time in which each party must conduct and conclude its arguments, and may arrange formalities for dealing with questions of evidence. In general the tribunal has broad discretionary powers to determine the procedure for the submission of the case. It may determine its own competence in interpreting the *compromis* and the evidence and in applying the principles of law. The decision is made by majority and is final and without appeal. Any dispute as to the interpretation and execution of the award is to be submitted to the tribunal. The Hague Convention also makes provision for summary procedure, which differs from the regular procedure only in the fact that each party in dispute appoints an arbitrator, and the two thus selected choose an umpire. If they do not agree, each arbitrator nominates two non-national candidates from the general panel of the court, and from these the umpire is determined by lot.

The procedure before the Permanent Court of International Justice, except as to Article 36, providing for obligatory arbitration, does not differ materially except that the parties have nothing to do with the selection of judges; they have only the privilege of nominating a national judge on the court ad hoc, if there is not already a national judge on the court. Proceedings are initiated by the filing of a written "application" addressed to the registrar of the court indicating the subject of the dispute and the names of the contesting parties. The registrar communicates the application to all parties concerned and to the secretary general of the League of Nations. Procedure before the court is both written and oral, as in the case of the Permanent Court of Arbitration. The hearing in

court is public unless the court, at the request of one of the parties, decides otherwise. The court determines the rules for the conduct of the case and makes all arrangements connected with the taking of evidence. The court may call upon the agents to produce documents and furnish explanations before the hearing begins and witnesses may be called. The court may entrust to any individual, commission or bureau it may select the task of conducting an inquiry or giving an expert opinion. Decisions by default are possible, provided the court is satisfied that it has jurisdiction and that the claim is supported by substantial evidence and is well founded in fact and law. The judgment is final and without appeal and must express the reasons for the conclusion reached. At the request of either party the court must construe its judgment, if uncertain. A special chamber of five judges, aided by four technical assessors, may deal with labor, transit and communication cases.

The plan of the Pan-American Treaty of Arbitration, 1929, limits the opportunity for disagreement on the terms of a *compromis*. Such special agreement concerns mere details. Definite provision is made for the setting up of a tribunal if the parties cannot agree, although the parties may select any arbitrator or tribunal they desire. If the parties do not agree upon a tribunal, each party must nominate two arbitrators, of whom one only may be its national. These four in turn select a fifth arbitrator, who is to be president of the court. If the four arbitrators do not agree, an alternative provision is made for the designation by each party of a non-American member of the Permanent Court of Arbitration; and the two persons so designated select the fifth arbitrator. Instead of leaving the final choice of the fifth arbitrator, who may be all important, to the drawing of lots, the choice is made by designated jurists—a provision designed to secure the selection of an impartial and well qualified person. The parties are required to formulate a *compromis* defining the subject in issue, the seat of the court, the rules of procedure and other conditions on which they may agree. If the parties do not reach an accord on these questions within three months from the date of the establishment of the court, the agreement must be formulated by the court itself. The award is final and without appeal.

This machinery makes it more possible to extend the scope of international arbitration. It must not be overlooked that any modern attempt at arbitration, whether through permanent courts or ad hoc commissions, is carried on in a constantly more favorable atmosphere as the peace movement gains in momentum. It is not merely that the principle of arbitration has received a more widespread acceptance. The whole complex of modern life organized upon an international scale is beginning to make imperative the extension of orderly processes to international disputes. There are also more tangible indications of the future place of arbitration in international relations. The provision for obligatory jurisdiction by the Permanent Court of International Justice is a hopeful sign. Though limited in application to legal questions —questions which have rarely caused armed conflicts—it nevertheless should remove from the field of controversy and automatically submit to judicial determination a group of questions always likely to cause irritation. The convention for the Pan-American Court of Arbitration, if ratified by the signatories, should advance obligatory arbitration on the American continent, though it must be recalled that ultimately reliance in such matters must be placed on the good faith of the nations involved. For under the Pan-American Treaty the parties may refuse to nominate arbitrators and thus frustrate the arbitration contemplated. Should the American countries refuse to cooperate in nominating arbitrators, however, it would constitute a breach of the convention, which no nation would lightly undertake. The provisions enabling the court to draw up the details of the *compromis* are a manifest advance over the provisions governing the Permanent Court of Arbitration at The Hague. In defining subject matter the court would be limited by the scope of the treaty.

The problem of the execution of an award is not a serious one. Out of thousands of cases execution of awards has been refused in less than ten, and then always on some plausible ground. The difficulty is not in executing awards but in persuading parties to arbitrate; and the improved modern machinery for inducing submission to arbitration must be welcomed. Nor has experience proved that arbitration is ineffective because arbitrators do not act under a sense of judicial responsibility as impartial judges but as "negotiators," effecting settlements of the questions brought before them in accordance with the traditions and usages and subject to all the considerations and influences which affect dip-

lomatic agents—the method of compromise. It may be doubted whether arbitration results in compromise and in the process of diplomatic negotiation rather than in a decision according to law. An endeavor to find or interpret legal principles, rules and precedents marks the deliberations and decisions of practically all the important arbitrations. If national judges occasionally lean toward sympathy for their own nations this is not true of umpires, even when they are nationals of one of the litigants, or of neutral commissioners. It is not improbable that the cause of arbitration has been unnecessarily harmed by the frequent reiteration during the past twenty years of the allegation that arbitration is not a strictly judicial process and is governed by considerations that an international tribunal with a fixed personnel would escape or avoid. Justice never works automatically for it uses human instrumentalities. These instrumentalities, whether on municipal courts or on international courts, are influenced by a variety of considerations, some of which defy analysis. That the element of compromise plays some part in the application of legal principles to facts need also not be denied; but this is believed to be as important a factor in municipal litigation as it is in international arbitration.

Nevertheless the process of international arbitration could not but be affected by a more definite formulation of principles and rules of international law. Not only would the acceptance of specific doctrines provide a more definite basis for arbitral decisions; but the extension of the rule of law and the consequent limitation of the scope of controversy in the international sphere would make inevitable further resort to the methods and machinery of arbitration. The tendency to formulate general principles must be more marked nowadays when international arbitrations are not as occasional as they were in earlier centuries, and international arbitrators are impartial jurists and not, as formerly, the crown heads of sovereign states who were likely to avoid the statement of general principles which might arise again in the future to embarrass them. However, should the principles of international law remain very much in doubt, the mere availability of the process of arbitration should remove the dangers to international peace which lie in their obscurity. Arbitration will probably and most usefully be limited to issues susceptible of formulation and decision according to principles of law in the broadest sense. Nevertheless, if there is a will to arbitrate, it is probable that political questions might often be formulated in terms susceptible of decision by principles of law or equity. This was true of the *Alabama* Arbitration, in which the parties agreed upon certain rules to be applied; and it was true of the Venezuela-Guiana Arbitration. There is no such fundamental and categorical distinction between legal and political questions as is sometimes assumed, although it may be admitted that the economic and political controversies between nations are not generally susceptible of decision by courts unless a preliminary agreement upon the precise terms of the issue is reached. It is probably true, however, that controversies may be determined either by arbitrators acting judicially or by conciliators and mediators acting politically. Yet it also remains true that the greatest conflicts have not been caused by stated controversies or disputes, but by unexpressed divergence and conflicts of interest, treaties of alliance and similar antagonisms and resentments not formulated in terms of a specific controversy. What controversy or dispute did Germany have with England in 1914? Or Italy and Rumania with Germany? Or most of the Allies with Bulgaria and Turkey? More is needed, therefore, than treaties of arbitration and conciliation. Possibly Article 11 of the Covenant recognizes the deficiency. A more common interest is needed in peaceful adjustments, accompanied by wider possibilities of mediation and good offices at the incipient stage of difference, before controversy arises.

EDWIN M. BORCHARD

See: MEDIATION; INTERVENTION; AGREEMENTS, INTERNATIONAL; TREATIES; EXECUTIVE AGREEMENTS; INTERNATIONAL LEGISLATION; INTERNATIONAL LAW; INTERNATIONALISM; AGGRESSION, INTERNATIONAL; OUTLAWRY OF WAR; PEACE MOVEMENTS; HAGUE TRIBUNAL; INTERNATIONAL ORGANIZATION; LEAGUE OF NATIONS; PERMANENT COURT OF INTERNATIONAL JUSTICE; ADVISORY OPINIONS, INTERNATIONAL.

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ARCH, JOSEPH (1826–1919), English agricultural workers' leader and politician. He was the son of a farm laborer and his fearless opposition to the tyranny of squirearchy and his fervor and eloquence developed as a Primitive Methodist local preacher gave him great influence among his fellow laborers. In 1872 he undertook to arouse the agricultural laborers from their apathy and, deprecating violence, advocated organization to secure emancipation and reasonable working conditions. The movement spread with unprecedented rapidity. Within a few months the National Agricultural Labourers' Union was founded, with Arch as its president, and, by demonstrations and strikes, wage increases and improvements in status were obtained. Subsequently the union declined greatly and, encountering bitter opposition from the landed interests, the laborers temporarily lost many of their gains. Arch's campaign, however, had created public interest in rural reforms. To urge these he entered Parliament (1885–86 and 1892–1900) as a Liberal, being one of the first workers elected. He advocated land law reform, allotment holdings, state aided emigration and extension of the franchise to the agricultural laborer. For improved conditions English rural workers owe much to Joseph Arch.

J. H. RICHARDSON

Consult: *Joseph Arch: the Story of his Life, told by Himself* (London 1898).

ARCHAEOLOGY, by etymology the study of beginnings, has historical reconstruction for its objective. It differs from history in its materials. These are artifacts, or objects actually made and used in the past, generally buried or lost subsequently and more recently recovered. Mostly they are not written documents: or if so, they have been transmitted to us not continuously but in the same manner as the artifacts. The ultimate purpose of archaeology is, however, the same as that of history, the authenticated presentation of a series of human events. By the nature of its materials it stresses the daily life of populations, their manufactures and art, religion and customs, in brief, their general culture. It is therefore more nearly related to culture history than to "history" in the current or popular sense; and it may be defined as that part of culture history for which both documents and ethnographic descriptions are lacking.

Some beginnings of archaeology date back to the Renaissance, but they scarcely involved more than the interest of discovery of ancient buildings and works of art. By the eighteenth century stone and bronze implements were finding their way into "cabinets," and antiquarians were hunting artifacts as well as inscriptions. The first general scheme of interpreting inscriptionless ancient material evolved in Scandinavia in 1836, when Thomsen distinguished the stone, bronze and iron ages, for which there was precedent in Lucretius and the legendary knowledge of the ancients. The first half of the nineteenth century witnessed a great interest in archaeology. Pompeii began to be excavated, Champollion deciphered the hieroglyphs in 1822 and therewith launched Egyptology on its career of authenticity. Grotefend as early as 1802 had begun to interpret Achaemenian, and by 1850 Rawlinson was reading the Babylonian as well as the Persian text of the Behistun inscription. The interests involved, however, so far as they were not sheer desire of discovery, were still those of the student of ancient history and art. Hence in the Greek field what was not Greek seemed meaningless and was neglected. It remained for Schliemann, a romantic amateur, to uncover Troy and Mycenae, and thereby "verify Homer." It was thirty years after Schliemann that Evans began to work at Knossos and the frame of pre-Greek Minoan-Mycenaean culture history commenced to take shape.

European prehistoric archaeology as a whole, after its first start in Scandinavia, where the palaeolithic does not occur, had its beginning in France. From 1838 on, Boucher de Perthes preached that rude flint implements of "antediluvian" age were to be found in association with fossils of mammoths and other extinct fauna. He encountered only skeptics until 1855, but a few years later began to make converts among scholars of standing, at first chiefly from England. His case for the palaeolithic was definitely established by G. de Mortillet about 1869. De Mortillet set up four stages or periods of the extreme prehistory of France, all characterized by styles of chipped implements as well as other cultural traits, including depictive art, and more or less correlating with faunal, climatic and geological data. These four periods were the Chellean (until 1878 called Acheulean), Mousterian, Solutrean and Magdalenian. Subsequently the original de Mortillet scheme was extended by recognition of the Acheulean and Aurignacian periods respectively before and after the Mousterian; and of late an initial and a

terminal phase have generally been included in the series: the pre-Chellean and the Azilian.

Definition and classification of the neolithic were slower and are even today less clear. This later stone age is wholly post-glacial and its fauna and flora essentially modern. Its understanding could therefore be little advanced by striking associations of the archaeological with geological and palaeontological evidence. It was not until 1865 that Lubbock (later Lord Avebury) coined the terms palaeolithic and neolithic, or old and new stone ages, the criterion of distinction being chipped versus "polished" (ground) stone implements. These terms are now well established; but their original definition is faulty, in that a period of several thousand years is thought by most authorities to have intervened between the close of the palaeolithic and the first grinding of stone. This gap is by some authorities bridged with a "mesolithic" (Azilian, Maglemosian, Campignian, Tardenoisian). Others call the period pre-neolithic or early neolithic, in distinction from the full neolithic in which stone was ground. The best criterion is pottery. The palaeolithic is pre-ceramic, in Lowie's phrase. The term neolithic is satisfactory as soon as it is understood to denote the ceramic age.

A pre-palaeolithic or eolithic, characterized by very rude chipping of natural flint fragments, began to be advocated soon after the palaeolithic was accepted, but is still not recognized as certain by some authorities. Besides the crudeness of the alleged artifacts, their geological age is an obstacle. Undoubted palaeoliths all fall into the Pleistocene; eoliths occur in the Pleistocene, Pliocene and Miocene, when man can hardly have existed, and have even been asserted for the Oligocene and Eocene—the early part of the age of mammals. There is some tendency among archaeologists of repute to accept the later eoliths as "natural tools," used but not manufactured by early human forms. Still dubious are the recently discovered "rostro-carinate" flints of Red Crag, Foxhall, England, which would also carry human culture back into the Tertiary.

In the gross, the archaeology of the palaeolithic rests on geological and faunal associations. The basis of Pleistocene chronology is the recognition of four glacial and three interglacial periods in Europe and North America; but the highest authorities are not agreed whether the Chellean falls into the second or third interglacial—a difference of perhaps 100,000 years. Nor is the palaeontological scheme wholly clear. Climatic conditions varied locally, and the fauna with them. Lately there has even been an attempt to reduce the four ice ages to two. On the whole, perhaps, the artifact evidence is the most consistent, as far back as the Chellean; and for the later Pleistocene geologists and palaeontologists have come to rely as much on the archaeologist as the reverse. The basis of European prehistoric archaeology is literally millions of artifacts found at many thousands of sites. For the Magdalenian in France alone more than five hundred sites have been discovered. The integration of this vast mass of data has been a long, specialized and gradual labor, analogous to that of stratigraphy in geology, whose ramified extent the non-archaeologist, hungry only for results, rarely appreciates. These results have been predominantly west European, because only there, until recently, have search and comparison been intensive.

Essentially the method of prehistoric archaeology consists of the recognition and correlation of two things: cultural styles and the physical association of these with one another in the ground. Sequence is inferred from the degree of association or non-association of styles with each other and with skeletal, faunal and geological data. Stratification or superimposition of remains is only a particular and most convincing form of associational proof. Even stratifications may lead to error where layers have been disturbed subsequent to deposit.

Roughly the first half of the Pleistocene, in Europe, is pre-palaeolithic. There may or may not have been an eolithic stage at this time. Heidelberg man, already of the human genus and of this time, and the still earlier Pithecanthropus of Java, were found unassociated with artifacts. The first palaeolithic period, the pre-Chellean, probably goes back to the second interglacial. The next, Chellean, in the second or third, had large, rough hewn, but well formed almond-shaped implements (fist-hatchets, *coups-de-poing*), which grade into those of the following period, the Acheulean. Chellean and Acheulean were west European (and African) culture phases. Contemporary with them in east Europe (and probably north Asia) was the pre-Mousterian culture, with smaller implements. There follows, in both west and east Europe, the Mousterian, with small tools "retouched," that is, finely chipped, on one side along one edge. Skeletal remains become fairly

abundant in the Mousterian and are all of the Neandertal species (finds at Gibraltar, Neandertal, Spy, Chapelle-aux-Saints, etc.). They show in some cases burial and grave offerings, suggesting a dawn of religion or at least soul beliefs. From the Chellean and Acheulean there are only fragmentary human bones (Ehringsdorf, Krapina) which, however, seem Neandertaloid.

So far we have the lower palaeolithic, lasting perhaps, with its four stages, from 100,000 to 25,000 years ago. There follows the upper palaeolithic, in which men were of the modern species. This is the reindeer age of the French and also comprises four periods: Aurignacian, Solutrean, Magdalenian, Azilian, falling into several fluctuation phases of the last glaciation, and computed to have ended about 8000 to 9000 years ago. The real cultural differentiation of the upper palaeolithic from the lower lies in the appearance of a series of new cultural activities —bonework, developed bodily ornamentation, art. Bone and horn involve a new technique —rubbing or grinding. The Aurignacian had awls; the Solutrean added needles; the Magdalenian, harpoon points, spear throwers, flutes. Art began in the Aurignacian and culminated in the superb productions of the Magdalenian, both plastic and graphic. The Azilian, a terminal or epi-palaeolithic phase, shows regression, especially in art. The upper palaeolithic culture bearers in western Europe were prevailingly members of the Cro-Magnon race, probably proto-Caucasian. The Grimaldi race (Aurignacian) is generally thought to have Negroid affinities. In central Europe, about Solutrean times, lived the Brünn race, with resemblances to both Neandertal and Cro-Magnon.

The early neolithic is represented by shell mounds in Denmark and Spain and camp sites elsewhere. Pottery is its diagnostic criterion, along with the bow and arrow and semi-domesticated dog. Stone tools were still chipped; bone and horn were much used; decoration was crudely geometric. The full neolithic may have begun in Europe by 5000 B.C. or, according to some recent estimates, only shortly before the bronze age. Now at last axes, etc., begin to be ground and polished—partly in imitation of metal forms cast in the Orient. The important innovation, however, is the introduction of domesticated animals and plants: cow, pig, goat, sheep, wheat, barley, flax for woven cloth. As these are represented in the famous Swiss lake dwelling remains and elsewhere, they are clearly importations from the south and east. Full neolithic pottery is normally decorated, most often by incision.

The bronze age in central, western and northern Europe begins either about 2500 or 1900 B.C., according as one includes a transition period of sporadic copper and gold (and megalithic monuments) or thinks specifically of the time when true bronze was cast. Several subdivisions are recognized, but the entire period in Europe depends on and is influenced by the higher civilizations of the Near East. Still more is this so in the iron age, as the dates of its inception show: western Asia, soon after 1500; Greece, 1250; Italy, 1100; western Europe, 900; Britain, 700; Scandinavia, 500 B.C.

In other continents evidence is far more scattered for the wholly prehistoric period, but some of it is beginning to tie into the European scheme. North and east Africa, Egypt and India contained Chellean-Acheulean implements presumptively coeval with those of western Europe. The north African equivalent of the upper palaeolithic of Europe is the Capsian, with upper, lower and terminal phases. It is marked by a microlithic industry and a distinctive semi-realistic art. The Capsian culture included most of Spain, and during the Azilian and early neolithic its influences invaded Europe, perhaps as far as Scandinavia. Central and south Africa are only beginning to be explored archaeologically, but show stone industries which will probably correlate with those of Europe. There are polished axes or celts in Africa, but no bronze age outside of Egypt, iron appearing to have followed directly on stone. Egypt shows only disputed traces of upper palaeolithic and early neolithic cultures, their remains perhaps being buried deep under Nile mud. Early correlation with Europe is difficult, unless the Nile terraces correspond to glacial epochs. About 5000 B.C. in the early pre-dynastic period, Egypt was already in the full swing of advanced neolithic culture, with thorough dependence on domesticated animals and plants, most of which Europe derived from it or western Asia. Crete contains a well marked neolithic culture lying back of 3000 B.C.

Syrian and Palestinian records go back to the Chellean and Mousterian and include a Neandertal skull. Mesopotamian research, for the pre-writing period, to date very sporadic, has hardly penetrated beyond the neolithic-copper transition (Susa). Anau in southwest Turkestan has yielded an important agricultural inventory. India is a chaos and has not yet been securely

correlated at any point. It has many copper implements but few of bronze. Siberian remains of the Yenisei area show partial resemblances to certain European palaeolithic and bronze horizons, without positive chronological correlation, and the same may be said for the recently made discoveries in China of Mousterian-Aurignacian, Azilian and neolithic implement types. Indo-China and parts of Indonesia are beginning to yield stone implements, especially of full neolithic quality. Australian conditions are difficult, owing to the recent native culture having advanced only little and irregularly beyond the middle palaeolithic level in its stone industry.

It is apparent that there is rich promise of the whole of the Old World integrating into a unified prehistoric scheme. This scheme is likely to be much more complex than the European one, which must accordingly be regarded as a small sample or variant of the larger whole.

The New World shows as yet not a single piece of generally credited evidence of the presence of Pleistocene man. The best evidences of Pleistocene or palaeolithic culture in America are the rude chipped argillite implements in the supposedly glacial Trenton gravels; some very well chipped knives or spear points at Folsom, New Mexico, in association with a bison that became extinct at an unknown period; and, in Patagonian caves, artifacts associated with glyptodon remains. Certainly the great bulk of American prehistoric data seems to be of general neolithic type and level.

The most scientifically explored area in America is the southwestern United States, where under the leadership of Kidder and Nelson a school of students, working essentially by the methods of European prehistoric archaeology, has gradually determined a reliable sequence of two pre-Pueblo (basket maker) and five Pueblo (cliff dweller) periods, with local variants. New York shows an Algonquin, mound builder and Iroquois sequence. The great mounds of the central United States have been dug into for nearly a century, systematically in Ohio, but have hardly yet provided a clear story, probably through inadequate conception of the problems involved. California shell mounds indicate relative stability of culture for a long time past.

Mexico is one of the richest archaeological fields in the world, but little understood, because of the lack of scientific objective and critical method in the work done. Archaic, Toltec or Teotihuacan, and Aztec horizons are accepted for the vicinity of Mexico valley, but in spite of the obvious existence of subphases of these, no sure series is yet determined, and important cultures like the Zapotec and Tarascan remain unplaced in time. For Yucatan-Guatemala, conditions are better, as a result of the decipherment of the Mayan date inscriptions, which have yielded a sure relative chronology, and an absolute one that is correct, with an error not above two and a half centuries, back to about 100 B.C. The story of Maya art and architecture is therefore fairly clear for some 1600 years, but their antecedents remain wholly unknown. Late Maya culture cross-ties at several points with a phase of Toltec, presumably also late. In Peru Uhle laid the foundations of scientific archaeology, and, aided by the presence of two pan-Peruvian horizons, has been able to classify the variant local cultures into pre-Tiahuanaco, Tiahuanaco, pre-Inca and Inca time levels. The earliest of these, however, like Nazca, Chimu, Chavin, appear suddenly, without traceable antecedents, probably not far from the beginning of the Christian era. Considerable exploration has been carried on in Argentina and in the mounds of Brazil, without as yet yielding results that can be safely correlated with those elsewhere. There is no reason to believe that, with the exception of the contested palaeolithic possibilities mentioned, any prehistoric American culture yet known can with conservatism be carried back further than 1000 or 2000 B.C. at the most—a scant record compared with the Old World.

It is evident that the promise of prehistoric archaeology is almost boundless, provided that scientific purpose and rigidly critical use of evidence continue to hold their own against the natural human impulse toward overhasty and romantic speculation. In view of the solid progress of the last twenty-five years, the results due from the next twenty-five, not to say hundred, are practically inconceivable today.

A. L. KROEBER

See: RECORDS, HISTORICAL; HISTORY; PREHISTORY; ANTHROPOLOGY; ART, PRIMITIVE; AGRICULTURE, PRIMITIVE; RACE; CULTURE.

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ARCHITECTURE.

THROUGH THE RENAISSANCE. The word "architecture" is best explained as meaning the art of building. If an attempt is made to set up any distinction between architecture and building many difficulties arise. Only big and ornate erections will claim the grander word. Or if we try to make beauty the test, it might lead to the discovery that architecture was the work of old builders but not of modern architects. In attempts to isolate architecture we are likely to be told that it is obviously more than *mere* building, but this qualifying word will not be explained. The arts of ship building and car building do not limit themselves to mere momentary convenience, and they hold due regard for soundness, shapeliness, precision and workmanlike finish. We should profit greatly if we could substitute the thought of an intelligible developing art of building for the mystery of architectural styles. Other activities are discussed in terms of fact and substance, but unhappily we speak of architecture in terms of style.

Histories of the building art usually exhibit this misplaced emphasis, and are for the greater part chronological descriptions of appearances and effects. For modern use we require histories of building of several varieties. One should be rigidly confined to structural problems, an account of what has been accomplished by walls, vaults and windows. Another should attempt to reveal the minds of the builders and explain the deep religious, magical and political elements in ancient art.

Some beginnings of building imagination may be traced back to the time when man had his dwellings in caves and his sacred places on the peaks of the mountains. The art of building itself had its origins in dealing with such humble materials as mud, timber and reeds. That most primary element, the wall, was probably first formed of mud; the arch, vault and dome certainly were. The rounded top to an opening was first of all a hole in a mud wall. Then when the mud was broken up into sections forming crude bricks, the same rounded form was taken over and constructed in several ways until finally the arch of wedge shaped units was found in the ways of workmanship. The arch has been called a great invention, but it is difficult to see at what point in the process we should put the invention. The vault and the dome were evolved in exactly the same way. The combination of wood and reeds with mud was the basis for many further developments. Dörpfeld long ago showed that the mature Greek temple retained vestiges of primitive mud and timber structures. Eastern domes rising to a point found their beautiful forms in a framework of bent reeds or sticks. Columns began as stems of trees and bundles of reeds, and from the latter are derived the fluting and reeding of masonry shafts. Roofs were commonly flat terraces formed of poles overlaid with clay. The projecting edges or eaves were the prototypes of cornices; dentils were the ends of the poles; in early examples these dentils are round and close together. Such were the material origins of architecture.

The art of building not only satisfied the needs of the body but it had also to minister to the mind. What we call monumental architecture emerged in the age of kings and priests. It was concerned with the building of temples and the tombs and palaces of god-kings. The sacred and magical character of this old architecture has not been sufficiently understood. Not only was it employed for sacred buildings but it was called out, formed and stimulated in these offices. Without the magic priestly demand the art as we know it would not have existed. Building itself was a magical procedure associated with many rites; the stability of

structures depended on certain observances, and what we call ornament protected them from evil spirits. Early sacred building was a work of wonder, and decoration was a sort of magical tattooing. Gorgons, sphinxes, griffins, the palm tree and the lotus were all protective and emblems of good luck.

In seeking sacred rightness sympathetic relations were set up between the building and the universe, conceived as a larger structure. The most recognized example of this way of thinking is the custom of orientation common to the earliest pyramids and our latest churches. The sacredness of mountains and "peak sanctuaries" seems to have led to their imitation by man in the *ziggurats*, or stepped pyramids of Chaldea. Temples of Egypt, Babylonia and Greece had ceilings representing the sky, and every temple was a localization of some paradise or sacred place.

It has long been supposed that architecture first attained what may be called city consciousness in Egypt, but many recent discoveries in western Asia are putting this in doubt. The Sumerians had a forward place in the advance, and some royal graves at Ur which were covered by vaults may, it is said, be dated far back in the fourth millennium. Whatever may have been the exact relations of Egypt and Asia, it still seems certain that the architecture of wrought stone was first largely practised in the valley of the Nile, where various fine stones might readily be obtained. When once the use of wrought masonry became customary in building, stone became the subject of a special enthusiasm and fine masonry a cult. Great blocks were quarried, and they were more and more accurately fitted together; then hard materials were searched out and they were finished with polished faces. Again there was something of magic in all this. Sacred works to be perfectly in relation to the universe had to be very exactly built and finished. The great pyramids, which seem to be artificial mountains (perhaps the paradise mountains), were adjusted to the four cardinal points with great precision, and their faces were as nearly as possible perfect planes finished to a polished surface. The casing of the great pyramid is a fair white limestone and when it was newly built it must have shone like an Alp.

The materials used in building were not only conditioning and limiting factors; they were inspirations as well. The magnifying of an interest in materials and a worship of workmanship have been constant elements in the evolution of architecture. In Egypt mighty pillars, colossal polished granite statues and obelisks over a hundred feet high witness the significance of these factors mixed with the magic instinct and a grandeur "complex."

Architecture, as we know it, in a very large degree came out of Egypt. The methods of working hard stone by means of tubular drills and emery saws observed in the monuments of Crete and Mycenae show that Egyptian traditions of work were followed. Testing of flat surfaces by contact with a reddened plane as practised in Greece was an Egyptian custom. The practise of setting out the sizes of buildings by a large unit, such as ten or twenty feet or cubits, was common to both Egypt and Greece. Even our modern standard of measurements, the foot, we probably owe to Egypt. On a great unfinished obelisk which still lies in its quarry bed, lines are marked averaging 11.77 inches apart. This is so very close to the old Greek foot and Roman foot that it seems there must have been continuity of use.

The importance of Minoan art in the second millennium B.C. as the foundation of Greek art has hardly been recognized except by specialists. It was an art of considerable power and refinement, deriving from both Egypt and the Orient. In the artistic sphere Crete was indeed, as it has been called, "the forerunner of Greece." There was some interruption in development, or rather interference, for continuity in arts and traditions was never lost. Greek art was, however, in a large degree the working out of the Minoan mind impulse. The Greek temple building which seems to us the perfection of culture was in fact the result of a quick smoothing and refining of a matter full of primitive survivals. In Minoan art the pillar had been a symbol of power and stability, and some memory of this must have remained in the thought of a people who so magnified and multiplied their columns. The peristyle of a Greek temple had in its origin a structural justification as wooden posts supporting an overhanging roof and thus protecting the mud brick walls of the sanctuary; but multiplication of great marble columns, so that some temples had five score and more of them, must have been the working out of a columnar impulse of the mind, a pillar psychology. And this achieved such a hold that when architecture reached a period of decadence and passed into the ostentation phase it was customary to build many great

pillars merely for display. The roots of the pillars were nevertheless in Minoan and oriental cults, and the Ionic variety of the column, which was developed in Asia Minor, seems certainly to derive from Hittite and Babylonian representations of sacred palm trees.

The special grandeur of the Greek temple portico had an affinity with the aggrandizement of Egyptian pylons. The temple door was the gate of heaven. A late Greek writer describes the temple of Zeus at Olympia as "imitating the sky." Doubtless as usual the ceiling was set with gilt stars on a bright blue ground; and the square area of black marble in front of the amazing gold and ivory image of the god may have represented the spring of waters above the firmament. Noble sculptures in the pediments of Greek temples were outgrowths of such early imagery as the lions of the gate of Mycenae, and the gorgons of archaic Greek work were protective before they were "decorative." Acroteria on the pediments were frequently representations of apotropaic creatures, griffins, sphinxes, gorgons. The great central acroterion of the Parthenon so closely resembled the horns of consecration set on Aegean buildings that it may not be doubted that it descended from them. The minor decorations of palmette patterns and "egg and tongue" were at bottom protective signs of good luck. "Eggs and tongues" were lotus petals.

One of the impulses underlying Greek architecture was delight in accurate stone cutting. The stones used in temple buildings were not only large, hard and fair but they were polished on the surface. Perfection in jointing was called *harmonia*, and it was so much desired that it may have given that word its extended meaning. Such thoughts were already embodied in Minoan buildings. The great doorway of the treasury at Atreus in Mycenae was cased with hard marble of two or more colors very accurately worked and highly polished, while small discs of glittering glass were inlaid in the red marble slabs carved with delicate spiral patterns. It has not been generally recognized how far the finishing of the marble surfaces of Greek temples was carried. Parts of the Parthenon sculptures still retain a reflecting polish. As it seems clear from the records and other evidence that the Erechtheum was wholly polished, it is probable that the greater temple was also treated in that way. The fair and shining surfaces were further embellished by delicate details added in gilding and bright color.

Greek builders in setting out the exact dimensions of their sacred buildings followed certain schemes of related measurements which we call proportion. Much has been written on this subject, but what can be demonstrated and by many believed is very little. It appears that the Greeks, like the Hebrews, Egyptians and Hindus, regarded number itself as a mystery, and it is certain that even to us simple measures in round numbers give an idea of rightness and completion that odd inches will not. Thus we are told that the ark of Noah was 300 x 30 x 50 cubits. The court of the tabernacle was 100 x 50 cubits, and Solomon's temple had a sanctuary 20 x 20 x 20 cubits, a "house" 40 x 20 and a portico 20 x 20. Egyptian builders in a similar way dealt with simple multiples of as large a unit as possible. The great pyramid is 11 x 40 cubits on the side and 7 x 40 cubits high. According to Pliny the Mausoleum at Halicarnassus was 140 feet high and 440 feet round about, a dimension that probably represents sides of 120 and 100 feet. The old Indian book, the *Mansara*, shows that similar thoughts obtained in India. The platform of the Parthenon in Greece was as 9 to 4. The ancient temple on the Acropolis was called the Hekatempedon from its length of 100 feet, and modern investigation has shown the frequent occurrence in Greek work of dimensions like 10, 12 and 100 feet. It is clear that large simple relations such as twice as long as broad were desired. Any elaborate schemes of proportions worked out by triangulation would obviously have been incompatible with such a system. The basis of all this was a desire for definition and order, a dislike of the accidental and unknown; it was of the mind philosophical, not of the eye aesthetic.

Number had a great place in Greek thought; everything had a perfect type and even representations of the human body were made to conform to a scheme of dimensions. Of course there is a truth in these notions; man does not vary much from a norm, and a boat or car conforms more or less to types of proportion. In the old way of thinking, however, there was magic in it. A column, a doorway, a temple, were definite things which had been found out.

The mysterious orders of Greek architecture, the Doric and Ionic, were not whims of art design but customary and sacred forms; they appeared as naturally as different kinds of wagons may have been evolved in England and America. Their very natures depended on their

conforming more or less to type. Columns built in courses of hard stone tended to become more and more slender according to what seems to be a general law of development, but their variation was within narrow limits, and it is easy to see how "proportions" giving a height of from say 7 to 10 diameters should come to be considered as normal or right constructively. Just as in old Hebrew thought the name was the essence of a thing, so measures were a part of its very definition. That which was sought to be defined, however, was found experimentally and practically and was in no wise the consequence of aesthetic doctrine. Having elaborated a modern notion of aesthetics we have confused ourselves into supposing that there is some mystery in Greek proportions not depending on structural rightness, so that columns of wood or plastered brick should be of "classic proportions."

It is generally agreed that the Latins had not the artistic gifts of the Greeks. It is doubtless true that there is diversity of gifts; but at the same time it must be remembered that Rome came to its age of maturity at a later time than Athens. Roman art was a branch of the late Hellenistic art of which Alexandria was probably the chief center. To Vitruvius architecture was a mysterious scholarship understood by the Greeks. The outlook on architecture of the Roman builders is as clearly expressed by their works as by their writers. An observation of Spengler's regarding their comparative failure in science applies equally to art. "It needs to be considered in general relation to Roman psychology, and is not improbably related to the Roman obsession for Rhetoric." We are indebted to Roman artists for naturalizing in Europe the vaulting systems of the East, for several engineering developments or departures, for amazing skill in planning complex structures and for an inclination toward the study of plant life and landscape. However, to quote again, "the growing estrangement of East and West deprived Roman art of a source of inspiration, but most of all the exclusively literary character of education in the late empire was to blame." The obsession for rhetoric clogged and dulled all their architectural efforts; nothing smiled. This rhetoric indeed is the easily besetting sin of architecture throughout the ages. In all great works power, pride and grandeur are necessarily present, but it is only when they are subordinated to some higher purpose and clear science that they are not repellent. In times of deadness architecture easily becomes an art of mere ostentation, and the Romans in this respect have provided their successors with an evil inheritance. This question of rhetoric in art is one of our pressing problems.

In consequence of the wide extension of Hellenism in the time of Alexander and his followers, the arts of the West become changed by absorbing much from the East. In the early Christian age Alexandria seems to have been the chief center of the transformation of late Hellenistic art into what we call Byzantine, but which might better have been named Hellenesque or some such word. In the West and North the provincial Roman manners of building also changed but in different ways from the art in the East, and this modified western Christian art is well named Romanesque. In Hellenesque or Byzantine architecture the scholastic bonds which pedants like Vitruvius sought to impose on a living art were not accepted, and building practise became flexible and inventive once more. In the return to vital construction as the center of the art, much use was made of the brick vault and dome. The culminating monument of this theory of building was the great church of S. Sophia at Constantinople built in the sixth century, a very daring and noble structure. In the West offshoots of Hellenesque art appeared here and there, largely in consequence of monastic expansion, and there were remarkable minor schools of art in Britain and Ireland about the seventh century.

In the culture fostered by Charlemagne all these sources were drawn upon and a new general ferment was introduced into the building art of the West. In the eleventh century the change in western Romanesque art quickened and it began to be more adventurous and organic. Toward the end of the century ribbed vaults, an important type of construction, were built at Durham Cathedral. This method of vaulting has been taken as one of the differentia of what we call Gothic architecture, but the first buildings to which that name is generally applied appeared in northwest France about the middle of the twelfth century. As Salomon Reinach says, "Gothic art is essentially northern and Franco-German," but like every expanding school it gathered from many sources. The word Gothic as first used in Italy by the scholars of the Renaissance was intended to describe the art which was not Roman but bar-

baric and Germanic. In our more modern use of the term Gothic, the earlier phases have been separated from it and named Romanesque.

The essential nature of what we now call Gothic architecture has at times been attributed to some one characteristic, such as the development of the ribbed vault, or to oriental influences during the crusading period, but it was, of course, the product of many conditions. These include the folk mind or native energy of the people; the influences of place, time and available materials; the new contacts with the East; the art inheritance, including Roman monuments and Romanesque traditions; religion, economics, feudalism. The folk mind—itself composed of many elements, Celtic, Teutonic, Latin—is mentioned first for in it is found the living principle which transformed many elements into a coherent and organic product. The aspiring heights, branching forms, intricate interlacing apertures and bursting foliage of Gothic architecture may best be explained as an outcome, parallel to the forest romances in literature, of the quality and mind of the people, the folk psychology of the time. There was no intention of imitating forest glades as some old (and observant) students have thought, but unconsciously the forest mind was there and it had to reveal itself, for the forest was what the people loved. The influence of oriental art in the formation of Gothic has long been perceived, and Wren called it the Saracen style. In the high Gothic of France there appears a consciously orientalizing strain. Centuries before the time of the crusades, the science, philosophy and literature of the Arab schools had been deeply affecting the West. There is little wonder that the art also made a great impression, for it was energetic, refined, civilized, while the arts of the north were rude. The western expansion of Saracenic art proceeded mainly from Spain. Changes in the complexion of the native Romanesque art in the century preceding the springtime of Gothic may be traced in the south of France, by the river Loire and in Normandy and England. It is rather obvious that Gothic architecture, the product of northern mind and southern art, had to be formed on some such frontier line as the Marne and the Seine. The religious and economic background of the Middle Ages made it natural that building energy and skill should find their greatest expression in cathedrals and castles. The cathedrals have been described hundreds of times, and here we may only call back a general impression of how they lifted themselves above the little groups of humble houses which formed mediaeval towns, their spires, pinnacles and traceried gables telling sharp against the sky and their long avenue-like interiors of branching rib work lighted by windows of brightly colored glass in interlacing stone bars. As we see them now they are worn, broken and gray, but as built they were sharp and shining, white picked out with gilding and color.

Although mediaeval builders were thus employed in the service of the church and chivalry, the accounts that they gave of their own art were singularly unecclesiastical and unromantic. The inspiring idea of the artists, so far as we may gather from writings left by the masons themselves, was no exquisite refinement of theory, but just the exploration of the structural possibilities of working and rearing stone work. What Villars de Honnecourt, the thirteenth century master, was interested in was "the powers of masonry." He recorded a scheme of planning a vaulted chamber, which he devised in conference with another mason, as if it were a solution in chess.

The Renaissance had several roots, but the chief factor in its early growth was restimulation of Italian nationalism—reaction against Germanic domination and a casting back to the might of old Rome. Dante's choice of Virgil as his leader in an exploration of the Christian universe is significant. Already in the middle of the thirteenth century members of a school or guild of marble masons signed their works in a particular way. For example, the master who wrought the marble and mosaic basis of the shrine of Edward the Confessor in Westminster Abbey named himself, in the inscription which it bears, *Petrus Civis Romanus*. Consciousness of ancient Rome and its monuments had again appeared. Although the work of this group was largely only a variation of current Byzantine traditions, the materials were marble and mosaic and it was anti-Germanic in spirit.

Out of this psychological state arose the thoughts about northern art which led to its being designated Gothic or barbaric by Raphael and others. The builders of the Duomo of Florence and its campanile followed and extended the customs of the Roman marble workers, and gradually more and more was drawn into the body of building practise by imitation

of ancient Roman monuments. The great typical buildings which were erected during the early Renaissance period in Italy, as the result of an aristocratic movement, were palaces, and the more self-conscious architecture thus became associated with the assertion of the princes. The old book of Vitruvius with its talk of orders and proportions existed and was greedily adopted as a guide, a sort of Bible of architecture. An argument was worked out that the temple of Herod was in the antique style, which was thus sacred and therefore the "only true architecture."

All this is easy to understand while the phenomenon remained an Italian revival. In Italy itself even the humblest workers must have understood what was happening and have entered more or less into the spirit of the thing. It was quite different, however, when the prelates and princes of other countries, seeing how imposing and proper to rulers were works in the grand style, began to impose them on the working artists of northern lands. It was at this time and thus that a difference was set up between correct "architecture" and traditional building. Men of taste who traveled, sketched, lived in offices and called themselves architects were now sundered from the old exponents and executants of a living building art. One interesting little evidence of how the new fashions were regarded by the people of England is furnished by the word "antique" which became our "antic."

The natural sacredness and mystery of reality passed away from building and a sham mysteriousness was introduced in its place. In its theory architecture became an art of ostentation and arrogance rather than of service and friendliness. Leonardo, Wren and possibly others saw that experiment was more essential than imitation of antiquity with dogmas about styles, orders, proportions. On the whole, however, architects after the Renaissance conformed to the type of the priest rather than to that of the worker—the experimenting artist.

In speaking of the successive phases of historical architecture it is usual and almost inevitable to make use of the word "styles," but this term is unfortunately misdirecting and indeed treacherous. It leads us in a hidden and dangerous manner to think of the essence of architecture as outward appearance rather than inner reality; as a matter of choice, even caprice, instead of law.

W. R. LETHABY

SINCE THE RENAISSANCE. The architectural servility of the later Renaissance, abetted by its archaeological interests, spelled the death of vernacular building. Customary architecture remained in the country districts of Europe to the end of the eighteenth century, and in America until much later, so that it is impossible in England to fix a date when genuine mediaeval building had disappeared and the Gothic revival had begun; but the mark of the disruption is the appearance of the gentleman architect, with his knowledge of fashions, precedents, styles, divorced from technical and social problems. The classical revival century and the neo-Gothic are one; they represent the desire to lend contemporary building an extraneous harmony and order or an equally extraneous picturesqueness. In the breakup of the old culture during the industrial revolution the ghost of past forms was almost all that remained of form in building.

While these surface changes claimed the attention of aesthetic theorists and practitioners, more profound alterations were under way. In the eighteenth century the mediaeval guild system disappeared, a fact witnessed in 1717 by the break between "operative" and "speculative" masonry. Unlike the mediaeval builder, the architect was paid, not daily wages and a bonus, but a percentage of the total cost of the structure; hence the growth of the fixed contract system of building, with highly complicated and detailed specifications all embodied in a legal contract. Another significant change was the institution of the modern habit of fabricating the parts in outside plants. This took place first with Georgian plaster ornaments and finally extended itself in our own day to almost every detail of equipment. If considerations of "style" and formal dignity chiefly occupied the architect's attention in the construction of a Madeleine or a national capitol, more utilitarian concerns assumed a central place in domestic building.

With the cheaper fabrication of glass, as early as Elizabethan times windows began to increase in size; with improvements in the drafts of chimneys, fine wall papers and delicate colors in fabrics and walls were introduced into the houses of the middle classes, replacing the more somber and expensive wood paneling. Living quarters became more commodious and, in the disposition of the rooms, more private; the hall, once the common gathering place of the famiiy, was narrowed into a

mere passage between private chambers, and the individual bedroom became the possession, first of the head of the family, then finally of all the inmates—except in the remoter country districts or in the slums of the industrial cities. This tendency toward privacy has resulted today in the common acceptance of one toilet for each family as a minimum sanitary provision and in a multiplication of toilets and bathrooms in the dwellings of the well-to-do.

The reinvention of central heating in America, early in the nineteenth century, and the succeeding introduction of the cooking stove, running water, the indoor toilet, the bathroom, gas light, artificial refrigeration and electric light has changed the whole character of building. Whereas in 1800 the structure represented the chief cost of house building, today the structure represents only 44 to 60 percent of the total cost, of which approximately half goes to fixtures and utilities, an item that, with electric refrigeration, radio outlets and garages, is still expanding. The same tendency exists in business structures; the visible shell represents but a part of the cost, while the expenditure on deep foundations, high speed elevators, heating and refrigeration systems and fireproof construction necessitates stringent economies in other parts of the program.

In actual construction modern building remains largely a handicraft operation, performed under minute regulations of numerous separate craft unions, but the parts that are put together have been steadily assimilated to the factory system. Window frames, windows, doors, cupboards, washstands, kitchen cabinets, are now built in the factory in standard units. The same is true of steel beams and columns and stone aud terra cotta ornament. The architect, as architect, has lost control over the elements of his design, unless the wealth of his client enables him completely to disregard expense; and the vast amount of building in America not supervised by architects comes almost entirely within the realm of industrial production. Mixed results have followed. The design of kitchen and bathroom equipment, particularly in America, has achieved a high level of competence and beauty; but in such fixtures and furnishings as are produced under a decorative canon, the outcome has more frequently been the manufacture of stereotyped patterns unrelated to modern needs and feelings.

Not merely have the "physiological" functions of buildings changed steadily during the last two hundred years; new types of building have come into existence. The factory, the railroad station, the savings bank, the office building, the garage, the hospital, present to the architect problems not hitherto faced in any existing form of building. At first he conceived these structures, in typical Renaissance fashion, in terms of existing forms: railroad stations as Pompeian baths, banks as temples. Modern architecture, properly so-called, begins with the effort to conceive the architectural forms directly in terms of the new materials and methods of construction, and of the new functions to be performed. Here it has taken two separate roads, which during the last thirty years have gradually drawn more closely together. One has been the experimental use of new materials and construction methods: the use of the glass and steel enclosure in the Crystal Palace, London (1851) and the Halles Centrales, Paris (1854), the use of the steel frame construction, first in a factory at Noisiel, France, in 1872 and then in the eighties in Chicago and New York for high office buildings. The other path has been the attempt to express in new forms the functions of the building, as in Root's Monadnock Building in Chicago, Sullivan's Wainwright Building in St. Louis, Richardson's Boston and Albany stations in Massachusetts, Berlage's Bourse at Amsterdam (1904) and Frank Lloyd Wright's country houses in the Middle West and California from 1901 onward.

As these conceptions of modern architecture draw together, certain unified characteristics emerge: first, the abandonment or the relegation to a minor place of older systems of construction; second, the use of steel and iron in all large buildings, either in the skeleton or the main supporting members, and the progressive disuse of stone except as sheathing; third, an increased use of factory fabricated materials for roofing, insulation, flooring, wall covering; and, finally, the elaboration of the plan and elevation of a building with respect to function and without sacrificing to formalism in design a fine and effective adaptation to human needs. Some of the conditions dictating this change in America have been the increased cost of wood, the expense of hauling bulky and heavy materials long distances, the necessity to use fireproof construction in closely built cities and the advantage of using materials whose performance has been tested and standardized. Such innovations as steel frame construction,

moreover, have increased the speed in building, a fact necessitated by the difficulty of carrying the charges for land and money over a long period, and have facilitated demolition and replacement.

With all these innovations in material, construction and function, the requirements of modern building have become so complicated and their economic solution so important that in big cities architects tend to specialize on certain types—skyscrapers, hospitals, schools—and by repetition have refined the design of these units down to the last possible degree of business efficiency, if not always of functional design. A large architectural office is an assemblage of specialists, draftsmen, engineers, designers and even legal experts on building codes, in which the nominal architect acts more and more as an intermediary and interpreter between the client and the specialist. So small is the province left to pure design in modern buildings that large structures have been frequently, though not always happily, designed by engineers with no specific architectural competence whatever.

Different types of building have been affected in various ways by current economic conditions. The skyscraper, for example, owes its origin to the high ground rents prevalent in the relatively constricted and stable financial district of a big city. Its construction was made possible by the invention of the elevator (1854), cheap fireproofing (iron floor beams in 1854 and hollow tile in 1871) and the cheapening of structural steel through the introduction of the Bessemer process into America in the eighties. The building itself has been reproduced on land of low value and in small, uncongested cities as a symbol of municipal progress and an advertisement of the product or service so housed. Attempts to meet the inordinate difficulties in transportation and street circulation caused by skyscraper congestion, which also blocks air and sunlight from adjacent buildings, have resulted in various ordinances, patterned after those first passed in New York in 1916, to set back the upper stories and to limit height in relation to street width. Such regulations have sometimes effected an improvement in the silhouettes of these buildings, but so generous is the allowance made for congestion, as the result of pressure by the realty interests, that they have not in general effected a closer adaptation to site and function nor appreciably decreased congestion.

In domestic architecture two opposing tendencies have been at work. The upper middle classes in the well-to-do suburbs, and the rich, have usually conceived architecture romantically, as a shell in which to escape the harsher realities of finance and industry. Such romantic designs exhibit a maximum of handicraft, either as antiques or as contemporary reproductions and designs. While the poorer classes perhaps share the same impulse, as residual clichés like fake gables and half-timber work on the façades of cheap apartment houses show, just the opposite process has gone on here. Every element in the house has been mechanized and cheapened by mass production, sometimes with a serious loss in quality. The necessity for simplifying housekeeping and for economizing on mechanical utilities has resulted in America and Europe in the development of the multifamily unit and the apartment house. Where costs have been sufficiently lowered by economic site planning, as in the English war housing projects and garden suburbs and cities, the individual house still survives in row units; otherwise, the house itself is reduced to a small, flimsy shack, low in original cost but outrageously extravagant in upkeep—as in the outlying areas of New York, Detroit, Chicago and many smaller industrial towns.

In Europe since 1920, as a result of economic pressure and partly through a complete revaluation of architectural aims, decisive advances have been made in domestic building which compare favorably with the advances made in America in industrial and commercial structures. Using mass production methods, simplifying design to the last detail, the architects have produced houses and apartments as efficient as a rationalized factory, as fitted to modern production as an automobile, and aesthetically comparable to the comprehensive designs of the eighteenth century London or Edinburgh squares. In America the chief evidence of the same spirit is to be found in various government war housing experiments, notably the Black Rock development at Bridgeport, Connecticut, and Sunnyside Gardens, an urban housing development in Long Island City, carried out by a limited dividend company.

Modern architecture, in sum, has developed around the conception of function, as opposed to the architectural stylicism introduced in the Renaissance which centered around interest in the decorative elements and in formal design. New functions demand a new disposition of

parts, new methods of construction and the use of new materials, because of either their special fitness or their economy; new knowledge or new aims of living—our modern concern for hygiene, sanitation, comfort, sunlight, fresh air, abolition of menial services, interest in the individual personality apart from the background of office or institution—demands new expressions in form. A certain cleanness and precision are an inevitable mark of the new architecture; if ornament enters the design it becomes itself part of the functional organization of the building, completing a structural element, making more visible the building's purpose or creating an appropriate feeling in the user and spectator.

The resultant forms depart completely from the precedents of earlier periods, and since their chief virtues are economy and efficiency and mechanical rigor they are at odds with the standards of pecuniary waste that have hitherto governed the ostentatious productions of the courtier, the banker, the merchant. Despite the undoubted triumph of modern architecture in more utilitarian buildings like the Medical Center in New York, it is only with reluctance that similar methods have been applied to churches, dwelling houses, college buildings. Nevertheless the work of Louis Sullivan, Frank Lloyd Wright and their followers in America and of numerous architects in Europe shows that fresh aesthetic results come about in every department where this spirit is permitted to work.

Today the architect has a multiple role. First, as industrial designer, he has begun to control the designs of fabricated parts, hitherto left to the chance improvements of the factory, meeting the demands of a blind market; second, he must orchestrate into a comprehensive unity the twenty or thirty different crafts, industries and services that enter into the construction of a modern building. His work now involves more than the design of the isolated building; it includes planning and coordination, touching factory production at one end and community planning at the other. Only by this double control can the stereotyped ugliness of commercial jerrybuilding, past and current, be avoided. This step has already been taken in Europe, and the reports of the Committee on Community Planning of the American Institute of Architects, 1924, 1925, partly recognize this need. The individual building becomes a unit in the community design and the modern architect recovers as community planner some of the aesthetic freedom he has lost as a creator of individual buildings.

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See: ART; INDUSTRIAL ARTS; HOUSING; CONSTRUCTION INDUSTRY; GUILDS; RENAISSANCE; ENGINEERING; URBANIZATION; REAL ESTATE; CITY AND TOWN PLANNING; ZONING; BUILDING REGULATIONS; CIVIC ART; CIVIC CENTERS; CLASSICISM; MEDIAEVALISM; TRADITIONALISM; MODERNISM.

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ARCHIVES.

HISTORY AND ADMINISTRATION. The word archives is derived from the Greek ἀρχεῖον meaning first a seat of government or administration, then a place in which the documents accumulated in the course of administrative work are stored, and finally the documents themselves. Of the exact modern significance of the word many definitions have been given, but most authorities now agree, at least in theory, that unbroken connection between the archives and the men who compiled them, or their successors in title, is essential if the quality of the archive is to be maintained; and further that the name may properly be applied to the accumulations not only of public but also of private business, however humble. From the first of these considerations flow many inferences highly important to the archivist—a designation given correctly to the curator only, not to the frequenter of archives; from the second it follows that archives of one sort or another, if they have survived, may be reasonably expected to touch and illustrate, in response to adequate research, every side of human activity.

The history of archives follows certain general stages; these are admirably illustrated by the progress of English public archives from their first dignified position as part of the royal treasure, through the organization of the fourteenth century and the succeeding centuries of neglect, their rediscovery by historians and antiquaries in the seventeenth and eighteenth centuries, their slow official recognition by parliamentary committees and commissions in the eighteenth and early nineteenth, their good and bad handling by the record commissioners of 1801 to 1837, to their present established position as a government department. Similar happenings reproduce themselves elsewhere, not being confined to any particular administration, period or country.

The development of archive science came as a reaction to a period of misguided enthusiasms and unfortunate methodizing in France with de Wailly's ministerial circular of 1841 as its Magna Carta. The one great principle there established is that of *le respect pour les fonds*, the *fonds* being the group of archives which results from the work of any single autonomous administrative body. This principle governs, or should govern, every aspect of archive work—storing, sorting, repair, even publication. Since the publication of this circular each of these aspects of archive administration has been the subject of special treatises in one country or another, and a few general works have endeavored to cover archive economy as a whole.

The materials of which archives have been composed were, until modern times, few: we have papyrus, paper (generally of rag), parchment, vellum; ink of gall and iron with, at worst, an admixture of gum and carbon; linen thread or silk, leather of vegetable tannage, wood or rope boards; beeswax and resin, and later shellac, in the seals. All these and most of the occasional less normal materials have proved in practise extremely durable. Varieties of makeup are likewise few—the roll, the file, the bound volume, loose sheets. Repair is generally necessary only where (it is true the cases are very numerous) excessive use or more commonly excessive negligence (especially that resulting in dampness) have caused deterioration; and can usually be conducted on the basis of restoring what has been lost without avoidable modification—resewing, for instance, through the original holes or replacing the size which has perished out of paper. In many archives the use of any essentially modern material, such as celluloid, is avoided in repair.

The main enemies of archives, although they vary in detail with countries and climates, remain much as Agarde defined them in 1611—rats, fire, water and misplacing. Against these systematic numeration and the ordinary architectural and other safeguards are employed. But a new problem, raised by modern materials, is very serious, many of these being known to be impermanent. Much attention has been given to this of late and most experts, as appears from reports published in America, England, Germany and elsewhere, including that of a recent committee (1928) of the League of Nations, are agreed as to the materials suitable for archives; the difficulty is to insure their general usage where requisite. Several countries are seriously considering the establishment of official testing bureaus to encourage such use.

Archive organization varies in every country; but the accepted form is that of France, where central archives conserve most of the muniments of the central ministries and also act as a controlling body over the archives of other public institutions from departments down to communes. At the other extreme is England, where, although recent legislation has put the head of the central archives (the Master of the

Rolls) in control of the huge mass of the *Court Rolls* (which are essentially private in origin), and although public opinion is doing much in other fields, there is in theory no central control over public archives as a whole.

Archive arrangement varies greatly, although it has been the subject of considerable study. The standard treatise is a Dutch work, which lays down one hundred sound rules based on the principle of *le respect pour les fonds*. What this comes to in practise is that the archivist must never add to the archives, as they come to his hands, anything which was not there (morally or physically) nor take away anything which was. A too logical application of this principle is of course possible in particular cases. Thus for their own sake it may be proper to remove maps from a volume in which they were immured, or for the convenience of the student it may be desirable to range together all the documents of a given kind found in different *fonds*. Most conscientious archivists probably feel that infraction of the principle for the sake of the student should be on paper only, not in specie; and that in other cases imperishable dated and identified notes should be left by the archivist to show what he has done.

The study of the subject of the writing of archives has at present been treated too much as a negligible corollary to ordinary palaeography, which has generally confined itself almost entirely to the book or text hands used formerly for producing what would now be printed books. Actually in all countries business hands, suited for rapid writing, developed on quite separate lines. They varied little among themselves all over western Europe as long as writing remained largely a monopoly of the clerical class; but later, in spite of the wide spread of the Italian Renaissance hands, the old forms of calligraphy persisted (as they have done in German countries to the present day) and developed striking national characteristics. In many countries these still await thorough investigation, although there has been some calligraphic study based on the writing masters' books of the sixteenth and seventeenth centuries.

The future of archives is a matter for interesting speculation. Unfortunately recognition of their value is undoubtedly tending to render modern archive makers self-conscious; the honest man is influenced in his writing by the reflection that his office work may be the raw material of future historians, and the politician is tempted more than formerly to select, suppress, garble or appropriate. Every year produces examples of this tendency in volumes of memoirs over well known names; and the quality of archives suffers. In addition to this and to the difficulty of maintaining standard in the materials employed there are the questions raised by the use of new forms of unwritten communication. It is possible that in the future written archives may dwindle to unimportance and some new form of record be demanded as a result of fresh inventions in telephony and television.

HILARY JENKINSON

NATIONAL ARCHIVES. The distinction often made between public and private records, proper enough in theory, has by no means always been observed in practise. Often matters which are the subject of the most secret and delicate diplomatic negotiations are not fully revealed in the official correspondence of a foreign secretary with his ambassadors abroad, but are dealt with in private letters running parallel to the official correspondence. Thus for an adequate understanding of many diplomatic negotiations the private as well as the public archives must be consulted. Herr von Holstein, for instance, one of the most influential men in the German Foreign Office during the thirty years before the World War, is said to have carried on a considerable private correspondence with German ambassadors abroad, which is said to be preserved in his own private trunks and is not to be found in the great German collection of official diplomatic correspondence for the period 1871 to 1914 known as *Die grosse Politik der europäischen Kabinette, 1871–1914* (40 vols., Berlin 1922–27). In Russia Izvolski complained that Witte as finance minister maintained a network of agents who supplied him with diplomatic as well as financial private information which was not kept with the public records but with Witte's private papers, and which was therefore not under governmental control or generally accessible. In England, on the contrary, Sir Edward Grey set a laudable example in leaving at the British Foreign Office all that part of his private correspondence which was in any way connected with his activity as secretary of state for foreign affairs. As a result G. P. Gooch and Harold Temperley, in editing the invaluable *British Documents on the Origins of the War*,

1898–1914 (vols. i–v, xi, London 1926–29) have been able to draw freely from the Grey papers, consisting of some eighty manuscript volumes (see introduction to vol. xi).

Usually, however, and especially the farther one goes back into the past, government officials, instead of following Grey's praiseworthy example, have adopted the contrary and vicious practise of keeping among their private papers, or even of abstracting from government repositories, originals or copies of many important official documents which should have remained in the public archives. Lord Salisbury, for instance, conducted much of his correspondence as foreign secretary from his country home instead of from Downing Street; as a consequence much of the information concerning British foreign policy in the later decades of the nineteenth century is to be found at Hatfield House—where it is being used by Lady Gwendolen Cecil in her life of Lord Salisbury —instead of being preserved for the use of students at the British Foreign Office. So also Admiral von Tirpitz, upon retirement from office, took from the German Admiralty files many papers which he later published in his *Politische Dokumente* (2 vols., Stuttgart 1924–26), although, as the editors of *Die grosse Politik* complain, these documents properly belong to the German Admiralty and Foreign Offices. Similarly the Austrian chief of staff, Conrad von Hötzendorf, apparently kept among his private papers a mass of official public documents which contribute the bulk of his so-called autobiography, *Aus meiner Dienstzeit, 1906–18* (5 vols., Vienna 1921–25).

It is this lack of distinction in actual practise between public and private archives which partly justifies Bismarck's greatly exaggerated boast: "As for using the diplomatic reports some day as material for history, nothing of any value will be found in them. . . . It is easier to find out something from the newspapers, of which, indeed, governments also make use and in which they frequently say much more clearly what they want. But that also requires a knowledge of the circumstances. The most important points, however, are always dealt with in private letters and confidential communications, also verbal ones, and these are not included in the archives" (Moritz Busch, *Bismarck*, Eng. tr., 2 vols., New York 1898, vol. i, p. 419–20).

Archives under governmental control, until quite recently, have usually been preserved very rigidly under seven seals of secrecy, partly to prevent the revealing of diplomatic secrets and partly to spare the reputations or susceptibilities of officials still living, as well as to insure the safety of the documents. Until toward the close of the World War, governments commonly forbade any access to unpublished diplomatic papers until the events with which they dealt had receded half a century or more into the past and until all their authors were in their graves. In England in 1914 it was the rule that no Foreign Office archive material subsequent to the year 1860 could be consulted by historians; in 1925 Sir Austen Chamberlain cautiously advanced the deadline to the year 1878. In Russia the restrictive date in 1914 was 1854, but soon after 1914 it was advanced for some persons and some subjects to 1870. In France, Germany and other countries much the same or even greater restrictions were in force until toward the close of the World War. It is much to be desired that foreign offices should be persuaded to set a fairly short period of years during which their archives shall remain secret, and then allow them automatically to become open to use by the public, so that each year the records of another year will become available. A resolution to this effect was voted by the Anglo-American Conference of Professors of History which was held at Richmond, Virginia, in December, 1924 (see *American Historical Review*, vol. xxx, p. 463).

The reasons for preserving the secrecy of diplomatic archives are further suggested in an order approved by Secretary of State Frank B. Kellogg, March 26, 1925, for the guidance of the editors of *Papers relating to the Foreign Relations of the United States, Supplement, World War* (Washington 1928, p. iii): "Omissions of the following kind are recognized as legitimate and necessary: (a) matters which if published at the time would tend to embarrass negotiations or other business; . . . (c) to preserve the confidence reposed in the Department [of State] by other governments and by individuals; (d) to avoid needless offense to other nationalities or individuals by excising invidious comments not relevant or essential to the subject; and (e) to suppress personal opinions presented in despatches and not adopted by the Department."

In the case of all wars prior to the World War, therefore, the public has had to wait half a century or more before access to the archives enabled historians or others to write tolerably satisfactory accounts of the causes of the wars.

But the World War, in this matter as in so many others, wrought a revolutionary change. It is safe to say that at present (1929), less than fifteen years after the murder of Archduke Franz Ferdinand at Sarajevo, we know more about the origins of the World War than was ever known for fifty years or more about the origins of any other great war. This is because the archives have recently been so widely opened to the public and their contents so fully published. There are several reasons for this new concession to demands for access to, and publication of, archive material.

One form of pressure for the publication of secret archives comes from the disrepute into which "secret diplomacy" sank as a result of the World War. It was felt by socialists, business men and an awakened public generally that one of the causes of the great conflagration of 1914 was the system of secret alliances, and the fears, suspicions and deceptions inherent in the old practise of secret diplomacy. The English public was suddenly and rudely awakened to the fact that Sir Edward Grey, by very secret "conversations" with France, had virtually involved England in a moral obligation to fight by the side of France in case of a German attack. Sir Edward, who was generally regarded as a model of uprightness and honesty, had done this in spite of the English constitutional tradition that diplomatic obligations of this kind were not to be undertaken except with the full knowledge and approval of the whole cabinet and of Parliament. There arose, therefore, a demand for the abolition of secret diplomacy and for democratic control of foreign policy; a league was formed to bring this about, headed by E. D. Morel, who had exposed some of the secret clauses of the Anglo-French Moroccan Agreement of 1904. More decisive steps were taken in Russia. In 1917 and 1918 the Bolshevists, anathematizing the "capitalist" war and its secret methods of selfish diplomacy, began to publish from the Russian archives in their newspapers the secret treaties by which the old czarist diplomats sought to gain Russian control over Constantinople and the Straits and to extend Russian imperialism in other directions (republished in abbreviated French translation by E. Laloy, *Les documents secrets des archives du ministère des affaires étrangères de Russie, publiés par les bolcheviks*, Paris 1919).

A second form of pressure for publication came from the desire to fix responsibility for the war. This motive was naturally especially strong in the defeated countries, where the socialists, newly established in power, wished to place the blame on individuals in the former imperialist governments. This motive was further strengthened by the fact that the victorious powers held Germany and her allies responsible for the war. Germans denied their sole responsibility and asserted that all the Great Powers were more or less jointly responsible or "guilty." In support of their assertion the German government authorized in 1919 the publication of the complete diplomatic correspondence of the German Foreign Office for July, 1914—the so-called "Kautsky documents" (*Die deutschen Dokumente zum Kriegsausbruch, 1914*, 4 vols., Charlottenburg 1919). This was later supplemented by *Die grosse Politik*, containing the most important diplomatic papers and most secret marginalia of chancellors and emperors for the period from 1871 to 1914. The Austrian socialists, following the example of Berlin, published the complete Vienna diplomatic correspondence for July, 1914, and allowed Professor Přibram to publish his epoch making edition of *The Secret Treaties of Austria-Hungary, 1879–1914* (2 vols., Cambridge, Mass. 1920). The Bolshevists continued to divulge former state secrets in their historical journal (*Krasny Arkhiv*, published in Moscow since 1922), in *Materiali po istorii franko-russkikh otnosheniy za 1910–1914* (Materials on the history of Franco-Russian relations for the years 1910–1914, 2 vols., Moscow 1922) and in other documentary publications.

All these revelations of secret diplomacy offered such good anti-imperialist propaganda and gave so many interpretations of history unfavorable to the Triple Entente powers that a third form of pressure for publication was raised in England, France and elsewhere by historical scholars who urged that in the interests of historical truth the archives of their own countries should be opened. In consequence Sir Austen Chamberlain consented to allow Gooch and Temperley to edit the work mentioned above. The French similarly have appointed a commission of some fifty historians, officials and ex-diplomats, who propose to begin publishing simultaneously three series of diplomatic correspondence covering respectively the periods 1871–1911, 1911–14 and July, 1914.

This unprecedented publication of archive material now affords, as never before in history, the opportunity for a wide, and at the same time a minute, scrutiny of secret diplomacy, with all its efforts and errors in the decades prior to the

World War. Scholars may now have in their own homes these fairly complete and admirably edited printed collections, and can examine them more quickly and more extensively than was hitherto the case, instead of having always to journey to the different archives of Europe and to toil through hundreds of thousands of more or less illegible documents during the short hours when archives are open, if open at all. It is thus possible to envisage as never before the "international anarchy" of the old system of pre-war diplomacy, and by observing its mistakes and weaknesses to contribute to a better education of the public in regard to international relations, and perhaps even to the building of a better international order.

SIDNEY B. FAY

UNITED STATES ARCHIVES. The archives of the federal government embrace in theory all the papers made or received by any branch of the present government since its establishment in 1789—office copies of outgoing and originals of incoming correspondence, accounts, reports and similar papers. No unified collection or general administration of federal archives exists. Each of the several executive departments which have existed (at present ten) and each of the independent governmental establishments (at present not less than fifty) and indeed, in most cases, each separate bureau of the executive departments has kept its papers in its own manner and in its own place or places. The federal archives are therefore at present dispersed in more than a hundred different repositories in Washington, besides many outside Washington or outside the country, as in the case of our embassies, legations and consulates abroad. The Department of State contains the diplomatic archives (more than 3000 volumes), the consular archives (more than 4000 volumes) and the volumes of domestic and miscellaneous letters (more than 1500); the Treasury Department possesses the greatest mass of all and the most widely scattered. In the War Department most of the archive material is concentrated, as to control though not as to place, under the authority of the adjutant general; the Department of Justice has the papers of the attorney general's office from 1817; in the Navy Department the most important collection is the correspondence between naval officers and the department (more than 3000 volumes); in the Interior Department are the files of the Indian Office and the General Land Office; in the Department of Commerce, the schedules and other papers of the successive censuses. The Senate, the House of Representatives and the Supreme Court also have extensive files. At the White House there are none but those of the president, for the convention is that all the papers of a presidential term belong to the incumbent, who may take them away with him at the expiration of his term.

Many of the places in which the federal archives are kept are grossly unfit, exposing them to danger or deterioration from fire, damp, dirt and rot. Serious losses have also occurred, and the processes for the authorized destruction of useless papers are crude. Ever since 1879 sporadic efforts toward the creation of a proper archive building and establishment have been made. Since 1908 a committee of the American Historical Association has actively pressed the matter. Acts of March 3, 1913, and June 28, 1916, authorized the erection of a suitable building. Appropriations for it are included in recent lump sum provisions for additional public buildings in Washington. A recent bill before Congress provides for a national archive establishment to be administered by an Archivist of the United States appointed by the president with an archive council representing the individual departments, and a commission on publications.

The Library of Congress possesses the papers of the United States government previous to 1789 (Continental Congress), of Washington and nearly all other presidents, of Franklin and Hamilton, etc. and most of those of the Confederate government.

J. F. JAMESON

See: RECORDS, HISTORICAL; HISTORY; DIPLOMACY; WORLD WAR; WAR GUILT; RUSSIAN REVOLUTION.

Consult: FOR HISTORY AND ADMINISTRATION: Giry, A., *Manuel de diplomatique* (Paris 1894); Langlois, C. V., and Stein, H., *Les archives de l'histoire de France* (Paris 1891); Hall, Hubert, *Repertory of British Archives*, vol. i– (London 1920–) p. ix–xxxiii; Loewe, V., *Das deutsche Archivwesen: seine Geschichte und Organisation* (Breslau 1921); Muller, S., Feith, J. A., and Fruin, R., *Handleiding voor het ordenen en beschrÿven van archieven* (2nd ed. Groningen 1920; tr. into French, The Hague 1910); American Historical Association, Public Archives Commission, *Reports* for 1913 and 1914 (Washington 1915–16); Jenkinson, H., *Manual of Archive Administration*, Carnegie Endowment for International Peace, Division of Economics and History, Economic and Social History of the World War, British series (Oxford 1922), and *Later Court Hands* (Cambridge, Eng. 1927); Casanova, E., *Archivistica* (Siena 1928).

FOR THE RELATION OF NATIONAL ARCHIVES TO

DIPLOMACY AND HISTORIOGRAPHY: Gooch, G. P., *Recent Revelations of European Diplomacy* (3rd impression, London 1928); Fay, S. B., *Origins of the World War*, 2 vols. (New York 1928), especially vol. i, ch. i; Webster, C. K., "The Study of British Foreign Policy (Nineteenth Century)" in *American Historical Review*, vol. xxx (1924–25) 728–37.

FOR AMERICAN ARCHIVES: Van Tyne, C. H., and Leland, W. G., *Guide to the Archives of the Government of the United States* (2nd ed. Washington 1907); Report of the Library of Congress, "Archives of Government outside of the City of Washington" in 62nd Cong., 3rd sess., *House of Representatives Documents*, vol. cxxxv, no. 1443; Leland, W. G., and Mereness, N. D., *Introduction to the American Official Sources for the Economic and Social History of the World War*, Carnegie Endowment for International Peace, Division of Economics and History, Economic and Social History of the World War, American series (New Haven 1926); Leland, W. G., "The National Archives; a Programme" in *American Historical Review*, vol. xviii (1912–13) 1–28, reprinted in 63rd Cong., 3rd sess., *Senate Documents*, vol. xv, no. 717; Paullin, C. O., "History of the Movement for a National Archives Building in Washington, D. C." in 62nd Cong., 2nd sess., *Senate Documents*, vol. xxvi, no. 297.

ARDASHEV, PAVEL NIKOLAYEVICH (1865–1924), Russian historian, professor at the universities of Dorpat and Kiev. Ardashev is best known as the author of a monumental work on the provincial intendants of France in the last period of the *ancien régime*. His conclusions are completely at variance with the view of the intendants which has prevailed since de Tocqueville. His work is of undoubted value in revising and increasing our information about the intendants but his appreciation of their historical role has been seriously contested. In Ardashev's description the intendant was an enlightened and public spirited official, a member of the nobility or of the new class of higher officialdom, no stranger in his province, not very young, well situated financially, not bent upon promotion and practically not removable, and thus in a position to carry on his highly expensive office in a spirit of independence; far from being a tool of the central authorities, he often initiated measures which they enacted and sometimes acted contrary to their specific directions. His relationship with the provincial *parlements* and with the lower courts was on the whole one of cooperation. In the municipalities he championed the masses against the corrupt municipal oligarchies and was the leader of the movement for urban regeneration and sound financial administration.

Ardashev's conservative views were expressed even more clearly in a pamphlet which he issued in defense of Taine on the occasion of Aulard's attack upon Taine's scholarship and in a course of lectures on European history since 1792, which were published in Russian in 1910.

ALEXANDER GOURVITCH

Works: *Provintsialnaya administratsia vo Frantsii v poslednuyu poru starovo poriadka, 1774–89. Provintsialnie intendanti* (Provincial administration in France in the latter part of the *ancien régime* 1774–89. The provincial intendants), 3 vols. (St. Petersburg 1900–03); vol. i summarized by Ardashev as "Les intendants de province à la fin de l'ancien régime" in *Revue d'histoire moderne et contemporaine*, vol. v (1903) 5–38; vol. ii tr. into French by Louis Jousserandot as *Les intendants de province sous Louis XVI* (Paris 1909); vol. iii contains documentary evidence in French.

Consult: Kareyev, N., "La révolution française dans la science historique russe" in *La révolution française*, vol. xlii (1902) 321–45. Also reviews of Ardashev's work in *English Historical Review* (1901) 597–99; in *Journal des savants* (1901) 401–10; in *La révolution française*, vol. xl (1901) 557–64, vol. xlvi (1904) 463–68, vol. lvi (1909) 551–60; and in *Annales révolutionnaires*, vol. ii (1909) 266–68.

ARDIGÒ, ROBERTO (1828–1920), Italian philosopher. He started his career as a Catholic priest, but because of his conversion to positivism he abandoned the priesthood in 1871 and became professor at the University of Padua (1881–1909). He was the leader of Italian positivism and was a significant figure in its development. Ardigò ascribed great importance to psychology, differing in this respect from Comte, and envisaged all of reality as passing from the less to the more distinct, like mental phenomena. He considered the universe as a progressive series of natural formations ascending to the human spirit and its manifestations.

The distinctive characteristic of Ardigò's sociology, which may be termed a juristic philosophy, consists in its theory of justice as a force peculiar to society. Independently of Fouillée's doctrine of *idées-forces*, Ardigò taught that social ideals arise naturally from social life and its struggles, that they first inform the juristic, then the ethical, order through their acquired impulsion on the human will. To the extent to which they authorize a certain course of conduct, these ideals become rights; they become duties to the extent to which they make it imperative. Accordingly responsibility is regarded as correlative with autonomy or self-control. Ardigò's sociological doctrines have influenced the Italian positivistic school of

criminology and have also influenced certain currents of contemporary Italian juristic philosophy.

ALESSANDRO LEVI

Works: *Opere filosofiche*, 11 vols. (Padua 1882–1918), especially vol. iii, *Morale dei positivisti*, and vol. iv, *Sociologia*.

Consult: Marchesini, Giovanni, *Roberto Ardigò, l'uomo e l'umanista* (Florence 1922); Hoffding, Harold, *Moderne Philosophen* (Leipsic 1905), tr. by A. C. Mason (London 1915) ch. ii; *Roberto Ardigò, scritti commemorativi nel 1. centenario della sua nascita* (Milan 1929), with an adequate bibliography.

ARENAL, CONCEPCIÓN (1820–93), Spanish feminist and social reformer. Family environment, personal taste and her marriage to a lawyer and journalist who shared her social ideals and encouraged her, led Concepción Arenal to the study of social science and to active work in philanthropy. She advocated the emancipation of women, a stand remarkable in those days, especially in Spain, and took a leading part in the movement for public education. She was particularly famous in Europe for her work in criminology. The Spanish government appointed her inspector general of the prisons in 1864, and the Academy of Moral and Political Science awarded her a prize.

Concepción Arenal is a curious combination, an eighteenth century rationalist believing in human progress and equalitarian ideals, and a nineteenth century philanthropist. Jovellanos, Madame de Staël, Guizot, Lacordaire and Herbert Spencer influenced her appreciably. In her scheme of thought social equilibrium depends on the harmony of the three elements of human nature, physical, moral and intellectual. Progress toward social equality would bring us nearer to this harmony. The forces which hamper this evolution she distinguished as individual (routine, indifference, injustice), economic (unemployment, old age, sickness) and moral (disappearance of the spirit of abnegation, religious decay). To counteract these forces we must resort to private and cooperative initiative. In connection with the former she outlined a personal method of approach of which modern psychologists would not disapprove. As to the latter, she held that associations should be federated and should act as a link between the state and the individual.

RENÉ E. G. VAILLANT

Important works: *La beneficencia, la filantropía y la caridad* (Madrid 1861); *Cartas à los delincuentes* (Coruña 1865); *Estudios penitenciarios* (Madrid 1877); *El visitador del preso* (Madrid 1896); *El pauperismo*, 2 vols. (Madrid 1897); *El visitador del pobre* (Madrid 1913).

Consult: Vaillant, R., *Concepción Arenal* (in French) (New York 1926).

ARETINO, LEONARDO. *See* BRUNI, LEONARDO.

ARGENSON, RENÉ LOUIS DE VOYER DE PAULMY, MARQUIS D' (1694–1757), French writer on economic and political subjects. The main principle in d'Argenson's philosophy was universal liberalism—"not too much government" (*pas trop gouverner*). In politics the "democracy" which he wished to "admit into the monarchic state" depended primarily on the abolition of inherited distinctions between the estates and on the decentralization of administration. In the economic sphere he demanded the cessation of all interference with the production and circulation of goods—"let liberty have sway," at least as long as it is "allied to justice." D'Argenson, the *grand seigneur*, was a partisan of the people, and he went almost so far as to talk of equality as a natural right. He was also a *rustique*, one for whom agriculture is the main basis of the state. Finally he was one of the first advocates of international arbitration.

G. WEULERSSE

Important works: *Considérations sur le gouvernement ancien et présent de la France* (written about 1737, published in Amsterdam 1764); *Journal et mémoires*, 9 vols. (Paris 1859–67).

Consult: Alem, A., *Le Marquis d'Argenson et l'économie politique au début du XVIIIe siècle* (Paris 1900).

ARGENTRÉ, BERTRAND D' (1519–90), French jurist, historian and man of affairs. He succeeded his father as seneschal of Rennes in 1548 and later became president of the presidial court. He wrote an important *Histoire de Bretagne* (Rennes 1582, 3rd ed. Paris 1618). Argentré is best known, however, for his work as one of the commissioners to restate the custom of Brittany (finished 1580) and for his treatise *Commentarii in patrias Britonum leges* (Paris 1608, 6th ed. Paris 1646), a part of which appeared as *Commentaires sur les quatres premiers titres de l'ancienne coutume de Bretagne* (Rennes 1568).

Argentré's service to the law may be traced directly to his provincial patriotism and to his

long experience as head of the provincial court. He succeeded in retaining the strong individual tone of the custom of Brittany in its restatement, which was principally his work. His best and most enduring work was in the conflict of laws, where he is conspicuously the precursor of the modern doctrine. His theory that the Breton custom was, to use a later phrase, "the law of the land" is contrary to that of the *statuta* of the Italian school. It led him to refuse recognition to any foreign law, except to the extent that it had created a personal status. Any local transaction in which a foreigner took part was within his novel category of "mixed statute" and was governed by the local law. This doctrine, strongly opposed in France by Dumoulin, Coquille and their successors, was adopted by the Dutch jurists of the seventeenth century and through them deeply influenced Story, Dicey and most common law scholars.

JOSEPH H. BEALE

Consult: La Lande de Colan, Charles de, *Bertrand d'Argentré, ses doctrines juridiques et leur influence* (Saint-Amand 1892), containing a full bibliography; Lainé, Armand, *Introduction au droit international privé*, 2 vols. (Paris 1888–92) vol. i, p. 309–425; Meili, F., *Argentraeus und Molinaeus und ihre Bedeutung im internationalen Privat- und Strafrecht* (Leipsic 1896).

ARISTOCRACY. Etymologically aristocracy means the rule of the best, a system which at first blush commends itself to common sense as the most rational form of government, but on second thought raises the questions: Who are the best, and how are they distinguished? Plato, who introduced the term into social theory, made their selection and education for the purposes of directing personal and social life the main thesis of his great treatise, but was very well aware of the difficulties of setting the mechanism in motion.

Perhaps the most delicate operation that the best and wisest can be called upon to perform is that of selecting the best and wisest for their coadjutors and successors. In any case, when translated into practise, the rule of the best must mean the rule of those who are thought the best, whether by themselves or by others. In this sense we may say that both monarchy and democracy normally pay attention, well or ill directed as may happen, to the aristocratic principle. It is in the interest of democracy to choose the best available men for every sort of function, and its frequent failures in this respect are more due to the lack of means of judgment than of good intention. The career open to talents has always been a part of the democratic principle. The same maxim is accepted by any enlightened monarch in relation to every position, except that of the monarch himself, and even in this regard there have been monarchies in which merit and experience have been taken into account in the choice of a successor. Paradoxically enough, it is just the historic aristocracies which are on principle opposed to the rule, for they are rooted in the view that the function of government belongs to a defined class, recruited by heredity, and though an intelligent aristocrat would doubtless agree that the best should rule, he would subjoin: "And the best are those of our blood." He may be liberal enough to make some reservations in favor of breeding, whereby the man of plebeian origin may be sufficiently dyed with the aristocratic tincture to be admitted as a "new man" to the charmed circle. But the regular passport is birth, and even the personal honors which please the aristocrat most are those which have "no damned nonsense about merit."

Thus there is a marked contrast between aristocracy as a rational system which functions wherever the principle obtains of choosing the man deemed best for a post, and aristocracies as historic systems in which fitness is determined primarily by birth and all questions of capacity and character are secondary. It must, however, be understood that the true aristocracy thoroughly believes in itself, and unless the belief is largely shared by other classes its power is precarious. Aristocracy is the rule of a class which is deemed, certainly by itself and in greater or less degree by others, to monopolize fitness for government.

Both in idea and in history aristocracy is generally opposed to monarchy as well as to democracy, but it is to be remarked that within its own circle aristocracy generally guards one democratic principle with solicitude. Its members are all of the one caste; they are each other's peers; they are the ὅμοιοι, generically alike and different from all others. In dueling societies, they and they alone have the dueler's right. The duke must not refuse the commoner satisfaction if the commoner is "born," but must refuse it to anyone not "born." The proudest aristocracies, like the English, think or thought little of titles which could be conferred for mere merit, and Squire Western of the eighteenth century is at one with Squire Hamley of the

early nineteenth in a certain dislike of a lord, often a member of a new family, yet claiming precedence over a family which has ruled its own acres since the Conquest. This remarkable exception to the too general rule that every Englishman loves a lord has not been sufficiently noted as a mark of the inner essence of the aristocratic spirit. At the same time titles in the modern as contrasted with the ancient world have served to mark our aristocracies, and the English custom of primogeniture by restricting the succession has helped to merge the descendants of a great family in the general community and thus blur the edges of distinction, since, after all, birth is socially nothing unless it is generally known.

Aristocracies have been often hostile to monarchy, or at least jealous and suspicious of it. In many cases, as in the early Greek states, they managed to throw off its supremacy or reduce it to a shadow for the performance of certain religious rites, or to a position of tutelage like that of the Spartan kings. Monarchy on its side has in consequence frequently leaned on the third estate for support, and in contesting feudal privilege has stood for both a more equal justice and a wider national unity. There is much in monarchy that may favor any kind of equality, as long as it does not touch the throne and is opposed to every privilege except that of one family. On the other side of the account, aristocracy involves government by discussion and the rule of a responsible senate, as against the arbitrary decision of a single man who, even if constrained by custom to take counsel with the nobles, is himself solely and wholly responsible for the final choice. In archaic societies the relation is likely to be closer. Those of royal blood are sufficiently numerous to constitute an aristocracy of themselves, and to be royal means not necessarily to be an actual king, but a potential king, one of those fitted by descent for kingship, and hence a possible claimant of any throne that is vacant or weakly occupied.

Royalties in general tend to form an endogamous caste, as is shown by the pervasive intermarriages of the royalties of Europe, who from this point of view may be regarded as having formed the supreme aristocratic circle. For to monarchy, too, birth is the one really stable qualification. The early Roman Empire, indeed, used the law of adoption to overcome the manifest risks of such a system, and used it with effect, particularly in the second century A.D. But it is characteristic of the weakness of such a device that the palmy days of the Antonines ended abruptly with the choice of a worthless son as his successor by the noblest of the emperors. Moreover, unless not only blood but strict primogeniture is the rule, there is always the possibility of civil war among surviving sons, and the history of the Mogul Empire shows how fatal the results may be. The one-man ruler is of course more dependent on the general acceptance of his position than a group of peers who, though a small minority, may be sufficiently well organized to defend their position. Success, particularly military success, has often made monarchs, from Napoleon downwards, but it is belief in birth that has engendered dynasties and a fear of revolution that has supported them and even preserved them in form while a mayor of the palace or a shogun has actually exercised power.

What is common to aristocracy and monarchy is of course that government is the privilege of the one or the few, and is external to the governed. If we confine ourselves to stable or "legitimate" monarchies, we may add that the privilege in both cases depends primarily on birth. This is no doubt the basis of an alliance which is deeper than the occasional hostility. Historically aristocracies have more often been associated with monarchy than entirely independent. Nobles formed the king's court, looked to him for advancement and sinecures for poor relations, monopolized the military commands in his army and in return gave his rule support in their own territories. In a feudal system a balance is struck in which at each grade the inferior holds his position on terms of service to the superior, who in turn protects and assures him in his position. The balance is insecure, and great nobles in particular watch for opportunities to make their position independent and hereditary, but unless in the rare event that the noble is great enough to set up a king on his own account he will recognize his overlord as the keystone of the arch. The historic instances of aristocratic rule without dependence on monarchy have been relatively few. They would include most of the Greek city-states before the rise of the tyrannies and democracies, Sparta, notwithstanding the preservation of the dual kingship, being reckoned among them. They would include the commercial republics of the Phoenicians, Carthage, the Philistine city-states, probably, though little seems to be known of them, the

tribal republics of early India and above all the Roman Republic, tinctured and certainly invigorated as this might be by some democratic elements. One cannot add the spiritual supremacy of the Brahmans, though perhaps more deeply rooted and more widely extended than any of these, because they never regarded direct temporal sovereignty as within their sphere. In mediaeval and modern Europe the association of aristocracy with monarchy has been the rule, though with some brilliant exceptions. On the whole it is in this association that aristocracy has had its widest reach. Apart from some brilliant, but not long lived, democratic impulses in classical antiquity, the normal government of civilized states, down to quite modern times, has been in the hands of privileged classes, whether royal or aristocratic or both in cooperation.

What are the origin and basis of this distinction between ruler and ruled? In the simplest known societies, which though probably not primitive are nearer to the primitive than any others that we know, no such distinction is found. The little groups which constitute the nucleus of social life present no inequalities of rank, and while many of these groups are associated in larger aggregates which may be called tribes, there is hardly ever any gradation of power among them, or indeed any common authority. As to sex, women are often the full equals of men and in general are at least far nearer to equality than they are under more advanced conditions of material culture. As to age, there are cases, particularly among the Australian aborigines, where the power is exercised by the elders, and sometimes oppressively, but there is no question of a governing class restricted by birth. The little groups have in general leaders or headmen, but their power is more often a matter of personality than of any rigid rule. Beyond the group there is still less authority, and a chief of a whole tribe is a rarity. What is most important, access to the soil and its products is available to all members of the community, and the products of the chase or the search are generally shared among those present. Private rights in these things are not unknown, but are quite subordinate. In personal things private property is recognized and is more effective, but possessions are too insignificant to lead to accumulation, and goods are in fact often destroyed at death.

When we pass to peoples of rather more advanced material culture we find changes which are accentuated as we move upwards. The tribe becomes a definite unity. It has a chief or a governing council, often with considerable powers, and the chief is frequently hereditary. Fighting becomes more organized and fills a larger place, while the position of women sinks. We hear not only of family feuds but of tribal wars, and as war requires a leader we have war chiefs as well as peace chiefs. A successful war chief gets prestige and a position which no headman of a group possessed, and how his success may grow, how then he will get a group of *comites* about him and how the position tends to be hereditary hardly need to be said. But, it should be remarked, women and children are taken in the tribal wars, while adult male captives may be adopted to fill the gaps in the victorious community, so that alien elements begin to enter it. Such elements do not necessarily fall into a lower status, but they may do so. The captive women, for instance, will often be secondary wives, reenforcing the growing tendency to polygamy.

A more decisive step, however, is taken with the development of agriculture and industry. A tribe that has developed warlike organization out of mere tribal quarrels may begin to turn it to more utilitarian ends. It may even be more to its taste to continue the hunter's life, to raid agricultural tribes for their produce, as the Guaycuru do, or to subject them to a regular tribute. If agriculture is practised at home, a demand for labor arises which may be met by taking slaves. Thus, on the one hand, we have the rise of a warrior class, and, on the other, alien elements of lower status, slaves or serfs, or perhaps tributary peoples. Finally, encouraged by success, the tribe begins deliberately to enlarge its borders, and sends out streams of migrants to settle down as lords in the territories of milder, more industrious and perhaps more civilized peoples. It is not of course suggested that such a bare outline repeats itself in every case. The intention is only to indicate the connection of a series of differentiations which we find still within the limits of the simpler peoples as we pass from the lower to the higher hunters, and from them to the successive stages of agriculture and the breeding of animals. As we pass up the scale of material culture we find more social differentiation, larger units with more effective government, more evidences of slavery and serfdom, on the one side, and of a noble class, on the other, more insistence on the

restriction of landed property to nobles and chiefs. Here and there, as in some oceanic islands, we have a definite upper caste of property owners and a lower order of landless laborers.

Thus the comparative study of the simpler societies prepares us for the history of the earlier civilizations in which the growth of larger states, their frequent expansion into vast and insecure empires, the exaltation and even deification of the monarch, the elevation of military and sacerdotal orders and the subjection in greater or less degree of the masses, play their well known part. To attempt to characterize these developments in their complex and endlessly varying detail would be to write a history of civilization, but something must be said of the basis of differentiation. We have followed militarism as the main clue, but there are other influences entangled with it. One is sacral. In many simpler societies the shaman has an influence equal, perhaps superior, to the chief's, and in many cases shaman and chief are one. In early civilization the priestly order is often supreme. The Sumerian city-state was ruled by the *patesi* as the local god's direct representative. In Egyptian history the priestly order reveals itself as dominant, and in India the Brahmans through long contests vindicated their position as the superiors of the warrior classes and the secular prince. But there is more even than this. Militarism is blind force, and society is not stable until blind force is recognized as authority. The transforming agency is religion. The king is a god or the representative of a god, or at least the Lord's anointed whom the church has consecrated. Rebellion therefore is as the sin of witchcraft. The nobles perhaps hold from him at the outset, but in addition many of them are of royal descent, and others, like many of the great Greek families, might find for themselves a descent from heroes and demigods. Under higher religions, which exclude such conceptions, the respect for ancestry still has a mystical authority going far beyond any scientific justification. If the English nobleman's ancestor was not a god, he at least came over with the Conqueror. The power that is long established raises no heartburnings. It does not injure self-feeling as the elevation of a rival may do, but is generally accepted as above competition, always provided that it does not attempt innovations.

Another influence to be considered is economic. Throughout, the main basis of aristocracy is territorial possession. Quite apart from any special rights and privileges, the ownership of a great estate involves a kind of petty sovereignty over its population which no other property confers. In a feudal nobility it is indeed the administrative functions that take the first place, and when economic development has gone far enough to engender manufacture, commerce and a money economy, it is rather hostile than otherwise to the rule of an exclusive aristocracy, for the tendency is to buy out feudal obligations and transform the fief into hereditary property. Again, if we look to the origin of aristocratic estates, we find that grants from the crown, the results of wars, conquest, rebellions and attainders, spoliation of church lands and so forth, lay the foundation of many of them. But underneath all this the economic factor must operate. One family prospers by good management and advantageous marriages while another fails. Riches themselves are respected as the basis of success and the signs of capacity, and sheer wealth from early stages is social power and can be translated at lowest into political influence.

There is thirdly the biological factor in which many see the real determinant. The ruling section, be it race or class, entering from without or rising from within, is in this view the superior type, best fitted to rule and proving its fitness by success. This is the scientific justification alike of hereditary monarchy and aristocracy, which for the purpose of this discussion need not be differentiated. Some thinkers indeed, going beyond the basis of biology, think of common human nature as something essentially weak, poor and incapable of self-government. It needs direction from above. Unfortunately there are only human beings to be its directors. But it seems to be thought that there is a small section of human beings which superior hereditary endowment, developed by family tradition and lifelong habit, equips for the superhuman task of ruling not only themselves but others, and in this natural aristocracy is the hope of human society. This is the aristocratic ideal proper, and must command a certain respect since its ultimate origin is in Plato. Against it must be set the democratic conception that human nature, however weak and defective, has in it the possibility of higher things which are developed by responsibility and the common life, that the better training lies in self-discipline rather than

subjection, in cooperation rather than subservience, and that the society resting on wide acceptance of a common well-being has a broader basis than that of the prestige of a superexcellent but narrow class.

Leaving these two ideals to speak for themselves, we return to the more distinctly biological issue which is entangled in the extremely involved questions of race, class and caste, of the effects of inbreeding on the one side, and miscegenation on the other, and of actual ascendancy as a test of permanent merit. We will assume with the biologist that the psychological factors making for success, whatever they may be, are as hereditable as any physical factors on the same terms, that is, that they are germinal or innate and not acquired. What we know of the conflicts of peoples seems to indicate that in numerous cases physically stronger and more vigorous, perhaps harder and less scrupulous, races have come into contact with weaker ones and established what may be a durable ascendancy. How far this admission would carry us we might determine if we knew better what is meant by race. Using the term in a wide sense, however, and granting the possibility of a definite racial superiority in the aristocracy that is founded directly on conquest, the fact remains that these conquests represent military superiority alone, which is compatible with inferiority in other respects. The pastoral tribes, which have so often overrun settled peoples, were supreme in the assemblage of military qualities and pretty clearly inferior in others. The most successful barbarian rulers recognized the disparity, as did the Gothic rulers who recognized the superiority in the Roman culture, just as the Romans in earlier days had bowed to the cultural eminence of the Greeks. Conquest does found aristocracies, but does not substantiate their claim to all round superiority.

The question then arises whether the conqueror is to preserve his aloofness. If so, he will have to live in an armed camp like the Spartiates and maintain an exclusiveness which is likely to have unfavorable results. Socially it requires a fatal division of society into opposed camps wherein the rulers are compelled by their situation to make their own preservation the foremost consideration in government. Biologically it involves the difficult question of inbreeding. Will the caste prosper in isolation and therefore in endogamy? Here it must be said that contemporary genetics does not altogether justify the popular opinion of inbreeding as a necessary cause of degeneration. On the "factorial" hypothesis the danger lies merely in the increased chance of a union of factors bearing the same defect, and if the stock were sound throughout, this danger would not exist. Some writers evidently think the risk of importation of defects from outside marriages the more serious of the two. On this view, however, two comments must be made. First, if the choice of partners is narrow, persons of unknown defects will find mates when they had much better remained unmarried. That this is a real danger in monarchical and close aristocratic castes, and particularly in cases where wealth is sought to replenish aristocratic poverty, is fairly well known. Second, if there is a possible deterioration through intermarriage, there is also the opportunity of new combinations uniting perhaps for the first time in evolution the best elements in two strains, and so marking a distinct step forward in racial life. This is strictly comparable to the results aimed at by practical geneticists in the vegetable world, and though we have no means of measuring its social importance, the frequent appearance of vigor and originality among mixed races suggests that it is a real factor to be reckoned with.

In all this we are assuming an original "racial" difference. Where this does not exist the biological considerations must be quite different. Here ascendancy must be due to some superiority of power, either in the present or the past, and how far such superiorities would be permanent would depend for modern genetics on the question whether they rested upon a definite mutation or on a quantitative variation of a common character or perchance on the exceptional mating of two factors which could not be counted upon for recurrence. It is thus easily explicable that the inheritance of eminent ability is the rarity which we actually find it to be. We can by no means count upon it, whereas with equality of opportunity it is reasonable to count on the power of the superior faculty to find its way to the front. Hereditary privilege therefore seems in these cases to be superfluous and rather dangerous, and these considerations will apply to all cases in which aristocracy has ceased to be endogamous.

If we ask why, then, the privilege of birth has played so large a part in civilization, the answer is probably neither sacral nor economic nor biological, but rather the need and the difficulty of government. The need and the

difficulty grow as society enlarges its borders and comes to embrace numerous peoples of diverse character and traditions, varying forms of industry, grades of wealth and poverty. As this process advances, government becomes a special art and mystery, remote from the ordinary man, and the mystery of mysteries is how to secure obedience. The first necessity is loyalty to the leader, who offers himself and proves successful. What more natural than to follow his son as successor, brought up by him and already invested with secondary power? What more disastrous than contests for the succession? It is not likely that sacral theories are deliberately invented to enforce loyalty, but where they arise at this stage of development states are more likely to flourish. The quasi-divine monarchs will be the survivors. This reason applies most cogently to the monarchical principle, but we have seen how at bottom the aristocracies are linked up with their superiors. Social order will require local and departmental rulers, and for them too, so far as they do not hold directly from the crown, against which their own feelings rebel, a sanction is needed. Thus it seems at bottom to be the need of a stable government which maintains the authority of the superior. Only with the spread of education and communication does self-government on the large scale become a possibility (and even now self-government has hardly passed beyond the experimental stage).

The decline of aristocracy in modern times has been due not merely to the rise of democratic ideas but to economic changes. Territorial ascendancy was undermined by the growth of industry; urban communities arose which resented territorial jurisdiction and obtained charters and liberties of their own. The most prominent burgesses, matching the nobles in wealth, began to establish a plutocracy frankly regardless of aristocratic tradition. About their wealth there is no halo of antiquity; men see it growing before their eyes. The successful ones are positive, matter-of-fact, measure values in terms of hard cash, and reck little of antiquity, but believe that the future is with them, and are resentful not only of the political privileges and social preeminence of the aristocracy but more deeply of its repudiation of money as a standard and the too easy contempt for the money making for which it has never had any need. What attitude will the aristocracy take to this new power? It may stand proudly aloof, refusing intercourse, jealously adhering to fiscal and personal privileges, but for the rest content to decline in wealth as its rival advances. Or it may make terms, and take its toll of the new wealth by marrying its daughters. The former has been on the whole the method of the continental aristocracies; the latter that of the British, probably because with them commercialism developed earlier and its prizes were more tempting. But even in England the breaking down of the caste feeling was very slow before the middle of the nineteenth century. It took time to make a "gentleman." Mr. Weston in *Emma* "was born of a respectable family which for the last two or three generations had been rising into gentility and property." He himself was now thought a good match for Emma's governess, and associated on equal terms with country gentlemen like the Knightleys and Woodhouses, but was held in contempt by the aristocratic family of his first wife. In Thackeray's time the Lady Annes and Lady Claras were deliberately married by their families to bankers or brewers. In the last generation or two this particular form of the marriage problem has been falling into the background in our literature. Money, as Vespasian said, does not smell of its origin.

Intermarriage in the end governs all social intercourse, and social intercourse interacts closely with political cooperation. In France there was no question but that the prosperous burgess belonged to the third estate, and the bourgeoisie, with the lesser clergy and a few idealists among the *noblesse*, took the lead in the first revolution, until frightened away by disorder, insecurity and some hints of socialism. In England there was a time, now difficult to imagine, when the city of London took the lead in liberal movements. Commercial men headed the democratic assault after the Napoleonic wars, and won their victory in the first Reform Act (1832) and the abolition of the protectionist duties on corn (1846). But the rising tide of democracy bore reconciliation on its breast, and cooperated powerfully with the social influences that have been mentioned, so that from 1886 onward "property" in England, landed or other, presented a very solid front. The disappearance of the old liberal parties on the continent tells the same tale in a different language. Aristocracy, like hereditary absolutism, is dead. The issue for Europe is between democracy and dictature, an issue which depends in the end on the question whether the

economic problem can be solved by good sense or must be kept unsolved by violence.

Aristocracy would hardly have been submerged in plutocracy if its ideal had not been disintegrated by democratic criticism. Aristocracy held a high standard of honor and fortitude, of public duty and personal courtesy, of inner character as against outward show. Yet in so far as it believed itself to have a monopoly of such virtues its exclusiveness was neither compatible with ethical requirements nor based on scientific facts. Nature has not parted men into sheep and goats. In all classes, all colors and all creeds there are good men and less good, wise and unwise, competent and incapable. Of any collection of men—a nation, or a class, or even a group of nations like a world of white men—the most that we can scientifically venture is that their average is higher in some one or more of these respects than that of others. Yet it will remain that the good man or the capable man of the class with the lower average will hold his own among the higher. Why should he be excluded from their circle or from any of their functions if personally he is capable of performing them? Even the average superiority may hold only in respect of one quality and fail in others, as the white man with his superiority in practical organization is inferior to the Japanese in artistic sense or to the Indian in fineness of spiritual perception. A mere sense of humor should prevent a nation or a class from vaunting an all round superiority which is hardly ever real. Ethically the traditional *noblesse oblige* might itself have taught that the greatest duty of the superior, if such he is, is not to wrap himself up in his superiority but to share his best with all the world, and for this purpose he must feel himself at one with the world—a man, not a demigod, among men.

Men are very far from being equal but, abnormalities apart, their differences are those of degree and lie as it were on the surface of that deep seated identity which is common human nature. The great poet and, more than that, the great statesman is he who does not stick in the differences, but can work down to these deeper forces and trust the results to the broader basis which they provide. From whatever point any race or class is truly superior, it needs nothing but equality of opportunity to prove its merit.

By defenders of the hereditary principle much is made of the high capacity of the founder of the family, but no general assumption of outstanding merit is warranted. What may be assumed is that some ancestor, recent or remote, had a capacity of some kind sufficient to enable him to found a family. Enough is known to assure us that such capacity is often of doubtful character, including, e.g., skill in court intrigue or doubtful political services. The more distinctive mark of the ancient family is that, whatever the causes of its rise, it has in fact held on. It has kept its estates while others have squandered theirs. It is morally more conservative than progressive or aggressive. It cares for its tradition. To hold its head high for two or three hundred years, while others rose or fell, pushed and scrambled, won dizzy success and ruin, is after all no mean feat, and implies the persistence of a certain tradition and perhaps a hereditary type of character.

It is this type, rather than any unusual ability, which expresses itself in the aristocratic code, and more broadly in the aristocratic manners at their best. The note of these manners is a security in the inner and the outer life which is too deep and untroubled to be called a conscious assurance. A certain code is inbred from birth and as a matter of course governs each man's own actions and those of his kind. He is aware of a coarser kind, but it serves only as a foil to teach him what to avoid. He knows without formulating it what he has to do, and that is what he will do, and what all his peers will do, and it includes the knowledge of dealing with those whose code is different. Moreover he is born free from worry about material necessities, with the sense that he has enough and needs no more. Men outside his class are appointed to serve him, and this too he takes for granted. This last point is the element in that repose stamping the caste of Vere de Vere which galls the outsider. It is the basis of the quiet voice, the even tones and easy manner which carry so much further than passion, vehemence and shouting.

If we except this power of command, the other features of the aristocratic manner may be found in cases where there is no question of class ascendancy. It is a feature, for example, of those religious households in which piety is not emotionally acquired but inbred. There too is untroubled confidence and a moral security in the possession of real values, not touched by the needs of this world, regardless of advancement, competition and criticism. Observers of the working class have noted a similar dignity

and repose among humble craftsmen possessed of some skill which gives them security in their modest position, but does not point the way to any great advancement. Thus the essential secret is not that of a class but of a standard held with conviction—what one may call a valuation. In the old families this valuation has become a settled tradition, and will survive a break of fortune, as has often been seen in revolutions. But in the aristocratic valuation there is a *per contra* account. Its exclusiveness limits its imagination. Other men are God's creatures, but so is the beetle which one avoids wantonly crushing; and in the traditional training there are for the circle itself elements of hardness derived from the militarist conceptions and the ideal of command and obedience in which aristocracy had its historic function. The self-control which is expressed in the untroubled exterior in the presence of suffering, danger and death, and of which the aristocratic tradition makes so strong a point, insisting on its cultivation from the days of infancy upward, may too easily be turned to hardness. The capacity to endure, which is perhaps the finest of human possessions, may pass into willingness to inflict, or at least into indifference to infliction, which is the most dangerous of human vices. The attachment to field sports, doubtless a natural expression of high vitality, skill and courage, must yet seem a very strange form of pleasure to an oriental, to whom, all life being sacred, searching questions must present themselves when he is bidden to have regard to our superior morality and religion. It must be added that a certain lack of intellectual and artistic interest, even a certain repression of originality, too often constitute another aspect of that unquestioning acquiescence in things as they are which detracts from the value of the aristocratic ideal. Yet that ideal has played its historic part. It has contributed something vital to human experience, and if it has perished only to give way to unqualified materialism and the uncharted adventures of the wealth seekers, it has perished before its time.

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See: CLASS; CASTE; NOBILITY; MOBILITY, SOCIAL; EQUALITY; AUTHORITY; FEUDALISM; PRIMOGENITURE; PRIESTHOOD; GOVERNMENT; GERONTOCRACY; OLIGARCHY; THEOCRACY; MONARCHY; DEMOCRACY; PLUTOCRACY; CULTURE; ASSIMILATION, SOCIAL.

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ARISTOPHANES (*c.* 445–385 B.C.), Athenian comic poet of the "Old Comedy." Eleven of his forty plays have survived, of which the following are most significant in the development of his thought: *The Acharnians* (425); *The Clouds* (423); *The Birds* (414); *Lysistrata* (411); *The Frogs* (405); *Plutus* (388). In the work of Aristophanes there reverberates the epic century which had changed a second class Ionian seaport into the mistress of the seas and isles and the spiritual guide of Greece. His literary qualities are of the highest—verve, gayety, exuberant invention, irresistible *fougue*, exquisite lyricism—qualities scarcely marred by his equally evident violence, coarseness and partisanship. Some of his obscenity was traditional and apotropaic, but much of it was the lusty ribaldry of uninhibited high animal spirits.

His social and political point of view was that of a complete Tory. His Toryism, however, was less the deliberate selection of a policy than the desire of a gentleman to live comfortably a life from which he derived satisfaction. Democracy in Athens was militaristic and imperialistic. Aristophanes heartily opposed both tendencies because they interfered with the kind of life he deemed worth while. But it is an error to make him the uncompromising foe of political innovation. He played the part of caricaturist in a world without newspapers, and he flouted eccentricity quite as unmeasuredly as he attacked dangerous radicalism. Euripides and Socrates were his victims no less than popular leaders like Cleon and Hyperbolus.

He had no imitators. Aristotle ignored him—

and rightly, for his influence was slight compared to that of Philemon and Menander of the "New Comedy," whom he foreshadowed in his latest plays. His survival is due to the fact that he embodies so well the great age in which he lived and to which later men looked back so fondly. He is frequently cited by the literary reactionaries of today, although by a curious paradox Toryism at the present time has just those militaristic and imperialistic associations which he so vigorously combated.

MAX RADIN

Consult: Müller-Strübing, Hermann, *Aristophanes und die historische Kritik* (Leipsic 1873); Deschanel, E. A. E. M., *Études sur Aristophane* (3rd ed. Paris 1892); Croiset, Maurice, *Aristophane et les partis à Athènes* (Paris 1906), tr. by James Loeb (London 1909).

ARISTOTLE (384–322 B.C.). He was born at Stagira, a Greek colonial town on the coast of Macedonia. His father was a doctor, and this may help to explain the interest which he showed in physiological and zoological studies; his family was of Ionian descent and the passion of the old Ionian philosophers for a thorough investigation of all the phenomena of nature characterizes his work. His life falls into three periods—those of the pupil, the wandering scholar and teacher and the settled master of a school. He became the pupil of Plato in the Academy of Athens at the age of seventeen, and he pursued his studies during a period of twenty years until Plato's death in 347. The years of his wanderings, which extend from 347 to 335 B.C., were partly spent in the eastern Aegean (in the south of the Troad and in the adjoining island of Lesbos) and partly at the Macedonian court at Pella. In the eastern Aegean Aristotle was associated, apparently as its master and teacher, with a small Platonic circle in which the "tyrant" Hermias (whose adopted daughter he married) was one of the most conspicuous figures; at Pella he acted as tutor to Alexander, the son of King Philip (who was connected by ties of policy with Hermias), and he may also have worked with a little group of disciples and colleagues in the general field of scientific inquiry. After the succession of Alexander to his father's throne Aristotle returned to Athens, where he spent the third and last period of his life (335–322) as the head of a school which he set up in the Lyceum. This school, according to tradition, was known as the "peripatetic," from the ambulatory (in Greek *peripatos*) in which he walked and talked with his pupils. Here, in the last dozen years of his life, he repeated, expanded and modified the courses which he had given before in the eastern Aegean and possibly at Pella; and here he also delivered a number of new courses of lectures. The body of Aristotelian writings which we possess represents almost entirely these different courses, either in the form in which he left them or as they were edited after his death by his disciples.

Aristotle's studies and lectures covered the field of general knowledge. The body of his writings thus forms an encyclopaedia—the first of encyclopaedias, but an encyclopaedia proceeding from a single mind and informed by a single general philosophy. We may divide this general body under eight heads: first, logic (represented by the *Organon*); second, physics, or the general study of inorganic nature (represented mainly by the *Physics*); third, biology, to which he especially devoted his attention, writing a treatise on the *Historia animalium* and delivering courses of lectures on various branches of the subject; fourth, psychology, a study which he founded by his *De anima*; fifth, metaphysics, or pure philosophy, which is represented by the *Metaphysics*; sixth, moral philosophy, a study to which he devoted two different courses, the earlier or *Eudemian*, and the later or *Nicomachean*, *Ethics*; seventh, political philosophy, as it appears in the *Politics*; and eighth, aesthetics or literary criticism, a field to which belong the *Rhetoric* and the *Poetics*. One of Aristotle's greatest contributions to knowledge was his classification of the sciences. He was the first to recognize the various branches of knowledge as separate sciences and to assign to each a particular method and content.

His philosophy continued to be studied and developed in the Aristotelian schools until 529 A.D., when, as tradition has it, they were closed by order of the Emperor Justinian. It was Platonic thought which dominated Christian Europe throughout the early Middle Ages; but after the twelfth century, partly through translations made from Arabic versions and partly (after 1250 A.D.) through translations made directly from the Greek, Aristotle's works became generally known and he became recognized as "the philosopher" par excellence. His ideas permeated mediaeval thought with a completeness which has rarely been attained by a single system of ideas in any other culture. Every department of intellectual activity came under his influence—politics, education, science, philosophy. The Arab Averroes, the Jew Maimon-

ides and the Christian Aquinas strove equally to harmonize their own religious systems with the ideas of Aristotle. For centuries his influence was an educative force, but as crystallized in scholasticism it eventually became an obstacle in the path of further intellectual development. When the reaction against scholasticism began with Bacon and Descartes, Aristotle's dominance began to wane.

His work in the sphere of the social sciences is to be found in his writings on moral and political philosophy. Here as elsewhere he combined a gift of theory with a mastery and accumulation of detail. The *Politics*, for example, may be compared with Adam Smith's *Wealth of Nations* for its union of analytic theory with knowledge of historical and contemporary data. Aristotle had prepared descriptions of one hundred and fifty-eight "polities" or constitutions (all now lost except one, the *Constitution of Athens*, which was discovered some forty years ago); and he had also compiled works (now lost) on "the customs of barbarians" and "cases of constitutional law." He interested himself also in contemporary politics, and he wrote (perhaps when he was tutor to Alexander) a treatise, *On Monarchy*, and another, *Alexander, or on Colonies*, which may belong to the period when his pupil was founding new cities during his eastern conquests. These also are lost, and we can form an opinion about his knowledge or his views in the field of the social sciences only from the two treatises on *Ethics*, the *Politics* and the *Constitution of Athens*.

In the specific subject of economics Aristotle delivered no separate course and left no separate treatise. The *Oeconomica* ascribed to him is a composite treatise of a later date; the first book may be a production of the peripatetic school soon after his death; the second is a collection of stories; and the third, while partly peripatetic, is also partly stoic in origin. There are, however, some remarkable germs of economic theory in Aristotle's own writings. One of these appears in a passage in the fifth book of the *Nicomachean Ethics*, where he deals with that species of justice which relates to exchange (commercial justice) and attempts a theory of value and price. Further examples of Aristotle's economic theory are to be found in some chapters in the first book of the *Politics*. Here he is concerned with "matters of the household" (the literal meaning of the Greek word *oikonomika*) such as the provision of labor, which raises the question of slavery, the exchange of goods, the nature of money and the problems of usury. We may also note the passage in the second book of the *Politics* in which he discusses the Platonic scheme of communism and gives his own justification of private property. We have to remember that Aristotle was dealing only—and then incidentally—with the economic problems of small quasi-rural city-states, in which economic development was still rude and simple ("Greece and poverty have always been foster sisters," said Herodotus); but the simplicity of the facts perhaps made generalization the more readily possible. Aristotle's generalizations about justice in exchange and the nature of interest affected the theory of price and of usury in canon law; his remarks on the nature of money were the basis of Nicholas of Oresme's remarkable treatise *De mutatione monetarum* in the fourteenth century; and his scattered hints on economics exercised sway over men's minds for many generations.

In the field of political philosophy his *Politics* has been a textbook ever since his time and is still used as a text in modern universities. His lectures on the subject must have been put together at different times, and they contain different and sometimes inconsistent elements. He may have begun to give instruction in politics as early as 347, when he joined Hermias and his circle in the eastern Aegean; he may have continued such instruction at Pella; and the final form of his notes on the subject would naturally have been attained when he was lecturing at Athens in the days of Macedonian supremacy after 335. Possibly the two books on the ideal state (vii–viii) belong to the earliest phase, when his memories of Plato were still vivid and he was still interested in political ideals. Possibly again the three books (iv–vi) which deal with the detailed problems of the structure of government, and more particularly (in v) with defects of structure and the methods by which they can be remedied, belong to the latest phase, when Aristotle had accumulated his descriptions of constitutions and studied thoroughly the facts they disclosed. The early books of the *Politics* (i–iii), which deal with general principles of politics, may belong, like the last two books, to an early stage: certainly book ii, which deals with proposed ideal states and the most admired of actually existing states, links itself naturally to Aristotle's description of his own ideal state.

Like his economic principles (but on a far greater scale, just as they are far more developed in his own writings) Aristotle's political principles have entered into the subsequent course

of social thought. He taught that the state was natural and that man was naturally a political being. He taught that law was sovereign and that the magistrates were servants of the laws; he distinguished "normal" forms of states from "perverted" forms and taught succeeding ages the difference between monarchy and tyranny; he investigated the deserts and capacities of the people, and while he criticized democracy he argued none the less that the people, especially because of their capacity for collective judgment, should elect their officers and call them to account. These were not ignoble lessons; and the whole history of political theory to the close of the Middle Ages shows how steadily they were conned. St. Thomas Aquinas, Dante and Marsiglio of Padua were all pupils of Aristotle in politics; and if the school of natural rights and social contract introduced a new line of approach in the seventeenth century, it did not in all respects improve upon Aristotle and in some it simply continued his teaching.

ERNEST BARKER

Consult: Ross, W. D., *Aristotle* (New York 1924) p. 7–19, 291–95, which contains a bibliography of Aristotle's writings and of editions, commentaries and general works bearing on them; Jaeger, W. W., *Aristoteles* (Berlin 1923); Barker, Ernest, *The Political Thought of Plato and Aristotle* (London 1906); Gelesnoff, W., "Die ökonomische Gedankenwelt des Aristoteles" in *Archiv fur Sozialwissenschaft und Sozialpolitik*, vol. 1 (1923) 1–33; Stocks, John L., *Aristotelianism*, Our Debt to Greece and Rome series, vol. xx (Boston 1925).

ARKWRIGHT, RICHARD (1732–92), English inventor of textile machinery. He had no knowledge of mechanics or practical experience with industrial processes, but his natural gifts compensated for the lack of technical training. His greatest achievement, the pivot of all his subsequent ones, was the invention of a machine for spinning by rollers (the "water-frame"). He was not the original inventor of this mode of spinning, for in 1738 a patent for spinning by rollers was taken out by Lewis Paul (son of a Huguenot refugee), who was assisted by John Wyatt. Arkwright may have discovered the secret of Paul's invention, or he may have conceived the idea independently; in any case his machine was superior in point of construction, and he was the first to make a success of it. The "water-frame," patented in 1769, was adapted only for the final process of spinning—converting the rovings into yarn. In 1775 Arkwright patented other inventions which enabled all the preliminary operations connected with spinning to be done by machinery. In addition he constructed a machine for carding by revolving cylinders instead of by hand cards, in which also he was anticipated by Lewis Paul.

Arkwright achieved both fame and fortune. He was knighted (1786) and made high sheriff of Derbyshire (1787). He possessed a remarkable faculty for organization and, although he was not an inventor of the first rank, his work marks the founding of the modern factory system.

E. LIPSON

Consult: Espinasse, F., *Lancashire Worthies*, 2 vols. (London 1874–77); Baines, E., *History of the Cotton Manufacture in Great Britain* (London 1835); Lipson, E., *History of the Woolen and Worsted Industries* (London 1921); Unwin, George, *Samuel Oldknow and the Arkwrights; the Industrial Revolution at Stockport and Marple* (London 1924).

ARMAMENTS. In its early sense the word armaments had a relatively restricted meaning. It was applied only to offensive and defensive weapons, ships of war, man power, supply and transport, especially as these were organized and coordinated by the state. In the earliest times armaments were not clearly distinguishable from the technical instrumentalities of ordinary life. Archaeology suggests that the tool and the weapon were at first interchangeable. The stone ax, when used to bring down a tree or to hollow out a canoe, was a thoroughly pacific tool, but the same ax, when used in combat, was a weapon. Similarly the spear or arrow by which the hunter supplied food for his family ceased to be a tool and became a weapon when the hunter went to war. Even before society had emerged from the hunting stage, however, this identity of tool and weapon had begun to disappear. As the use of weapons developed, defensive weapons—chiefly shields and armor—were added to offensive, although throughout history the latter have been more varied and abundant.

The evolution of naval armaments has closely followed the general development in the means of water communication. From the primitive war canoe emerged the galley, which was propelled partly by sails and partly by oars and which varied in type from the classic trireme to the dragon boat of the Viking raiders. The sail was first used together with oars and then gradually superseded them, later to be supplemented itself by steam power and finally superseded.

As society passed out of its earlier stages and states began to grow up, armaments became more thoroughly organized. They ceased to be individual and became tribal, feudal or national. The distinction between the fighting man and the civilian was almost as difficult to draw then as it is today, except that women and children—although usually regarded as legitimate booty—were not then considered part of the armed establishment, since they did not, as today, play an important part in the production of munitions. The entire male population was, in theory at least, liable to military service; but as there was no way of transporting large masses of troops to the front, and as communications were inadequate to control them, relatively few men could actually be called into service.

In ancient, mediaeval and even early modern times the term armaments could be restricted to the articles—armor, uniforms, shock and ballistic weapons, ships of war, munitions and strictly military and naval supplies—necessary to equip relatively small standing armies. With the growing complexity of society and the corresponding complexity of warfare the meaning of the term has gradually broadened. In modern war, armaments are regarded as including every element in the national life that can in an emergency be employed either defensively or offensively. This wide interpretation of the term is due specifically to the rise of the industrial system and the application of science to warfare. Many machines and implements not previously considered as such were brought within the category of armaments by the introduction of the railroad and electric telegraph in the nineteenth century and of motor transport and wireless communication in the twentieth. These inventions made it possible to bring troops into the battle line, control them and keep them supplied in numbers inconceivable under the older methods of transport and communication. The modern conscription system followed, and the conception of an entire "nation in arms" became a reality. The distinction between weapons and implements, like that between combatant and non-combatant, tended to disappear and during the World War vanished almost entirely.

The armament value of heavy industry has long been obvious, but in recent years the increasing application of science to war has had the result that many other factors in the military situation which would in previous years have been regarded as matters of purely civilian concern are now supervised by general staffs and regarded as integral parts of the national armament. The most obvious example of the change that has taken place is to be found in dye and other chemical factories. Before the introduction of chemical warfare these factories were never thought of as having military significance, but today they are recognized as a swift, easy and secret means of providing a formidable defensive and offensive weapon. Research laboratories also and many ordinary factories can in time of war be turned from peaceful industrial purposes to the production of uniforms, artillery, small arms, transport and medical supplies and all the other innumerable articles required to maintain an army in the field. In other words the entire economic fabric is today a part of the national armament.

Thus the temptation becomes very strong to regard the enemy's entire territory as part of the theater of war and everything that he possesses as part of his armament and therefore a legitimate target. The increased range of modern artillery has to some extent assisted in this process. The development was particularly brought about, however, by the adaptation of the airplane to offensive operations. Before the World War the airplane had been regarded as primarily a means of reconnaissance, but during the war an air attack on the national capital or vital manufacturing centers became an important means in achieving the true object of war, which has always been to paralyze the enemy's will to resist. If successful, such an attack rendered the army itself helpless because it could no longer be supported by the stream of military supplies flowing from the civilian population behind the firing lines.

The existence of armaments introduces numerous difficulties in international relations. The political results which followed the appearance of the modern armored and steam propelled navy are an example. A modern steam vessel is an immensely complex machine and like any other machine it may need repairs at any moment. It must never be out of reach of a base equipped with adequate docks, machine shops and fuel depots. Since all trade is world trade under modern conditions, a fleet, to be of any use for commerce defense, must be able to operate freely anywhere on the globe. To make such operation possible a state must not only have bases and fueling stations but these stations must be distributed in all navigable waters, where they necessarily threaten either the coasts

or the communications of other states. The British bases at Gibraltar and Singapore, the American bases at the Gulf of Fonseca and Guantánamo Bay, the Japanese base at the Bonin Islands, are examples. The scramble for suitable bases has resulted in international friction in every part of the world and a still further increase in the difficulties of peaceful diplomacy.

Of wider significance in international relations is the fact that governments maintain armaments as much for purposes of impressive display to support national policy in time of peace as for actual use in war. It is a recognized fact that in the present state of civilization the policies of sovereign states depend in the last analysis either upon force or upon the threat of force, whether that threat is actual or implied. This is true even in the friendliest negotiations; every diplomat has always in mind, consciously or unconsciously, the possible military strength of the government with which he is dealing, and where fundamental disagreements with regard to international policy develop, the strength or lack of strength of a diplomatic opponent becomes an important consideration. This is clear enough when one considers the different policies that the powers have pursued toward the tariffs of China and of the United States, the one a weak country, the other a strong one; or the change in the attitude of the European states toward Japan as soon as she had built armaments and learned how to use them. It is equally clear when one compares Italy's appeal to force against Greece in the Corfu incident with her very mild diplomatic protest when the United States by the new immigration law shut off one of the most important outlets for the surplus Italian population. The policy of "showing the flag" exists among naval powers solely as a means of demonstrating their strength. The British fleet, merely by the fact of its existence, has again and again supported the Foreign Office without the firing of a gun or the movement of a vessel. The cruise of the American fleet around the world in 1911, although entirely peaceful, was a demonstration of naval strength which was not lost upon foreign offices. The pre-war German policy of "rattling the sabre" is another obvious illustration of the use of armaments to support diplomacy by threat of war.

Threats of force, even when they remain wholly silent and even when they are completely successful, lead directly into the race for armaments, which is one of the chief dangers to the peace of the world. Statesmen who have once been compelled to abandon a policy under threat of superior force are very likely to make up their minds to be prepared next time. Another important factor stimulating armament races is the practical impossibility of distinguishing between offensive and defensive armaments. It is impossible to organize an army or a navy so that it can be used solely for defensive purposes, for it is a strategic maxim that the best defense is a vigorous offensive and therefore every staff thinks itself compelled to plan attack even when instructed merely to defend.

It would, it is true, be possible to construct a navy which is suitable only for defense. The pre-war German navy, for example, though not solely defensive in intention, was at least so constructed that it could operate at maximum efficiency only in the North Sea and could therefore be used only for defense or for aggression against a limited number of opponents—the Scandinavian countries and the powers of the Triple Entente. It would also be possible, by confining naval armaments to monitors, small submarines and other vessels of limited cruising radius, to establish a fleet that would be useful solely for coast defense. This is especially true of nations like the United States which are separated by many thousands of miles of sea from any possible opponent. But the rapid increase of economic interdependence among the nations of the world has reached such a degree that merely to hold the enemy at a distance from the coast is no true defense. Such action provides no protection for sea borne commerce. Furthermore, as was shown by the blockade of the Central Powers during the World War, a country can be starved even though its army may be proof against defeat by the enemy. Commerce protection therefore becomes necessary, but since the light cruisers used to defend a nation's own merchant shipping are also useful for raiding the enemy's, their construction by one country is immediately construed as a threat by every other.

No matter how pacific a government's intentions it thus always has at hand a weapon suited to aggression; and modern ministries are so unstable that no state ever knows when its neighbor's ministry may fall and its national policy may change. Even when they are honestly intended primarily for defensive purposes, military or naval preparations of any kind are likely to be construed by neighboring powers as a possible future danger. When they themselves

begin to arm—again with the honest intention of providing defense only—the first power, in turn, immediately construes these preparations as a menace and itself speeds up or increases its armament program. The most spectacular and obvious illustrations are to be found in the Anglo-German naval race which began in the early twentieth century and in the Anglo-French competition in aviation which followed the war. In the first instance Germany's protestations that the new fleet was required solely to defend her rapidly increasing merchant marine were in themselves logical enough. But they could not possibly be accepted by the British Admiralty, charged as it was with the duty of providing absolute assurance that the supply of raw materials and foodstuffs for the British Isles should never in any circumstances be interrupted. In the second instance the tremendous development of aviation by the French was probably originally due to their desire to insure air superiority against Germany and not to any desire to assail their late allies across the channel. But the existence within a short distance of London of an air fleet capable of reducing the imperial capital to ruins in a few hours was too dangerous for the British to accept with complacency, and an Anglo-French race for air supremacy immediately began. Although the airplane is still so new a weapon as to make prediction difficult, it is probable that an aerial armament race of this sort will prove more menacing to peace than the competition in land and naval armaments with which the world is already familiar. Sir John Fisher is known to have urged King Edward VII to "Copenhagen" the German fleet while it was still small enough to be easily destroyed. Since aircraft can strike far deadlier blows than warships and with far greater swiftness, the temptation to deal similarly with a diplomatic rival's growing air fleet will be proportionately stronger.

The armament "races" produced by this state of affairs have two especially evil effects on international relations. In the first place they encourage the heaping up of national armaments on a scale out of all proportion to reasonable defensive needs. A recent example is the race in battleship construction which was ended by the Washington Conference of 1921–22. After the announcement of the American naval program of 1916—an outgrowth of the World War and therefore, though very indirectly, a result of Anglo-German naval rivalry—the Japanese took immediate steps to counter the construction proposed by the United States. Between 1917 and 1921 Japanese naval expenditure increased from about $85,000,000 per annum to $245,000,000. If the building program which Japan inaugurated then had continued, it would have reached $400,000,000 by 1927, unless the sheer hopelessness of competing with the superior economic resources of the United States had precipitated a conflict while there was still a possibility of Japanese success. American naval expenditures, which were $136,858,301 in 1914, increased to $433,279,574 in 1921 and would undoubtedly have risen higher had the conference failed to reach an agreement.

In the second place the very strength of the armaments creates a state of international distrust which hinders the peaceable settlement of disputes and facilitates the outbreak of war. Military and naval staffs have a natural professional desire to use the huge machines they have built up. Responsible civilian leaders are tempted to take the position that since war is inevitable it is better to precipitate the conflict while their own armaments are still ahead of their rivals, in accordance with von der Goltz' principle that "the statesman who, knowing his instrument to be ready and seeing war inevitable, hesitates to strike first is guilty of a crime against his country."

Armaments constitute a social as well as an international danger because of the heavy drain on the national wealth which they represent. The Brussels international financial conference in 1920 estimated that on the average all powers are devoting "some 20 percent of the national expenditure" to the maintenance of armaments and to preparation for war. Sir Josiah Stamp has estimated that before 1914 Great Britain, France and the United States were spending from 34 to 38 percent of their budgets for military purposes. Italy, Japan and Sweden were at the same time spending between 25 and 30 percent, while Argentina, Belgium and Spain were spending between 15 and 20 percent. In 1920 Japan's peacetime expenditures for military and naval purposes reached 48 percent. The total naval budgets for 1921–22 of the five powers which met at the Washington Conference amounted to $1,300,000,000. This sum is three times that required to build the Panama Canal and double the endowments of all American universities, colleges and professional schools. The total military budget of the United States, which maintains one of the smallest standing armies in proportion to population, was $361,-

987,000 in 1927, while the naval budget was $322,621,000. These figures do not include pre-war pensions, which amounted to $230,556,000.

Moreover the costs of military and naval establishments are constantly rising as science supplies new and more elaborate equipment. The pre-war and post-war budgets of the leading powers offer an instructive comparison. The following figures, which include both military and naval expenditures, are calculated in millions of dollars according to the exchange rates prevailing at the time:

	1913–14	1922
British Empire	661	1073
France	349	461
Italy	181	123
Japan	96	367

It should be pointed out, however, that budgetary figures do not represent a trustworthy means of comparing national armaments, since powers like the United States and Great Britain which have volunteer armies are compelled to spend a great deal more per soldier than powers whose armies are on a conscription basis, and which are therefore able to fix their rate of pay at a bare pittance. Moreover only the direct costs of peacetime armaments have been taken into account. The cost of raising, equipping and keeping in the field or at sea the forces required in time of war, when the entire strength of the belligerent nation is brought to bear on the enemy, is of course vastly greater—without counting the tremendous permanent loss of capital and man power which modern warfare involves.

But enormous budgets, although they indicate clearly that armaments represent a huge waste, do not completely reveal its true extent. Even in time of peace the diversion of capital and energy from productive pursuits, which is necessitated by the existence of large armaments, greatly exceeds the apparent and direct cost represented by the military or naval budget. Where conscription exists, all able bodied young men are withdrawn from productive work during a period ranging from one to three years. Since the World War there has been a tendency to make these training periods short but more frequent. Much ingenuity and scientific ability which might otherwise be turned to productive industrial or to purely scientific purposes are devoted to a refinement of the means of destruction and their auxiliary devices—high powered artillery, sound ranging instruments, deadly gases, sights for artillery and bomb droppers and the like.

A. C. Pigou estimates the cost of armaments in Great Britain to be from 3 to 4 percent of the "national dividend," or aggregate income. This, he says, is equal to "about a fortnight's work of the brain workers, hand workers, and mechanical equipment of the country every year." In countries having conscript armies the figures are much higher; Sir Josiah Stamp, basing his conclusions on post-war figures, would double these amounts. He thinks that "the release of the whole armament expenditure alone would be, in some cases, equal to 5, up to 8 or even 10 percent in others, of the national income, and a much larger percentage of the 'free' income"—that is, the portion of the national income above that needed for bare subsistence.

The speed with which the implements of modern war grow obsolete adds greatly to the cost of maintaining armaments. A battleship worth $40,000,000 has a life of only twenty years, and at any time during that period an unexpected advance in naval construction may make it practically useless. The most striking pre-war example of depreciation of this sort was provided in 1909 after the first all big gun battleship, H.M.S. *Dreadnought*, had been built and tested. Instantly all other battleships in the world became obsolete. During the war the lessons learned at the battle of Jutland again threw out of date all existing battleships and battle cruisers. It is quite possible that the launching of Germany's 10,000 ton war vessel, the *Ersatz Preussen*, in 1930 may prove to be another turning point in naval architecture, since none of the 10,000 ton "treaty cruisers" of other powers will be able to stand against her.

The equipment of land armies becomes obsolete with equal speed. An entire stock of gas masks may be rendered useless by the discovery of a new gas with penetrating powers not possessed by those gases against which the mask in question was designed. Sudden advances and improvements in the military or naval equipment of one state may render its rivals suddenly helpless. The World War, which saw the introduction of such novelties as combat airplanes, forty-two centimeter siege artillery, submarine blockade, gas warfare and tanks has served to emphasize this fact, but earlier evidence is also abundant. In 1866, for example, the Austrian infantry, armed with muzzle loading muskets, found itself helpless against the breech loaders of the Prussian infantry.

In such a situation nothing short of complete reequipment can restore an army or a navy to its original effectiveness. Private manufacturers of armaments are therefore under constant temptation to make new fortunes by discovering new types of equipment which will throw out of date the one they have already sold. Although the army contractor was a familiar figure early in the history of warfare, it was only with the growth of armaments on the huge modern scale that an armament industry developed which was capable of undertaking to sway the decisions of statesmen. The armament works of Krupp in Germany, Vickers-Maxim and Armstrong in England, Skoda in Austria, Schneider-Creusot in France, Putiloff in Russia, made enormous fortunes for their stockholders, who were in many cases high state officials or their relatives.

In general these armament firms kept the armorer's faith as declared by Undershaft in Bernard Shaw's *Major Barbara*: "To give arms to all men who offer an honest price for them, without respect of persons or principles." Since the war, sales of arms to backward peoples have been frowned upon, although by no means ended. Except for this limitation modern arms are still sold freely to all comers, precisely as the famous swords of Toledo, Damascus and Sheffield were once sold. If this should mean—as it meant, for example, in the Balkan wars and in the World War—that arms from the same foundry are to be turned against each other, that is no concern of the manufacturer. As is natural where rival firms are competing for enormous orders from the same nation, bribery of state officials was in pre-war days by no means uncommon, and presumably still persists. The press was "sweetened" by advertisements and subsidies and when these methods failed the armament makers bought newspapers, in their own or other countries, in order to stir up war scares and increase their orders. It was not necessary to incite to war. Anything that would arouse uneasiness sufficed. The most convenient means of doing this was—and still is—to point to the growing armaments of other states. The armaments trade is thus, commercially speaking, in a peculiarly happy position, for its markets are not easily glutted. To sell a new field gun or a cruiser to one state means that presently its rivals will also be in the market for the same goods. Hence the willingness of privately owned armaments firms to sell to their countries' prospective enemies. The immediate effect is profit from the foreign trade; the ultimate effect is larger domestic orders.

The armaments industry thus became a standing peril to international peace because it created a powerful financial group having a vested interest in war, or at least having a vested interest in promoting the armaments race, which leads to war. Moreover, as their businesses increased, the armaments firms tended to become international. Frenchmen, Italians, Germans and Englishmen sat together on the same board of directors, and British, French and Austrian firms were all cooperating with the Putiloff firm in Russia before the World War. The British firm of Vickers had branches in Spain, Italy, Russia and Japan, and even went so far as to associate itself with the German firm of Ludwig Loewe and Company. The latter also had Austrian, Italian, Chinese and Japanese connections.

Theoretically it should be possible to do away with this strong vested interest of private individuals in promoting the war system by permitting only governments to manufacture arms. As a matter of political practise, however, this plan becomes an actual stimulus to the armament industry. Under existing conditions only five or six among the sixty-odd nations have an armament industry of any considerable proportions. The smaller powers buy from these. If, however, this source of supply is cut off, each of the smaller nations is compelled to set up a munitions factory of its own, and the number of armaments works is not diminished but increased. There seems to be no means of stopping the armaments trade short of the abolition of war itself. The abuses of the traffic are not so glaring today as before the war, but they still exist. Even the Krupps, although forbidden to carry on their old trade on German soil, are still able to cooperate with Swedish manufacturers, who have taken over Krupp designs.

As modern warfare has grown in scale, its enormous cost, both in armaments and in losses, has lent a very practical aspect to the movement for its abolition. The accumulated shortage of the world's export trade during the fourteen-year period after 1914, estimated at $200,000,000,000, suggests a very obvious reason why powerful business interests regard the peace movement benevolently. The various movements for world peace or for disarmament, which were originally rooted in purely humanitarian motives, have thus taken on new life, for in appealing to the self-interest of the commer-

cial classes they touch one of the most powerful of human motives. Cooperation in disarmament has also been facilitated by the increasing need for international cooperation in ordinary commercial life.

JOHN BAKELESS

See: DISARMAMENT; ARMY; NAVY; WAR; WARFARE; ARMS AND MUNITIONS TRAFFIC; MUNITIONS INDUSTRIES; MOBILIZATION, INDUSTRIAL; ARMED FORCES, CONTROL OF; PEACE MOVEMENTS; INTERNATIONALISM.

Consult: Gibson, C. R., *The War Inventions* (London 1917); Liddell Hart, B. H., *Remaking of Modern Armies* (Boston 1928); Bliokh (Bloch), I. S., *The Future of War in its Technical, Economic and Political Relations*, translation by R. C. Long of the last volume of the Russian work under a similar title (new ed. Boston 1914); Newbold, J. T. W., *How Europe Armed for War (1871–1914)* (London 1916); Morel, E. D., *Military Preparations for the Great War* (London 1922); Perris, G. H., *The War Traders* (London 1914); Murray, H. Robertson, *Krupp's and the International Armament Ring* (London 1915); Lewinsohn, R., *The Man Behind the Scenes: The Career of Sir Basil Zaharoff* (London 1919); Brailsford, H. N., *War of Steel and Gold* (3rd ed. New York 1915); Enock, A. G., *The Problem of Armaments* (New York 1923); Mahan, A. T., *Armaments and Arbitration* (New York 1912); Bakeless, John, *Origin of the Next War* (New York 1926) ch. xii; Hirst, F. W., *Political Economy of War* (London 1915) pt. i, chs. iv–v; Pigou, A. C., *Political Economy of War* (London 1921); Stamp, Josiah C., *Studies in Current Problems in Finance and Government* (London 1924) ch. iv; World Peace Foundation, "The Staggering Burden of Armaments" in *A League of Nations*, vol. iv (1921) 209–72, 297–364; League of Nations, *Armaments Year Book*, vols. i–v (Geneva 1924–29); League of Nations, Preparatory Commission for the Disarmament Conference, *Reports*, ser. A, vol. i, and ser. B, vols. i–iii (Geneva 1926–27).

ARMED FORCES, CONTROL OF. The control of armed forces implies the possession of power of no mean magnitude even in times of formal peace and is therefore customarily found in the hands of persons or institutions dominant in a given society. Hence the social incidence of the existence of armed forces is a strengthening of the tendency toward the maintenance of the status quo. This influence is important, but the extent of it varies widely both with the character of the armed forces and with the presence or absence of counteracting social factors.

Notably in times of transition or instability the normal role of armed forces is likely to be greatly altered, augmented or even reversed. The apparent possessor of power is at such times imperiled. The seat of power is disputed between rival institutions, parties, social groups. Under these circumstances, as in time of war, armed forces may play a determining part in immediate decisions. And if their action or power to act contributes to the restoration of equilibrium it is likely to have durable consequences.

On numerous occasions armed forces have been actively instrumental in preventing the overthrow of established modes of control. The events of the Russian Revolution of 1905 provide a recent important illustration. The revolt of the Jacquerie (1358), Monmouth's Rebellion (1685), the rising in the Vendée (1793), the Polish uprising (1863), the Paris Commune (1871) and the Spartacist revolt at Berlin (1919) are other examples taken at random. The use of the army by Frederick William IV of Prussia to overthrow the liberal National Assembly in November, 1848, is typical of many similar episodes.

On the other hand there have been many times when armed forces, although available, have not prevented a change of regime. The Revolution of 1688 in England and the French Revolution of 1789 are notable cases. In the French revolutions of the nineteenth century the political opinions of the army affected its morale on important occasions. In 1830 the garrison of Paris broke down in face of the revolutionaries. In 1848 the national guard of Paris determined the abdication of Louis Philippe by its unwillingness to fight. Indeed it would appear that most successful revolutions during the past century have been tolerated or even actively supported by important sections of the armed forces. This was true of the Spanish and Neapolitan revolutions of 1820, of the Piedmontese revolution of 1821, of the Arabi revolt in Egypt (1881–82) and of the Young Turks revolution of 1908. The political history of Spain from 1832 to 1876 was a continuous succession of *pronunciamentos* heralding military movements by which more or less sweeping changes were made in the nominal control of affairs.

When the authority nominally in control of the army does not or cannot actually exercise its power, such control may lapse into other hands and the army may play the part of an independent and often deciding political factor. The role of the praetorian guard in making and unmaking Roman emperors from Pertinax to Constantine, of the thematic forces in the Byzantine Empire which dominated the political situation from the latter part of the seventh

century to the early part of the tenth, and of the Janizaries who deposed six Turkish sultans before the dissolution of their organization in 1826 will be recalled as illustrating this relation. And quite apart from these extreme cases of praetorianism the chronicles of Rome and Byzantium, outstanding cases of unstable monarchical succession, are full of situations in which military leaders as such exerted a decisive influence in the transit of executive power.

The control of armed forces in a period of struggle for social control is accordingly a matter of considerable moment and from feudal times has been in Europe the object of sharp constitutional conflicts. That process which marked the transformation of feudal levies into the modern national army also marked the constitutional changes which made for the rise of the modern state. The issue of royal supremacy was fought in terms of centralized military control which was impossible as long as the fighting class was organized upon a local territorial basis. The substitution of taxes to support a royal army for the personal levy was the essential method whereby the transition toward absolutism was accomplished.

The Anglo-Saxon tradition of the incompatibility of extensive military forces with popular government arose out of the tangled incidents of English history from the Hundred Years' War to the civil wars which ended with the domination of Parliament by Cromwell and the army. Torn between the desire to stabilize the regime established by the Whig revolution and the fear of despotism Parliament in 1689 began that custom of enacting yearly a Mutiny Act (Army Act since 1881) by which the crown was granted authority to remunerate and discipline a stipulated number of troops only for the ensuing year. In Burke's phrase "an armed disciplined body is in its essence dangerous to Liberty; undisciplined, it is ruinous to Society." In the United States the same tradition has prompted much jealousy of a military establishment, especially on the part of the states, which conceded an army and navy to the federal government only after Shays' rebellion. Even under the constitution the states continued to play an important role in the raising and commissioning of volunteer troops in war time down to the World War.

In many other countries controversy as to control of the armed forces has attended constitutional transitions. The Constituent Assembly in France sought in the constitution of 1791 to divide control between the king and the Legislative Assembly. In subsequent constitutions down to 1848 control remained, however, with the successive executives who had relatively slight responsibility to the legislative power. In the constitution of 1848 an attempt was made to introduce responsible control by requiring the acts of the president to be countersigned by a minister. Nevertheless Louis Napoleon Bonaparte was able to secure a control of the army which made possible his coup d'état of December 2, 1851. In the constitution of the Third Republic the chief of state is nominally in command of the armed forces and his actions must be countersigned by a minister closely responsible to the legislative chambers. The history of the Third Republic during its first quarter century, however, reveals no such certainty as to the supremacy of the civil over the military power or as to the unquestioned fidelity of the armed forces to the established order. Not until the Dreyfus case brought an assertion of the supremacy of civil tribunals over the military (1906) did ardent republicans feel that monarchical restoration with support of the army leaders had ceased to be a serious possibility.

However, no constitutional or legislative provisions could instantly diminish the social prestige which attaches to high positions in the army and navy and immediately render armed forces a pliable tool in the hands of the civil authority. The age long existence in the West of military rank as the special prerogative of non-industrial aristocracies has made army and gentry allies in the struggle for survival. In pre-war Germany, Austria, Hungary and Russia, in Spain and Portugal and their emancipated American colonies the armed forces retained social prestige as the stronghold of classes which competed for political preeminence with commercial and industrial interests. Although apparent political power had passed in many cases to the latter, the harmony of interest between the higher ranks of the armed forces and former governing classes was a factor in salvaging much real power for both. Thus even in Great Britain the vaunted supremacy of the civil power left much to be desired when political proposals impinged upon the Admiralty; or when as in 1914 it was proposed to employ the army to carry out a solution of the Irish question dictated by a popular majority. In many countries besides Great Britain and Austria-Hungary in the nineteenth century the services were able to stave off for decades efforts of other govern-

mental authorities to reorganize them in the interest of their own efficiency. Pre-war Germany is the classic instance of a systematic psychological overvaluation of the military power; the survival protest of the Prussian Junkertum was at least one of many factors in this situation.

Nevertheless it is the theory of most modern constitutions that the military power is at all times subordinate to the civil. The army, navy, gendarmerie are mere instrumentalities through which the government accomplishes assigned purposes under limitations of law. Either through control of appropriations or through some device of administrative responsibility, representative legislative assemblies generally share control of these forces with the chief of state, who nominally commands them. The developments of modern war have made for unified central control, replacing such limited state and provincial controls as were permitted even in pre-war Germany and Austria-Hungary. Belgium, Czechoslovakia, Denmark, Esthonia, Germany, Greece, Italy, Portugal, Spain and Switzerland are among the countries where substantially these arrangements theoretically prevail. Recent constitutions of Austria and Turkey have gone even farther in reposing control of the army entirely with the legislature.

In other countries, as in Japan, Hungary, Norway, Sweden, Finland and Poland, although the executive is not theoretically absolute it is not completely responsible for its administration of the armed forces, and elsewhere the theoretical relations have been seriously distorted in practise. In Fascist Italy, for instance, the chief of the government has not only secured the power to dispose of the standing army and reserves without reference either to a popular legislature or to the nominal chief of the state but commands a special armed militia of sworn partisans whose activity is an important factor in the maintenance of Fascist control. The governments actually in power (1929) in Albania, Greece, Jugoslavia, Lithuania, Poland, Portugal and Spain arrived by means of military coups and have not in all cases given constitutional regularity to their position. In many Latin American countries such as Cuba, Mexico, Guatemala, Peru and Chile the army is of decisive importance in maintaining governments in power and in directing the succession of administrations. External control of armed forces by foreign officers, as in Egypt, Morocco, Haiti and other protectorates, forms another type of departure from modern constitutional theory. In China continuous disorganization has left independent power in the hands of provincial military governors, who fight for their own purposes in the midst of attempts to reestablish a supreme civil authority in the country.

LELAND H. JENKS

See: ARMY; NAVY; POLICE; GOVERNMENT; EXECUTIVE; CIVIL WAR; BRIGANDAGE; COUP D'ÉTAT; REVOLUTION; CONSTITUTIONALISM; CONSTITUTIONS; MILITARISM.

Consult: Clode, C. M., *The Military Forces of the Crown*, 2 vols. (London 1869); Iwasaki, Uichi, *The Working Forces in Japanese Politics* (New York 1921) p. 64–76; Jaurès, Jean, *L'organisation socialiste de la France: l'armée nouvelle* (Paris 1915), abr. tr. ed. by G. G. Coulton as *Democracy and Military Service* (London 1916); Coulton, G. G., *The Case for Compulsory Military Service* (London 1917); MacDonald, J. Ramsay, *National Defense* (London 1917); Firth, C. H., *Cromwell's Army* (London 1902) p. 349–85; Maurice, F., *Governments and War* (London 1926); Smith, Munroe, *Militarism and Statecraft* (New York 1918); Bloch, J. de, "Militarism in Politics" in *Contemporary Review*, vol. lxxx (1901) 761–93; Vinacké, H. M., "Military Power and Constitutional Development in China" in *American Political Science Review*, vol. xv (1921) 233–52.

ARMED MERCHANTMEN. When a state embarks upon war it may arm its merchantmen for defense without violating any prohibition of international law. This practise, although an old one, almost fell into disuse during the course of the nineteenth century because, with the general decline of piracy and privateering, the only hostile ships likely to be encountered by a merchantman were those belonging to the navy of the enemy; and as it became too dangerous for the merchantmen to combat a naval vessel, the reason for carrying guns lost much of its strength. Nevertheless some naval codes, such as that of the United States of 1900, continued to keep alive the assertion that a belligerent might without impropriety arm its merchant fleet for defensive purposes. The *Manuel des lois de la guerre maritime*, emanating from the Institut de Droit International in 1913, expressed acquiescence in the face of some German opinion to the contrary.

The lack of general agreement forbidding the conversion on the high seas of belligerent merchantmen into public naval vessels, together with the expectation that some maritime states would, upon becoming belligerents, attempt such conversion, caused Great Britain in 1913 to make preparation for arming defensively many of its merchantmen. The submarine operations of their enemies during the World

War also encouraged the Allied and Associated Powers to arm their merchant vessels for purposes of defense.

Offensive operations by private ships under private control are not sanctioned by international law. Under present conditions, however, a belligerent merchantman armed with a six-inch gun becomes a formidable instrumentality for offense. Its master is encouraged to, and may in fact, engage any enemy ship of inferior defensive strength, whether a surface or submarine craft. The advisory committee to aid the American delegation at the Washington Conference on the Limitation of Armament of 1921–22, declared that in the World War "the merchant ship sank the submarine if it came near enough; the submarine sought and destroyed the merchant ship without even a knowledge of nationality or guilt. . . . When merchant ships met a belligerent submarine, with a strong probability of being sunk by that submarine, the law of self-preservation operated, and the merchant ship resisted by every means in its power. Defensive armament was almost sure to be used offensively in an attempt to strike a first blow. The next step was for each to endeavor to sink the other on sight." It was accordingly recommended that laws should be made prohibiting the offensive arming of merchant vessels as well as their use of false flags.

Due to the difficulty in establishing practical tests by which particular acts on the part of an armed merchantman may be judged as defensive or offensive, many problems have arisen concerning the treatment which such a vessel and its occupants should receive at the hands of the enemy. One of the more important is whether the armed merchantman is entitled to immunity from attack without warning. The assertion that a naval vessel of any type is obliged to give warning to an enemy ship, which through armament is made capable of doing it injury, deals harshly with the equities of the former. It is exceedingly doubtful if in the course of maritime wars belligerent states ever generally acknowledged that a merchantman so armed as to be capable of destroying a vessel of war should enjoy immunity from attack at sight when encountered by an enemy naval vessel of inferior defensive strength. They were not disposed to admit any antecedent obligation to visit and search an enemy ship known to be armed. There were indeed solid reasons for the growth of the humane practise which heeded the equities of an unarmed enemy vessel incapable of taking the offensive; but those reasons were obviously lacking when the disability was removed.

In a confidential and informal note to the British ambassador at Washington, Secretary of State Lansing, on January 18, 1916, made sound application of the principles underlying the situation then existing. The Department of State, however, in a memorandum dated March 25, 1916, sustained a somewhat different view. It maintained in substance that the right to attack an armed enemy merchantman at sight depended upon conclusive evidence of a purpose to use the armament for an aggressive end. Thus proof of the design of those controlling the ship, rather than its power to take the offensive, was made the basis for deciding what treatment should be accorded it. The reasonableness and sufficiency of that test may, however, be questioned. It should be noted that a treaty signed at the Washington Conference on the Limitation of Armament, February 6, 1922, to protect neutrals and non-combatants at sea in time of war imposed an antecedent obligation to visit and search merchantmen without differentiating between the armed and unarmed ship. The treaty has not as yet received the approval necessary to make it operative.

No duty of non-resistance is believed to be imposed upon the belligerent merchantman, armed or unarmed, which falls in with an enemy warship. The former may generally exercise the right of self-protection either by flight or resistance. If such conduct is unsuccessful and the merchantman is captured, the officers and crew are entitled to treatment as prisoners of war. The situation is, however, different when capture results from an unsuccessful effort on the part of the merchantman to engage offensively a hostile warship. The reasonableness of the claim of those individuals to treatment as prisoners of war would therefore depend upon the nature of the engagement in which they were participants.

The view of the United States, when itself a neutral in 1916, was that a belligerent merchantman, armed only for purposes of protection against the enemy, may in the course of legitimate trade enter and leave naval ports without hindrance; and the conclusions of many other maritime powers were substantially in harmony with this position. The Netherlands government, however, in 1914 regarded armed merchantmen as assimilated to belligerent warships and declined to admit them into its ports.

The expedient of arming belligerent merchantmen in order to safeguard them against submarine attack proved a failure in the World War. This may lead to the growth of a common sentiment among maritime nations for abandoning this practise.

CHARLES CHENEY HYDE

See: MARITIME LAW; MERCHANTMEN, STATUS OF; PIRACY; PRIVATEERING; CONTRABAND; SUBMARINE WARFARE; ARMED NEUTRALITY.

Consult: FOR DOCUMENTS: United States, State Department, *European War*, 4 vols. (Washington 1915–18) vol. ii, p. 37–46, vol. iii, p. 159–95 and vol. iv, p. 63–65; "Armed Merchantmen" in United States Senate, 64th Cong., 1st sess., *Senate Documents*, vol. xlii, no. 332; "Conference on the Limitation of Armament" in United States Senate, 67th Cong., 2nd sess., *Senate Documents*, vol x; United States Naval War College, *International Law Situations, 1926* (Washington 1928) p. 39–64; " The *Nereide*," 9 Cranch 388–455; "The *Panama*," 176 U. S. 535–50; "Oxford Manual of Naval Law, Article 12" in Institute of International Law, *Annuaire*, vol. xxvi (1913) 641–44; Opinion of Parker, Umpire, "The Steamship *Rockingham*, Case No. 127" in Mixed Claims Commission, United States and Germany, *Administrative Decisions and Opinions* (Washington 1925) p. 86–88.

FOR GENERAL DISCUSSIONS: Fauchille, Paul, *Traité de droit international public*, 4 vols. (8th edition of Bonfils' *Manuel*, Paris 1921–26) vol. ii, p. 383–93; Garner, J. W., *International Law and the World War*, 2 vols. (London 1920) vol. 1, §§ 244–60; Higgins, A. P., *Studies in International Law and Relations* (Cambridge, Eng. 1928) chs. xiii, xiv; Oppenheim, L., "Die Stellung der feindlichen Kauffahrteischiffe im Seekrieg" in *Zeitschrift für Völkerrecht*, vol. viii (1914) 154–69; Triepel, Heinrich, "Der Widerstand feindlicher Handelsschiffe" in *Zeitschrift für Volkerrecht*, vol. viii (1914) 378–406; Scott, J. B., "Armed Merchantmen" in *American Journal of International Law*, vol. x (1916) 113–16.

ARMED NEUTRALITY. The phrase was first employed in connection with the international situation resulting from the proclamation of Empress Catherine II of Russia in 1780. Less accurately the term has been generally used to describe the arming of neutral merchantmen in time of war.

Desiring to free neutral trade from interference by belligerents during the American Revolution, Catherine II issued a declaration which sought to overturn the "Rule of 1756" by restricting the category of contraband to munitions and essential instruments of war and thus to secure for neutrals the freedom of navigation even to the ports and upon the coasts of belligerents. This declaration asserted as an established rule of international law the principle that "free ships make free goods," and set forth a new theory of blockade. The treaties of Utrecht, 1713, had proclaimed the maxims, "free ships make free goods" and "enemy's ships make enemy's goods"; Christian powers had never accepted the first of these principles except in conjunction with the second. The proposition that "free ships make free goods" had already been urged in some quarters, apart from conventional agreements, and had been extended to neutrals as a privilege by France in 1778. What Catherine II claimed as a right of neutrals under international law, however, the prize courts of Great Britain and the American states had denied in favor of the older principle of the Consolato del Mare that enemy's goods in neutral vessels might be seized while neutral goods on board vessels of the enemy should go free.

In response to the proclamation of the empress, Denmark, Sweden, Holland, Prussia, Austria, France and Spain formed the League of Armed Neutrality of 1780, mutually agreeing to defend their rights as neutrals. Great Britain alone determined to follow the rule of the Consolato del Mare. The twin maxims of the treaties of Utrecht were acceptable to the United States and were included by Congress in its draft of a plan for treaties with neutral powers, becoming Articles XIV and XXIII of the treaty of amity and commerce with France in 1778, and six months later proposed to Holland. The attitude of Great Britain, however, prevented the adoption of the less rigorous principle, except through conventional agreements. In the decisions of the prize courts in the United States, neutrals continued to receive the same treatment accorded them in the admiralty courts of Great Britain.

After the alliance between France and the United States was formed, however, this diversity could not be supported in practise, and in 1780 Vergennes, foreign minister of Louis XVI, induced Congress to make its instructions to the commanders of armed vessels conform to the principles of the Armed Neutrality. Congress, however, did not become a party to the league which was to enforce them. This was impossible while the United States remained a belligerent, and although the treaties of peace in 1783 altered the situation Congress decided that it would be "unwise to become a party to a confederacy which might thereafter complicate the interests of the United States with the politics of Europe." It was therefore resolved that while the United States should seek to include the principle that "free ships make free

goods" in treaties, it should "avoid accompanying them by any engagements which shall oblige the contracting parties to support those stipulations by arms."

The wisdom of this step was soon demonstrated. All the members of the Armed Neutrality of 1780 abandoned upon the very next occasion of becoming belligerents the creed they had sought to enforce by arms when neutrals. In 1800 a second armed neutrality was formed, to which Russia, the Scandinavian powers and Prussia were parties. The platform of this alliance embraced many of the principles found in that of 1780 together with new claims concerning convoy. Nothing was gained by it, however, save some trifling concessions from Great Britain.

Depredations upon American commerce by France led the United States in 1798 to adopt retaliatory measures accurately described by its attorney general as "an actual maritime war between France and the United States." It was this precedent which President Wilson had in mind when he told Congress in 1917 that there might be no recourse but to armed neutrality to protect American commerce against German submarine attacks, and authorized the arming of merchantmen. In his war message to Congress he said that he believed the course he had just followed constituted armed neutrality.

WILLIAM SEAL CARPENTER

See: MERCHANTMEN, STATUS OF; ARMED MERCHANTMEN; FREEDOM OF THE SEAS; NEUTRALITY; BLOCKADE; CONTRABAND.

Consult: Kleen, Richard, *Lois et usages de la neutralité*, 2 vols. (Paris 1890) vol. i, p. 21–28, 120; Lampredi, G. M., *Del commercio dei popoli neutrali in tempo di guerra* (Florence 1788); Barton, William, *A Dissertation on the Freedom of Navigation* (Philadelphia 1802); Ward, R. P., *A Treatise of the Relative Rights and Duties of Belligerent and Neutral Powers, in Maritime Affairs*, 2 vols. (London 1801, reprinted London 1875); Bergbohm, Carl, *Die bewaffnete Neutralitat 1780–1783* (Berlin 1884); Fauchille, Paul, *La diplomatie française et la ligue des neutres de 1780* (Paris 1893); Carpenter, W. S., "The United States and the League of Neutrals of 1780" in *American Journal of International Law*, vol. xv (1921) 511–22.

ARMISTICE. An armistice or truce refers either to an agreement between belligerents suspending active hostilities or to the condition existing during the period of such agreement. In its broadest sense it includes not only general armistices which suspend active hostilities everywhere for a considerable time or indefinitely with a view to peace negotiations, but also suspensions of arms for limited areas and durations and purely military purposes such as collection of the wounded, burial of the dead or negotiation of cartels. The distinction is important because of the understanding that general armistices, which often include provisions of political importance, can be made only by the highest authorities of the belligerent states and may be repudiated if made by military commanders, as was that between Sir William Sidney Smith and General Kléber at El Arish in 1800 and that between Generals Sherman and Johnston in 1865.

An armistice is distinguished from a capitulation or surrender by being "essentially bilateral, giving mutual concessions and imposing mutual restrictions." Sometimes, however, as in the cases of the so-called armistices between France and Prussia on January 28, 1871, and between the allied powers and Bulgaria, Turkey, Austria-Hungary and Germany on September 29, October 30, November 3 and November 11, 1918, one belligerent is actually rendered *hors de combat*.

An armistice does not end the legal state of war and so is to be distinguished from a treaty of peace. It is also primarily of a military character and thus distinguished from preliminaries of peace. The latter may be concluded before the armistice, as by the Allies and Germany on November 5, 1918, or after the armistice, as on February 1, 1856, January 8, 1871 and January 31, 1878. Sometimes preliminaries of peace provide also for suspension of arms, as did the protocol of August 12, 1898, between the United States and Spain. Sometimes armistices include political provisions to guide the peace negotiations, as did that of November 11, 1918, with respect to Alsace-Lorraine and reparations.

Wars have occasionally been ended without any armistice at all, in which case the signature of the peace treaty suspends hostilities as soon as it is notified. The existence of active hostilities, however, adds to the difficulty of peace negotiations, and armistices have been customary in the past century, though none was concluded between Japan and Russia in 1905 until peace negotiations had been completed. There was no armistice during the peace negotiations at Ghent in 1814, and the battle of New Orleans was fought two weeks after peace had been signed.

Present practise permits belligerents to move troops, transport supplies, construct forts or to do anything else short of engaging in active hostilities during an armistice, unless expressly

forbidden by the agreement. The armies must be notified of the armistice and unless otherwise specified it goes into effect at that moment. If no duration is specified, hostilities may be renewed by either side on giving due notice. Usually a period of time is agreed upon at the expiration of which hostilities may be renewed without notice.

Violations of armistice by individuals or soldiers on their own responsibility merely occasion demands for punishment or claims for compensation, but serious violations give the other belligerent the right of denouncing the armistice or, in case of urgency, even of resuming hostilities immediately.

QUINCY WRIGHT

See: WAR; WARFARE; BELLIGERENCY; TREATIES.

Consult: Carnegie Endowment for International Peace, Division of International Law, *Hague Conventions and Declarations of 1899 and 1907* (2nd ed. New York 1915), Convention iv of 1907, arts. xxxv–xli; United States, War Department, Adjutant General's Office, *General Order 100* (Lieber's *Code*) (New York 1863, Washington 1898) arts. cxxxv–cxlvii; United States General Staff, *Rules of Land Warfare* (Washington 1917) arts. cclvi–cclxxv; United States Naval War College, *International Law Documents, 1918* (Washington 1919), reprinting text of World War armistices; Phillipson, Coleman, *Termination of War and Treaties of Peace* (London 1916) p. 55–75; Spaight, J. M., *War Rights on Land* (London 1911) ch. viii; Hall, W. E., *A Treatise on International Law* (8th ed. Oxford 1924) p. 658–64; Hyde, C. C., *International Law Chiefly as Interpreted and Applied by the United States*, 2 vols. (Boston 1922) vol. ii, p. 278–89.

ARMOUR FAMILY. The history of the Armour family and of the packing firm to which they gave their name typifies much that was characteristic of American business in the last half century. The firm dates from the late fifties, when Philip D. Armour used the money he had made selling provisions in California during the gold rush to buy into a Milwaukee packing firm. Shrewd transactions during the Civil War netted Armour at least $2,000,000, and removal to Chicago in 1875 proved fortunate. With the aid of his brothers, five of whom eventually entered the packing and allied industries, P. D. Armour built up his firm until the name "Armour" came to epitomize the packing industry (*see* MEAT PACKING AND SLAUGHTERING). He was perhaps the most active of the packers in initiating those changes which made a new industry out of packing—the creation of livestock markets in the packing centers, division of labor and elimination of wastes on a scale hitherto unknown, the use of by-products, the shipment in refrigerator cars, the organization of the branch house system of distribution, expansion into the export trade and into such allied lines as fruit and vegetable canning and the operation of grain elevators.

When P. D. Armour died control passed to his son J. Ogden Armour. Under his guidance the business continued its growth along lines already laid down. In 1913 net earnings were reported at $6,000,000, and in 1917 they had increased to $21,000,000. Armour's interests, moreover, had extended beyond the confines of the business. He held directorships in a score or more banks, railroads and insurance companies; he was the largest individual holder of bank stocks in the city; and his personal fortune was estimated at anywhere from $100,000,000 to $200,000,000.

The years were not without their difficulties for the Armour family. There were strikes and threats of strikes; in 1886 the Knights of Labor imposed a boycott on Armour products. The embalmed beef scandals of the Spanish American War period stirred public consciousness, and the shock produced by Upton Sinclair's *The Jungle* in 1906 resulted in government reports dealing with unsanitary conditions in the packing plants. A government bent on maintaining competition made unwelcome inquiries in 1917 into the relations between the Big Five and their excursions into allied fields, until finally the packers were forced to divest themselves of control of the stockyards and to cease fruit and vegetable canning.

With the end of post-war prosperity in 1921 came difficulties for the entire industry, but those of Armour and Company were the most serious. With enormous stocks on hand bought dear and sold cheap, with an admitted loss of $23,000,000 in transactions in foreign exchange, with $50,000,000 tied up in loans to the head of the firm, the company was not in a position to carry on without assistance. Until this time the business had been a family enterprise. To be sure, it had been incorporated in 1900; but the stock and positions of authority were closely held within the family. Now, however, a group of bankers was called in, the stock was taken by banks and sold to the public, and in spite of the retention of J. Ogden Armour as chairman of the board of directors, control passed from the family to the banks. These personal losses of Mr. Armour were shown most spectacularly at his death in 1927, when it was found that his

estate was valued at less than $2,000,000 with claims against it totaling over $10,000,000. This exaggerates the decline in the family fortune, however, as his wife and daughter had wealth of their own, built up in part from the profits of the business.

The rise and fall of the house of Armour were important in the business and industrial life of Chicago, but made very little difference in its intellectual or civic life. Neither the energies nor to any great extent the funds of the Armour family were spent on its institutions of learning or of culture, its enterprises for remaking the city, its philanthropies or social reforms. A single important institution, the Armour Institute of Technology, received large sums from the family and included its representatives on the board of directors. If "the whole cultural and intellectual life of Chicago" was founded on meat packing, it was not because of any conscious efforts on the part of the most powerful of the packers.

HELEN R. WRIGHT

Consult: Gunsaulus, F. W., "Philip D. Armour" in *American Review of Reviews*, vol. xxiii (1901) 167–76; Hubbard, Elbert, "Philip D. Armour" in *Little Journeys to the Homes of Great Business Men*, 2 vols. (East Aurora 1909) vol. i, p. 137–66; Hill, H. C., "The Development of Chicago as a Center of the Meat Packing Industry" in *Mississippi Valley Historical Review*, vol. x (1923) 253–73; Clemen, R. A., *The American Livestock and Meat Industry* (New York 1923).

ARMS AND MUNITIONS TRAFFIC. The question of the traffic in arms, munitions and war material presents a different aspect according as it is viewed from the standpoint of peace or of war. In time of peace such traffic is of no great economic importance to the exporting countries. The world exports of war material at the present time amount to about fifty million dollars (sixty-five million if we include sporting equipment). This represents rather more than 1 percent of the total annual exports of the United States.

Though not important from an economic point of view, the export of arms is of considerable political importance. The countries which export this type of material are not numerous. The world export in arms and munitions is principally carried on by three countries—Great Britain, the United States and France.

The following table shows the export figures for arms and munitions in Great Britain, the United States and France from 1923 to 1927, in absolute figures and in percentage of total exports:

	Year	In Millions of Dollars	Percentage of Total Exports
Great Britain	1923	14.5	0.4
	1924	12.9	0.4
	1925	16.6	0.4
	1926	14.5	0.5
	1927	15.4	0.4
United States	1923	9.3	0.2
	1924	9.9	0.2
	1925	10.7	0.2
	1926	10.5	0.2
	1927	9.5	0.2
France	1923	8.0	0.4
	1924	12.2	0.6
	1925	7.2	0.3
	1926	6.0	0.3
	1927	6.0	0.3

The other countries are either non-producing or produce only on a small scale, and do not cover their own needs. The political importance of this monopoly in the export of arms for the big producing countries can therefore be easily understood.

In time of war the export of arms and munitions is of considerable commercial importance. "In August, 1914, the total factory capacity in the United States for the manufacture of powder was 6,000,000 pounds a year. In April, 1917, under the stimulation of orders placed by the Allies, the capacity had been increased more than sixtyfold. England, France and Italy were taking this entire production and asking for more. They had absorbed our entire output. A huge stream of materials, supplies, and ammunition was flowing steadily from America to the front-line trenches in France" (Crowell, B., and Wilson, R. F., *The Armies of Industry, Our Nation's Manufacture of Munitions for a World in Arms, 1917–18*, 2 vols., New Haven 1921).

The following table showing the export figures for arms and munitions in the United States from 1913 to 1917, in absolute figures and in percentage of total exports, will illustrate the above statement:

	In Millions of Dollars	Percentage of Total Exports
1913	9.2	0.4
1914	9.7	0.5
1915	51.0	1.5
1916	485.1	8.9
1917	898.3	14.6

Thus in 1917, the last year during which the United States remained neutral, it exported war material to the extent of 14.6 percent of its total exports, as against 0.4 percent in 1913.

Neutral commerce in time of war has always been a source of contention between combatant and neutral powers. No international ruling on the subject has yet been accepted. Neither the Declaration of Paris of April 16, 1856, nor the Hague Conference in 1907, nor the Declaration of London of February 26, 1909, succeeded in settling the question. The first failed to define contraband; the second failed to reach any conclusion on the subject; and the third, while drawing up precise rules concerning contraband, was unable to secure their ratification by any state.

The difficulties concerning contraband were connected rather with articles of general consumption than with arms. It has always been admitted that arms and munitions of war are absolute contraband, that is, they may be confiscated by the belligerents in cases where they are destined for an enemy country. The World War introduced a new complication even as regards absolute contraband, for during it other products hitherto considered as relative contraband, that is, only subject to confiscation if consigned to the governments of enemy countries, came to be regarded as absolute contraband. Modern war has become so all embracing that the old regulations as to absolute contraband cease to have any meaning.

The attitude of neutral governments with regard to the export from their countries of arms and war material for the use of belligerents is another controversial question. In theory there is no restriction on commerce between neutrals or between neutrals and belligerents. Subject to the application of the regulations with regard to contraband, neutral governments are under no obligation to prohibit exports of arms and munitions to belligerent countries (Article 7 of Hague Conference).

A controversy arose on this subject at the beginning of the World War. Until the entry of the United States into the war it was the only neutral country in a position to export large quantities of arms and munitions. The Allied Powers having the command of the seas, all export of war material from the United States to the Central Empires was impossible, and these exports were made only to the Allied Powers. The governments of Germany and Austro-Hungary protested to the United States against this action, on the ground that whatever might be the theory of the situation, the reality was that the supply of arms was one-sided. The attitude of the United States in the face of these protests was in accordance with international usage. The practise has always been for neutral powers to supply belligerents with arms without considering whether this action favored one power at the expense of another. As the United States observed in its reply to the notes of these two countries, Germany and Austro-Hungary themselves supplied arms to Great Britain during the Boer War, while the South African Republics were completely cut off from European supplies. Further, it is not always possible for a neutral country to judge which of the belligerents is superior at sea, and this superiority does not always remain with the same country or group of countries

Though under no obligation to prevent its citizens from exporting arms to the belligerents, a neutral government may sometimes be forced to do so. A belligerent power has always the right to take all steps to prevent its enemy from receiving directly any articles which would facilitate its continuance of the war. And while, thanks to the contraband theory, it may be in a strong position as regards the direct export of arms by neutral powers to enemy countries, its position is less favorable with regard to arms and munitions exported from one neutral country to another. But such arms may finally reach enemy countries, since it is not always possible to prevent neutrals from buying arms with the object of reselling them later to the enemy. In order to meet this difficulty during the World War the Allied Powers proposed to the neutrals that they should forbid exports of certain specified articles to the Central Empires, promising in return that they would not interfere with the importation into these neutral countries of the articles in question. Arrangements of this type were made by the Allies with all the neutral countries of Europe, and the system was found to work out perfectly satisfactorily.

The traffic in arms is sometimes regarded as one of the causes of war. It is generally thought that manufacturers of arms have an interest in war in view of the enormous profits resulting from the vast consumption of arms and munitions which modern war entails. Such a view is somewhat crude. What is certain is that arms manufacturers have an interest in maintaining a state of fear of war out of which war may actually arise. Moreover, it must not be forgotten that nowadays arms and munitions of war do not consist exclusively of weapons. No modern war is possible without coal, oil, iron, chemical products and a considerable number of general

products. Therefore, if we are to say that the traffic in arms is one of the causes of war, we must add to arms and munitions, in the strict sense of the term, products such as coal and other fuel, minerals, chemical and other products which in time of peace are only used for pacific purposes.

Those who look on traffic in arms as one of the direct causes of war naturally ask whether it would not be possible to prevent it. But can we really suppose that such prohibition would result in the suppression of war? If we prohibit the traffic in arms and at the same time allow their manufacture, the great powers would find themselves in a privileged position, since it would always be possible for them to manufacture munitions for their armies, while the position of the other countries would be critical. If we are to prohibit the traffic in arms we must at the same time prohibit their manufacture. And even if the whole world agreed to prohibit the export of arms, it is scarcely possible to consider the prohibition of export of products harmless in themselves but capable of being transformed into munitions, as, for example, chemical products. It must not be forgotten that countries which have at their disposal airplanes, even for civilian use, and chemical products, can make use of them in time of war to asphyxiate the greater part of the enemy population. The way out is not through prohibition but through international cooperation.

There is no doubt that in the present state of public opinion there is no chance of prohibiting either the export or the manufacture of arms. The League of Nations has not even succeeded in establishing the control of international traffic in arms, munitions and war material. Article 23, Section (d), of the Covenant intrusted the League with the control of the traffic in arms and munitions with countries where this control is necessary in the common interest. The Convention of St. Germain, signed on September 10, 1919, dealt with this question, but it was ratified by only eleven states; the great powers refrained from ratification until the adhesion of the United States, and the convention was given up when the United States refused to ratify.

A new convention was then prepared by the League and adopted in a conference which took place in Geneva (May, 1925). The discussion turned principally on three main questions: first, the definition of war material and the unification of statistical material relating to it; second, control and publicity; third, relations between the problem of controlling the international traffic in arms and that of the private manufacture of arms. The plan of international control of traffic in arms was rejected, beyond a mild measure of publicity and regulations for the issue of export permits, but certain prohibited zones were laid down into which the export of arms is allowed only under certain conditions.

The convention was to come into force after its ratification by fourteen countries. Although thirty-four countries have signed it, it has been ratified by only three (France, China and Venezuela). This delay in ratification is due partly to the passive attitude of the great manufacturing nations, such as England and the United States of America, partly to the fact that many countries make their adhesion to the convention dependent on the establishment of an international control of the manufacture of arms and munitions of war.

It became apparent during this conference that many countries, notably in Spanish America, attach considerable importance to regulations made by manufacturing countries (and particularly by the United States of America) for controlling exports of arms to other countries with a view to furthering or checking revolutionary movements. The power of laying embargo on arms exports to Spanish American countries has no doubt constituted one of the most effective weapons for the American government in its relations with Spanish American republics. There does not seem to be any general solution to this problem which would not handicap possibly beneficial changes in internal conditions.

S. DE MADARIAGA

See: ARMAMENTS; MUNITIONS INDUSTRIES; ARMED NEUTRALITY; FREEDOM OF THE SEAS; NEUTRALITY; BELLIGERENCY; CONTRABAND; BLOCKADE; EMBARGO; SMUGGLING; LEAGUE OF NATIONS; PEACE MOVEMENTS.

Consult: United States, Library of Congress, Division of Bibliography, *List of References on the Commerce in Munitions of War between the United States and European Belligerents, 1914–15* (Washington 1915); Morey, W. C., "Sale of Munitions of War" in *American Journal of International Law*, vol. x (1916) 467–91; Gregory, C. N., "Neutrality and the Sale of Arms" in *American Journal of International Law*, vol. x (1916) 543–55; Garner, J. W., "Sale and Exportation of Arms and Munitions of War to Belligerents" in *American Journal of International Law*, vol. x (1916) 749–97; "Convention for the Control of Trade in Arms and Ammunition" (text of protocol) in *American Journal of International Law*, vol. xv (1921) supp. 297–313; "Convention for Supervision of Trade

in Arms and War Munitions" (drawn up at Geneva 1925) in *American Journal of International Law*, vol. xx (1926) 151–54.

ARMS, RIGHT TO BEAR. This right is declared in varying phraseology by the Second Amendment to the Constitution of the United States and by thirty-two state constitutions. It originated in the English Bill of Rights of 1689, because of the disarming of Protestants by James II. It was closely connected in England and the colonies with the popular conviction that a militia of citizens trained to arms was a safeguard against usurpation of power through a standing army.

With the gradual disappearance of frontier conditions and wild life, arms became less necessary in this country and their disadvantages increasingly obvious. Legislative attention was directed to murderous affrays, armed criminals, the threatened extirpation of game, unauthorized military societies especially of the foreign born, and armed bodies of men on both sides of labor disputes. Penal statutes of varying types have attempted to cure these evils. Some states were free from constitutional limitations, for instance New York, where the legislation has been drastic. States where the "right to bear arms" existed usually upheld their statutes by two alternative constitutional interpretations. First, the guaranty was construed to mean only the right to bear arms as a member of the state militia. This interpretation virtually enables the legislature to destroy the right by refusing to pass laws necessary to keep up the militia. Second, most state courts have construed the clause more broadly to include arming for self-defense, but have held that this right, though absolute in terms, is subject to the state's police power for the preservation of public order. The decisions are not entirely harmonious but, with the growing danger from the use of arms in an urbanized nation, the tendency is toward a widening construction of the police power keeping pace with new legislation.

The most common statutes, unquestionably valid, punish the carrying of concealed weapons. Even open use of arms like sling shots and bowie knives, which are uncivilized or unmilitary, may be forbidden. Unauthorized military companies are often declared illegal. Regulation of weapons is sometimes left to local governments, so that cities may be stricter than rural districts where arms are more necessary. In Pennsylvania and other states, statutes requiring aliens to have a hunting license annex a provision against the ownership of rifles and shotguns by unlicensed aliens. This, though ostensibly for the protection of game, seems really due to fear of armed foreigners in strikes. Although these laws are usually upheld because they permit the ownership of short range firearms suitable for self-defense, recent legislation is directed against pistols, since they are easy to conceal.

The law has passed from controlling the manner or place in which arms may be carried to regulating their ownership even on one's premises. A licensing system, impracticable when most citizens required weapons, now takes adequate care of the exceptional persons who need to be armed. Insistence on permits makes possible a thorough investigation of the applicant's character and a record of the weapon he owns. At the same time sellers of firearms may be obliged to be licensed, to sell only to licensed persons and to record such sales. Since stringent regulation in one state does not prevent importation from a lax neighbor, a uniform firearms act has been drafted for submission to all the states, and Congress has frequently been urged to regulate the interstate shipment of firearms. If such statutes are upheld, the right to bear arms becomes only an opportunity to join the militia and to obtain a permit to keep a weapon on cause shown. The constitutionality of recent drastic legislation has been questioned less than its wisdom. It is difficult and expensive to enforce. If criminals are easily able to evade it, it may often operate to render the honest victim of attack helpless before his armed assailant.

The clause in the federal constitution is much less important. It restricts only federal legislation, which is unlikely to forbid citizens to carry arms. Unlike the neighboring amendments, this clause safeguards individual rights very little and relates mainly to our federal scheme of government. Its chief effect is to protect the states against congressional legislation attempting to abolish state militias. Conversely, the states may not limit the bearing of arms so as to cripple the federal power to use citizens for national defense. The Second Amendment is thus connected with the militia and army clauses in the original constitution.

ZECHARIAH CHAFEE, JR.

See: BILLS OF RIGHTS; CIVIL LIBERTIES; POLICE POWER; MILITIA.

Consult: Emery, L. A., "The Constitutional Right to

Keep and Bear Arms" in *Harvard Law Review*, vol. xxviii (1914–15) 473–77; Chamberlain, J. P., "Legislatures and the Pistol Problem" in *American Bar Association Journal*, vol. xi (1925) 596–98, reviewing statutes; *Central Law Journal*, vol. i (1874) 259–61, 273–75, 285–87, 295–96; *Lawyers' Reports Annotated*, n.s., vol. iii, 168–72, vol. xxxvi, 115–24, 1917c, 60–65; *American and English Annotated Cases*, vol. i, 55–56, vol. xvii, 566–71, vol. xxvii, 323–34; *American Law Reports Annotated*, vol. xxiv, 1115–22.

ARMSTRONG, SAMUEL CHAPMAN (1839–93), American pioneer in Negro education. He was born in Maui, one of the Hawaiian Islands, and his parents were American missionaries. He attended at Punahou the school that in 1855 became Oahu College; here he remained until 1860, completing the first two years of college work. In the fall of 1860 he entered the junior class at Williams College, where he came in close touch with President Mark Hopkins. Graduating in 1862, he enlisted, became captain in the 125th New York and, after serving with distinction at Gettysburg, accepted in December, 1863, the colonelcy of the 9th Regiment United States Colored Troops. Leaving the army as brigadier general, he was in charge of the Freedmen's Bureau at Hampton, Va., from 1866 to 1868. In 1868 he founded the Hampton Normal and Agricultural Institute to train Negro young men and women, especially to teach them respect for labor and the highest conception of character. Ten years later Indians were admitted. Armstrong was a man of great energy and driving power and he also possessed a keen appreciation of human values. His work has had far reaching influence not only on the education of the Negro (as at Tuskegee) but on vocational training throughout the United States and the world.

BENJAMIN BRAWLEY

Consult: Talbot, E. A., *Samuel Chapman Armstrong* (New York 1904); Tomlinson, E. T. and P. G., *A Leader of Freemen* (Philadelphia 1917); Peabody, F. G., *Education for Life* (Garden City 1918); file of the *Southern Workman* (Hampton, Va. 1872–); Founder's Day addresses and other papers published at Hampton Institute.

ARMY. An army is not only a military organization; it is also a symbol of national or imperial power. The size and character of armies are therefore largely determined by a nation's real necessities as developed by history and enforced by circumstances. In a well organized state, the normal health of which depends upon the balance between elements, the army does not absorb too much vital force; it sustains the vigor of the social body without weakening it. A nation totally and perpetually in arms would be unproductive; a nation totally unarmed would be defenseless. The number of "regular" troops to be maintained depends upon conditions such as international rivalries and the propinquity of possible perils. Not only is the influence of geographical location vital but internal social organization as well. The balance between elements is delicate, to be determined by wise and competent statesmen, political leaders and the people themselves.

There was a time when every able bodied man was a soldier. Among primitive peoples tribal man power was the whole male population. It was thus also in the early days of Rome, when it was said, "vivere est militare"; the legion was the gathering of the clans. Later under Servius Tullius the warrior was a conscripted farmer. Under the republic and the early empire the army consisted of trained troops which functioned as part of the systematic administration of the broad realm of Rome. But by the third century of our era emperors even enlisted fighters from beyond the frontiers, men who fought not for the glory of Rome but for pay and as a trade. Civilization had become sufficiently intricate and commercial and social organization sufficiently specialized and complex to make it necessary to tax the people and pay the troops, which not only held the frontiers against barbarian hordes but maintained internal political factions during the anarchy of the third century. The transition from universal fighting man power to defense by a professional army coincided with the geographical expansion and political organization of the Roman state. When the short sword from the city by the Tiber could no longer protect provinces against invaders from the north, the empire broke down and the political organization of western Europe under Roman rule came to an end. Military organization under feudalism reflected the disappearance of large political units. The attacks of the Vikings were repulsed by highly localized troops raised for short periods of service. Local men of distinction were given hereditary lordship and military command over the countrysides which they dominated and in exchange were expected to maintain fighting men and furnish them at need. Paid personal followers served their lord and with the aid of local peasants defended his castle when a foe advanced to the gates. Each holder of a fief owed military service to his superior. When the tenant-in-chief was called

to battle he took with him his paid personal retainers, selected attendants and fighters of lower order. A document of the seventh century summons to arms "duke, count, castellan, freeman, and freedman," each "with a tenth part of his serfs armed with weapons of war." A ninth century document of Charlemagne calls upon a fief holder and his "men" each "with arms and gear and all warlike equipment of clothing and victuals." The loyalty of this fighting man power was not to the king but to the local feudal lord. Men at arms were private property, not national troops, and fighting even in the Middle Ages became a special prerogative of the richer and better armed classes.

The mercenary forces of the later Middle Ages were indicative of the growing inadequacy of the military organization. Bellicose kings began to contract with nobles to provide troops "at the accepted wages of war." The "free companies" employed by various kings in this fashion fought for pay, ransom or plunder, but not for principle, nationality or even for defense. Engaged only for specific wars or campaigns, such troops were constant sources of trouble, since they felt no loyalty. Genoese, Swiss and Irish fought side by side, not in national forces or "standing" armies but as professionals. The king, of course, like other great lords of his time, had a bodyguard, but it was not large.

The trends toward administrative centralization, nationalism and democratization which have characterized political developments in modern times ushered in the modern standing army. Mercenaries and merely royal troops became national standing armies. When kings had to suppress domineering barons, the extent of the royal force might have been governed by internal affairs. However, once national states were well founded, military policy again depended upon foreign policy and upon geographical frontiers, which required large forces for their protection. In the middle of the fifteenth century Charles VII of France established what was probably the first standing army in history. He organized and kept permanently on foot for the "king's service" twenty *compagnies des ordonnances du roi*. Officers were commissioned by the king and men were enlisted in the king's name and paid from his funds. This was the beginning of the type of army that was to dominate Europe until the French Revolution. Municipal troops independently organized by the rich mediaeval towns disappeared, as did the armed bands of the great lords and the "free companies" of mercenaries. Indeed men were forbidden to raise forces without the king's permission, and service in a centralized military organization became a patriotic profession.

Although when Charles VIII of France set out on his invasion of Italy in 1494 he still had many Swiss and German mercenaries, he had the beginning of the standing armies that were to contribute to the renown of French kings in the following centuries. It was on the whole a national force, "the men-at-arms, being almost all of the king's subjects, gentlemen and not of the popular sort, not simply under the direction and discipline of Captains, nor paid by them, but by the king's officers, men of choice and contented in service." During the Thirty Years' War the king's troops were frequently inspected and regularly mustered for pay. There was uniformity in the set of the hats, in the cockades worn on the brim, in the dressing of the hair and even in the trim of mustaches. In the days of Louis XIII soldiers could not be distinguished from civilians by their clothes. But as the standing army developed they came to be completely uniformed, at first just the few foreign regiments and later by degrees the whole force. Louis XIV, who practically took over the remnants of the army of Gustavus Adolphus, formally organized and stabilized the permanent regiments. Brigades were designated; generals were given posts and duties and were instructed precisely "so as not to take too great risks with the king's troops." It had formerly been the custom to quarter soldiers on the people, but in the eighteenth century the building of barracks commenced, separating fighters from townsfolk. The greatness of kings was measured by the number of troops they could raise and keep under arms. Even in 1675 the daily mounting of the guard was a prodigious ceremony. At the end of the reign of Louis XV there were elaborate parades to attract the people and delight the court.

The eighteenth century thus was the greatest era of the purely professional well trained and severely disciplined armies. It was then that the resplendent Bourbons kept vast forces on foot. It was then that Frederick William boasted that while his soldiers fought his wars his merchants could go about their business undisturbed. It was then that Vattel remarked: "War is made by regular troops. The people, the peasants, the bourgeoisie, are not concerned with it." This reflected the doctrine repeated by Rousseau and accepted by continental publicists to this day

that war is a relation of state to state and not of man to man. The Englishman, Laurence Sterne, could reach Paris without knowing that his country was at war with France.

As the period of great kings and benevolent despots drew to a close, the people as such began to participate in military affairs. A few mercenary forces survived, the Swiss Guards of the Bourbons, the Hessians employed to fight the American colonies, the older regular Hanoverian army, which was known in Britain as "the king's German Legion" and which even appeared under Wellington on the peninsula. But these and the nationalized professional forces were not sufficient for the war needs of French monarchs. In 1688 the great military statesman Louvois initiated regular calls of militia to supplement the regular troops. In the War of the Spanish Succession this became practically national conscription. The French Revolution, with its military necessities, completed the process. It also brought to the fore the dislike of the people for the standing armies of the king. Rousseau echoed the popular opinion when he said of the European monarchs, "by dint of laziness and money they at last possessed soldiers to enslave the country." The people remembered that it was with royal troops that Louis XVI had closed the hall on the third estate after the Estates General met in 1789. After the people had attacked the Bastille and massacred the Swiss mercenaries a popularly enrolled militia was raised by the Paris Commune and with Lafayette in command was called the National Guard. In 1793 the government declared a levy of all able bodied men between the ages of eighteen and twenty-five. In 1798 Jourdan's law incorporated the principle of universal service in the constitution. Regular troops, augmented and inspired by conscripted "volunteers," carried the ideas of "liberty, equality and fraternity" to the four corners of Europe. The days of the hired mercenary were gone forever. As Dubois-Crancé declared, "Every soldier must be a citizen and every citizen a soldier." Since that time the dominant type of European army has been the nation in arms.

It is true that conscription in France lasted for only a short time. Napoleon III depended on long term "professionals," but the Third Republic under Gambetta saw universal military service actually established in time of peace. In Prussia under Stein there was veritable universal service combined with sincere nationalism. German success in the war of 1870 opened the eyes of the world. Since that year every great power in Europe except England has adopted universal service. In Japan the incidence of conscription has been especially noteworthy, showing in the clearest fashion the close relationship between the adoption of this institution and the sweeping away of the feudal military caste.

Regular professional armies persist, but they are merely the mold of form and the guide of practise. "A portion of the men able to bear arms," says von der Goltz, "are retained in permanently organized bodies of troops which serve as a school for military training for the entire male population fit for service and at the same time furnish the framework for the reception of the stream of educated soldiers in case of war." Even in the early nineteenth century, in the days of the American Revolution, the rude farmer who seized his squirrel rifle and marched forth as a militiaman was not so valuable a fighter as a trained soldier. Specialization has brought in many new weapons. The confusions of the modern battlefield have brought intricacies of tactics which must be learned. A mere call to arms is not enough, because time is necessary in order to transform man power into fighting man power. As old Ben Butler remarked, "troops do not get disciplined in ninety days"; Washington also said that "to bring men to be acquainted with the duties of a soldier requires time." Winder's militia at Bladensburg, which had marched "at a moment's notice" against inferior numbers of Wellington's veterans of the peninsula, fled the field and left the capital to the torch of the invader. The first new divisions created by Kitchener in 1914 did not begin to land in France until April, 1915, and fought their first battle at Loos five months later. It was over a year after America entered the war to use "force without stint" before American troops engaged in offensive operations. Their average training was six months in America, two months in French camps and one month in a quiet sector, and even then they were considered relatively raw and suffered needless casualties from rashness and inexperience.

Thus it has happened that the nations of Europe with their abutting frontiers have developed military organizations comparable to their advanced political systems and their modern views of popular participation in government. National defense is considered as much a duty as the payment of taxes, military service as much a privilege as voting. It is true that Great Britain and the United States are exceptions.

Although national unity and governmental political ideas are determinants, they are not the sole deciding factors. The problem is fundamentally military. Army strength is intended for defense, and this has been true in spite of some exceptions to the rule from the time of the ambitious ancients to that of the modern militarists. "What walls you build," said Carlyle, "depend upon the state of the outer sea." The factor that decides between heavy armament and light is simply the recognized chance of foreign invasion. If frontiers are vulnerable, a nation must be well prepared. It is the same as with the army in enemy territory. If a foe be near and exceedingly strong the security forces must be numerous; if it be distant or weak lighter detachments will serve.

England and America have been reasonably free from the danger of hostile invasion such as has for centuries stood insistently before the eyes of all the continental peoples. Britain's first line of defense has ever been her fleet; America's isolation has been her protection. Both have resorted to conscription as a temporary war measure, but neither has considered compulsory service necessary in time of peace. In neither has there been need for very large forces constantly under arms, like the standing troops of the Bourbon kings, or for the entire population fully trained and organized to mobilize on short notice, like the reservists of Central Europe. Both countries have held to the ancient militia principle that the citizens owe defensive service in time of emergency; but in both the people have felt that the necessary troops could be raised before the home peril became too great. Special circumstances in each country have caused the continued maintenance of small standing armies, but neither Great Britain nor the United States has been willing to adopt compulsory military service.

It is very strange that the two outstanding great powers which depend almost solely upon regular, standing armies in time of peace should be the two in which political history shows the most bitter prejudice against the professional force. King John increased his unpopularity with the barons by bringing back to England the mercenaries he had hired to fight his battles in France. His *alienigeni milites* and *servientes stipendarii* are condemned in Magna Carta as having been brought to England "for the injury of the realm." It is a dangerous state, remarked Francis Bacon, where men of war "live and remain in a body, and are used to donatives." "In a land of liberty," announced Blackstone, "it is extremely dangerous to make a distinct order of the profession of arms."

It is not surprising that the United States, with this British tradition behind it, in its first days desired to get along without any standing army at all. The Massachusetts Articles of War of 1775 declared that the keeping of such a force in a colony without the consent of the legislature was against the law. The Declaration of Independence protested against the employment of mercenary troops and the quartering of them on the people. In the constitution the federal Congress was not empowered to maintain an army, but only to "raise and support" armies under two-year appropriation acts; and the Second Amendment showed that reliance was placed on "a well-regulated militia" as "necessary to the security of a free state." In the Virginia convention of 1788 even the Federalist Madison protested that "a standing army is one of the greatest mischiefs that can possibly happen." In the Constitutional Convention, Gerry of Massachusetts objected that there was no specific prohibition against the formation of a standing army.

Nor is this fear of such armies merely a political idea dominating enactments and discussions. It is implicit in the historical facts of the time. After the treaty of 1783 all the troops in the service of the United States were discharged except guards of twenty-five privates at Fort Pitt and fifty-five at West Point. For frontier defense against the Indians and to suppress Shays' Rebellion troops were raised for limited periods only. From the small size and the temporary establishment of the forces raised it is apparent that the legislators hoped to dispense altogether with professional forces. The basic theory of American defense was to be the ancient British militia theory. A militia act of May 8, 1792, stipulated the enrolment of all "white male citizens of the respective States" between the ages of eighteen and forty-five and required that they be uniformly armed and equipped and arranged into "divisions, brigades, regiments, battalions, and companies." This militia was never organized, but the idea of the militia prevailed in legislative halls. The traditional American method of raising armies has ever been, from the days of the revolution until the World War, to wait until the struggle came and then to call out citizens untrained in tactics and unseasoned for conflict.

Britain likewise began with militia, as is

shown in the Assize of Arms and the Statute of Winchester. Nor was this a mere feudal levy. It was true national man power called and officered in the name of the king by county sheriffs or by lord lieutenants under commissions of array. Although under the feudal system military tenures did supply the king with troops, although lords constantly furnished scutage to pay foreign mercenaries for overseas wars instead of leading forth their own men at arms, it never became law that those not bound by tenure need not fight. Indeed in military matters as well as in government, centralization and national unity in Britain were forged by direct links between the royal ruler and the plain people. "In this organization of the common folk under royal officers," says Maitland, "there is all along a counterpoise to the military system of feudalism, and it serves the King well. The great families of the Conquest are at length pulverized between the hammer of the King and the anvil of the people."

Even Tudor despotism did not depend upon standing forces. And when the great rebellion came in the middle of the seventeenth century there was no standing army to be manoeuvred by the king as Louis XVI tried to manoeuvre the royal forces in France in 1789. When the quarrel finally reached the stage of armed force, the traditional means were used, namely the commission of array for the king and the militia for Parliament. In 1645, at the insistence of Cromwell, the New Model Army was formed and retained after the victory of Parliament against the possibility of a Stuart return. But until this time England had no regular forces, only inconsequential castle and garrison guards like the yeomen of the guard established by Henry VII in 1485 solely for personal defense.

When at the Restoration a regiment of the New Model Army laid down its arms on Tower Hill on St. Valentine's day in 1661, it took them up again with a new name, the "Lord General's Regiment of Footguards," which served under Charles II and later won fame as the Coldstream Guards. Included in the new British establishment of 1661 was a Scottish brigade of Gustavus Adolphus of Sweden, which had served in France under Louis XIV, finally came to England with Charles II and is now the Royal Scots. At the end of the century many regiments were raised for particular affrays and disbanded when peace was made. In the eighteenth century under Marlborough the British army established its finest regimental traditions and most of the units which fought at that time still exist today. With their bright uniforms, their stiffness of manner and manoeuvre and their mode of fighting they formed a typical standing army.

Nevertheless England was traditionally averse to professional soldiers. During the seventeenth century this aversion was voiced in bitter political discussion, recrimination and violence. During the incipient years of the great rebellion the Convention Parliament passed an act disbanding the army. Clarendon was impeached for maintaining a standing force; Danby was impeached for diverting funds to such a force. The Anglo-Saxon prejudice against standing armies was strengthened during this most severe test of modern time. "At the Restoration," declares Maitland, "the very name of a standing army had become hateful to the classes which were to become the ruling classes."

When William and Mary ascended the throne of England in 1689, it was made plain by the Bill of Rights that "the raising or keeping a standing army within the kingdom in time of peace, unless it be with the consent of Parliament, is against the law." In the same year the British adopted the custom of voting the Mutiny Act each year, the act upon which the discipline and very maintenance of the army depended. It definitely determined that the people controlled the army. It enacted into statute form the provision of parliamentary consent, provided for annual reenactment and prescribed that funds for the pay of troops should be voted only from year to year, "an invariable and wholesome usage," says Hallam. No longer would Englishmen be ruled by force of arms. No longer could kings keep troops for internal use. Such standing British troops as might be raised were to be, according to the law, not for home service but "for better preserving the balance of power in Europe."

In that participial phrase lies the secret of the existence and the form of British forces. British wars have been fought overseas to settle colonial and continental difficulties. There has been no proximate danger of home invasion to require the maintenance of compulsory service in time of peace, or of large standing armies. Men engaged to garrison distant posts and savage frontiers must be professional soldiers. Even in the later days of feudalism English kings found that feudal levies would not suffice when they began to fight overseas. From the time of Stephen onward, hired soldiers were used regularly in the foreign wars particularly with

France. Just as Henry II, Richard I, John and the first three Edwards had to use paid fighters for service on the continent, so Marlborough, Wellington, Kitchener, Roberts and the other modern commanders had to have regulars—men enlisted for long periods of time.

The character of British military organization and military policy is conditioned by this dominant fact. Great Britain's regiments have been practically dual in character: a recruiting and training depot at home and an active force abroad. It was so in 1809, when Wellington went to Spain. "The infantry of the line," Fortescue recounts, "consisted of one hundred regiments, nearly every one of which had two battalions, the design being that the second battalion should remain at home and feed the first battalion on foreign service." Heavy commitments overseas, the demand for many garrisons, for many expeditions in Zululand, Afghanistan, India, Abyssinia, East Africa, China and along the Nile required a considerable establishment. When times were quiet troops might be few; when wars were being waged they must be many. The British army organization has therefore been characterized by the maintenance of substantial standing forces and a volunteer system of providing replacements.

The British doctrine is well described in the words of Viscount Wolseley (1872): "The test of any peace organization must be its power: 1st, To place in the field immediately on the outbreak of war, in the best possible state of efficiency, as large a force as is possible compatibly with the peace military expenditures; 2nd, To maintain that force throughout the continuance of hostilities undiminished in numbers and efficiency." Great Britain has consistently adhered to this doctrine. In exceptional cases she has resorted to wartime conscription even for overseas fighting, as in 1802 when troops were raised by levies on the parishes and in 1916 when compulsory enrolment succeeded the failure of calls for volunteers to bring forth enough men. But in general the British system has been a regular-volunteer standing army system. Since the World War and indeed since 1907, with the acts creating territorial forces and reserves, there has been a tendency to create a reservoir of semi-trained civilian man power enrolled on a voluntary basis. But in spite of political prejudices England has clung to the idea of a standing army. Her militia defense has become a mere tradition. Save for rare exceptions she has relied on regulars.

As distinct from the British policy, which has relied solely upon regular forces reenforced with replacements, the American policy has been to provide in emergencies large forces in addition to the pitifully small, professional volunteer standing army. The initial theory that a big standing army was undesirable has persisted. But the early policy was faced with immediate necessities. Harmar's expedition against the Indians in 1790 was followed by St. Clair's expedition of 1791. In 1794 came Wayne's expedition and the Whiskey Rebellion. Troops were raised for these expeditions and the enlistments and the establishments overlapped. Then came the wars of the French Revolution, when America seemed likely to become involved in the continental struggle. War appeared probable with France in 1798, with England from 1807 onward. In 1812, on the eve of a conflict in which the United States employed 528,000 troops, her regular standing army comprised only 6686 men. The Mexican war, in which 104,000 American troops were used, was begun with a force less than 8000. In the Spanish War of 1898, which America entered deliberately, there were 60,000 regulars and 220,000 volunteers. In 1916 the entire National Guard was mobilized on the Mexican border. With the coming of the World War the National Guard and additional hosts were called into service again, until the total armed force increased from an approximate 100,000 to 4,000,000. The wartime volunteers sometimes consisted of already organized state militia coming forward en masse, as when the Eighth Massachusetts and the Seventh New York moved toward the Potomac in 1861. Sometimes units were separately raised, as when Ingersoll's Fireman Zouaves in 1861 and Roosevelt's Rough Riders in 1898 offered their services. Sometimes conscription was resorted to, as in the draft of 1863 and the selective service of 1917. But the problem has ever been the same: how to mold the feeble regulars and the organized militia or National Guard and the unorganized militia, untrained and unenrolled, into an effective force.

The tendency toward centralization in government which became apparent in the United States after the Civil War eventually influenced its military organization as well. The Dick Bill of 1903 put the National Guard on a new basis, providing for standardization, for federal equipment to be issued to state troops, for an organization to consist of four regular and twelve guard divisions and for joint field manoeuvres

of guardsmen and regulars. Certain defects in this system would have been eradicated by the National Defense Act of 1916 had not the World War disturbed the process. During that struggle a new arrangement was effected for the period of the emergency; afterwards everyone came home to be demobilized and the legislators started all over again.

In 1920 a new National Defense Act was framed in the form of extensive amendments to the act of 1916. There was created a single Army of the United States with three components, Regular Army, National Guard and Organized Reserves. The regulars were to be professional soldiers, sufficient to garrison foreign possessions, to furnish instructors to other components, to inhabit a few of the old home stations and to make up a small force capable of meeting minor emergencies. The National Guard was to consist of the organized state militia with federal aid and federal instruction: citizens formed into home town units ready to answer a call and to form a second line of defense. The Organized Reserves were to consist of volunteer reservists grouped into mere skeleton units provided only with officers and with a very few enlisted specialists. They were not to be fully recruited except in great struggles demanding the entire man power of the nation.

The personnel of these components has been divided into nine corps areas in the United States, determined in accordance with the distribution of population as revealed by draft experiences of the World War and grouped permanently into brigades, divisions and corps in the proportion of nine regular, eighteen guard and twenty-seven reserve divisions. The scheme thus combines the elements of the Anglo-Saxon militia system (i.e. citizen service in time of war only) and the idea of a standing army, supported by local pride and local traditions of the long established state militia or National Guard units.

The real significance of this act can be best understood by noting the strengths of the three components on June 30, 1928:

	Regular Army	National Guard	Reserve Corps
Officers	12,030	12,347	101,926
Enlisted Men	124,192	164,453	5,192

Personnel for these units is procured by voluntary enlistment of the professional regulars and of the citizen guardsmen and by voluntary enlistment into the reserve corps, as officers and as soldiers, of young men who graduate from Reserve Officers' Training Corps units at various colleges and from one-month Citizens' Military Training Camps. Guardsmen usually have two weeks' field training each year and semi-monthly drills. Reservists can be called to duty for training only with their own consent, and the usual practise is to have as many as possible (usually about 25 percent) of the reservists of a single regiment attend camp together and train with men with whom they will organize in case of war.

The United States thus clings partially to its militia tradition. It also maintains its standing army in spite of Anglo-Saxon prejudice against such a force. Like England it does not need the intensive nation wide compulsory training for protection of immediate frontiers as much as do the crowded nations on the continent of Europe. But it has had its trouble with sudden increments, with raw troops, with confusions, and it leans toward the skeleton army idea. Present authorizations of strength for the regular forces have required the demobilization of many regiments and the reduction of many regular units far below their established peace strengths. Indeed, with the heavy burdens of providing overhead and instruction for the civilian components, the regular army is at present so small as to be practically ineffective without reenforcement. But—and here is the difference between American and continental reserve systems—American increases will not consist of such a "stream of educated soldiers" as von der Goltz described. They will be raw increments requiring training, superior to the drafted men and volunteers of 1917 only in that they will have over a hundred thousand partially initiated reserve officers ready to begin their training immediately.

It is not only in England and America that military strength has been allowed to decline sharply with the coming of peace. If we consider their colonial commitments overseas, it is just to say that generally the nations of the world are not militarized to any such degree as was Bourbon France with 175,000 peacetime regulars to a population of only 20,000,000 or as the Prussia of Frederick William with 80,000 men in its standing force. In Germany, Austria, Hungary and Bulgaria military forces are limited by the treaties imposed upon these defeated powers after the World War. For instance, Germany, with a population of 62,348,782, has a professional force of only 100,000 with twelve-year soldiers and twenty-year officers.

The size of military forces of other principal countries as of October, 1929, is shown below:

Nation	Population	Active Army	Organized Reserves
United States...	120,013,000	136,217	284,074*
British Empire..	391,913,948	394,519	572,829
France	40,960,000	643,675	5,442,318
Italy	42,000,000	353,120	3,056,409
Japan	86,000,000	210,000	2,038,000
Russia.....	150,000,000	715,000	5,600,000
Turkey.....	13,753,000	119,500	250,000

Source: United States War Department.
* Includes National Guard.

A new factor, however, may determine the size and character of future armies. The principle of the mobilization of power according to a nation's need holds good, but the probabilities are that machine power and not man power will be the object of competition. A modern army is now a very complex organization. Even the rifle shooting infantry is not formed merely of musketeers; it has machine guns, automatic rifles, hand grenades, rifle grenades, 37-mm. cannon and 3-inch mortar guns as well as rifles and bayonets. The platoon (58 men) is the fire unit; the company of three platoons is the disciplinary and messing unit; the battalion of three rifle companies and one machine gun company is the fighting unit; the regiment of three battalions is the administrative unit; the brigade of two regiments is the manoeuvre unit. Then comes the division of 20,000 men, the self-contained and self-sustaining campaign unit, consisting of two infantry brigades, one artillery brigade, tanks, engineers, medical regiment, quartermaster personnel, ordnance specialists, radio and telephone operators, ammunition and supply trains and airplanes. Higher headquarters—corps, field army and army—are simply directive. They comprise varying numbers of divisions. But handling of divisions requires technical and staff training. The mechanics of troop movement is intricate and requires careful study to prevent tangling thousands of men into confused masses on country roads.

The growing mechanization of the army is already apparent in this organization. In the Civil War the telegraph, balloon and railroad were first actually useful; in the war of 1870 Germans employed the telegraph and railroad with such superior skill as to demonstrate their values on campaign. With the World War came the extensive use of the airplane and motor vehicle. The nations are in a frenzy over mechanization and motorization, which are profoundly affecting organization and will have a greater effect upon tactics. The tank made its mark on the battlefields of Europe. The armored car is being perfected. Rapid movement of large bodies over long distances has been accomplished in manoeuvres in Germany, France, England and America. The machine takes the place of slower means of transport. The caterpillar tread and the wheel replace to a considerable extent heavy army boots and clattering cavalry hoofs.

The effect of this mechanization is great. A British major has pointed out that of the 856 enlisted men in the present war establishment the British battalion commander will have available 120 rifles, 24 Lewis guns, 16 machine guns and 2 anti-aircraft Lewis guns. The motor vehicles must be cared for. Only 14 percent of the enlisted strength of a British battalion will be rifle strength. According to Robert Home's *A Précis of Modern Tactics* (revised and rewritten by S. C. Pratt, London), published in 1892, the British battalion had a total strength of 1096, of which 894 were privates or rifle and bayonet men. And the British are now beginning to wonder whether 120 soldiers can be expected to do the work of 894.

In the American army the tendency is somewhat similar. Although the low percentage of riflemen has not yet been affected to any great extent by military mechanization, the decline being due more to complexity of command and to the carrying out of signal communications duties, there is still a greater discrepancy than in the days of Gettysburg and Santiago when a battalion meant a battalion of shooting soldiers. The American major has a total enlisted strength of 824. Of these only 546 are armed with rifles. And many rifle armed men are not used as rifle men but as messengers, guides and section leaders. Of rifle and bayonet men designated to act as such he has only 378, less than half his personnel. The discrepancy is not so great as in the British battalion, still it is far below the proportion of 1892.

Motorization of armies is merely in its initial stages now. In recent American experiments it was found that on a rapid motor trek of over 200 miles it took 75 soldier chauffeurs to operate, repair and "service" a train of trucks which carried only 334 enlisted men. This may be a hint as to how low the proportion will be reduced in a motorized battalion of the future. Tank and truck on field and road, planes in the air and submarines in the water are vital weapons. Perhaps many years hence when we

come to discuss the making of armies we shall talk of factories and machines more than of conscription and of men.

ELBRIDGE COLBY

See: NAVY; CONSCRIPTION; MILITIA; RECRUITING; MILITARY LAW; COURTS MARTIAL; MILITARY TRAINING; RESERVES, MILITARY; VETERANS; ARMAMENTS; WARFARE; WAR; PREPAREDNESS; MILITARISM.

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ARND, KARL (1788–1877), German economist and political scientist. He occupied a position midway between the English classical school and the German historical school. Arnd accepted the principle of spontaneity in social and economic processes, and the use of the isolating deductive method in social study. Nevertheless he also took into account historical factors and existing social conditions. He believed in free competition as the regulator of economic life, but did not neglect the desirability of improving social organization. His attempts to define the sphere of influence of society and to determine the purposes of the state may be traced to Wilhelm von Humboldt. In his doctrines of division of labor, exchange and distribution of income he followed Adam Smith, while the importance he attached to immaterial goods shows the influence of Schiller and German philosophy. Arnd attacked Friedrich List and emphasized the importance of international trade. He is often erroneously classed with the physiocrats because of his advocacy of the single tax. His stand, however, was based on the belief that this tax would prevent a rise of prices and wages and thus stimulate the development of industry and commerce.

LOUISE SOMMER

Important works: *Die neue Guterlehre* (Weimar 1821); *Die materiellen Grundlagen und sittlichen Forderungen der europäischen Cultur* (Stuttgart 1835); *Der Freihandel, List und das Memorandum* (Frankfort 1849); *Die naturgemässe Steuer* (Frankfort 1852); *Die Staatsverfassung nach dem Bedürfniss der Gegenwart* (Frankfort 1857); *Das System Wilhelm Roschers gegenüber den unwandelbaren Naturgesetzen der Volkswirtschaft* (Frankfort 1862).

Consult: Adler, Max, *Karl Arnd und seine Stellung in der Geschichte der Nationalökonomie* (Karlsruhe 1906); Auerswald, Arno, *Beiträge zur Lehre von der einzigen Steuer*, Greifswalder staatswissenschaftliche Abhandlungen, no. xvi (Greifswald 1922) p. 26–29.

ARNDT, ERNST MORITZ (1769–1860), German nationalist, historian and poet. Arndt played a unique part in the development of German national self-consciousness. The son of a peasant, he was a forerunner of that peculiar type of agrarian democratic nationalism which, as distinct from the contemporary bourgeois nationalism and constitutionalism, did not develop as a principal feature of European politics until the downfall of the Russian and Austro-Hungarian monarchies. He won his first success as a political writer by an essay on the history of serfdom in his native country of Pomerania, *Versuch einer Geschichte der Leibeigenschaft in Pommern und Rügen* (Berlin 1803). It raised violent controversies and was the direct cause of the legal abolition of serfdom in Sweden in 1806, shortly before the similar step taken by Stein in Prussia in 1807. His first two volumes, *Geist der Zeit*, published in 1806 and 1809 (6th ed. 4 vols., Altona 1877), ranged him with the

inner circle of anti-Napoleonic feeling in Prussia: Fichte, Heinrich von Kleist and Schleiermacher. But his great hour arrived when he joined the exiled Stein in Russia in 1812, and by his "revolutionary" *Katechismus für den deutschen Kriegs- und Wehrmann* (n.p. 1814), putting loyalty to the nation above that to princes, sounded the keynote of the German War of Liberation. His subsequent career, a professorship in the newly founded University of Bonn (1817), suspension from office in consequence of the "persecution of demagogues" instigated by Metternich, reinstatement by the new king, Friedrich Wilhelm IV, and election to the "professorial parliament" of the National Assembly of 1848, closely mirrors the general political destinies of Germany. His manifold writings, though often profuse, unoriginal and somewhat untrustworthy as historical sources, place him with Joseph Görres in the first rank among the fathers of modern political journalism. A complete scientific edition of Arndt's works is still lacking.

CARL BRINKMANN

Consult: Haym, Rudolf, in *Preussische Jahrbucher*, vol. v (1860) 470–511; Freytag, Gustav, in *Allgemeine deutsche Biographie*, vol. i (1875) 541–48; Meisner, H., and Geerds, R., *E. M. Arndt; Ein Lebensbild in Briefen* (Berlin 1898); Müsebeck, E., *E. M. Arndt* (Gotha 1914), covering period to 1815.

ARNOLD OF BRESCIA (*c.* 1100–55), ecclesiastical and political reformer. After attending the lectures of Abélard in Paris he returned to Brescia where, as a canon, he joined the cause of the citizens against their bishop. He became an apostle of disendowment, inveighing against "prelacy" and teaching that "bishops having regalia, clerks with property, and monks with possessions could never be saved." Condemned at the Lateran Council of 1139 and banished from Italy, he went to France to defend his master Abélard against St. Bernard. He was denounced by the saint as "armor bearer to Goliath," and was involved in a common condemnation with Abélard. He was expelled from France and lived for some time in Zurich (*circa* 1140). Disappearing for a few years, he eventually went to Rome in 1147, and spent there the last eight years of his life. The papacy had recognized a "commune," or independent municipality, in Rome in 1145; and Arnold, somewhat like Cola di Rienzi two centuries later, became its prophet, seeking to revive the splendors of the ancient Roman Republic and teaching that "the Capitol should be rebuilt, the senatorial dignity restored, and the order of knights reformed." The apostle of disendowment thus became also the antiquarian idealist, and his speeches were a mixture of the Bible and the Fathers with Vergil and Justinian. His policy was doubly dangerous to the papacy, involving as it did both the disendowment of the popes and the substitution of a free Roman republic for their temporal sovereignty in Rome. He had only the support of the Roman populace, and they expelled him when the vigorous English Pope, Adrian IV, placed them under an interdict in 1155. He was arrested by the Emperor Friedrich I (then marching to Rome for his coronation), and handed over to the papal authorities. He was hanged and burned, and his ashes cast into the Tiber.

His zeal for disendowment was linked with his passion for civic liberty which, under the Italian conditions of his day, was the natural means of reducing both the bishops in Brescia and the pope in Rome to "apostolic poverty." As an apostle of disendowment he was a precursor of Wycliffe; as the prophet of Roman liberty he was a forerunner of Rienzi and Mazzini. He was remembered in the Risorgimento, and in 1862 placards were posted, "Viva il Papa non re: viva Arnaldo da Brescia: viva il Clero liberale." In 1883 the city of Brescia, with the aid of Zurich, erected a statue to his memory.

ERNEST BARKER

Consult: Original authorities: Otto of Freising, "Gesta Friderici I. Imperatoris" in *Monumenta Germaniae historica*, Scriptores, vol. xx (Hanover 1868) p. 338–496; John of Salisbury, *Historia pontificalis*, ed. by R. L. Poole (Oxford 1927). For life and times: Odorici, F., *Arnaldo da Brescia* (Brescia 1861); Guibal, G., *Arnauld de Brescia* (Paris 1868); Giesebrecht, W., *Arnold von Brescia* (Munich 1873); Gregorovius, F. A., *Geschichte der Stadt Rom im Mittelalter*, 8 vols. (4th ed. Stuttgart 1886), tr. by A. Hamilton, 13 vols. (London 1894–1902) vol. iv, pt. ii, chs. iii–v; Hausrath, Adolf, *Arnold von Brescia* (new ed. Leipsic 1895).

ARNOLD, MATTHEW (1822–88), English poet and social critic. He was born within the English church, an institution which has contributed so markedly to English culture. He was educated in English public schools, at Winchester and Rugby; of the latter his father, Thomas Arnold, was the famous headmaster. At Balliol College, Oxford, he made his mark as a poet, and after publishing several volumes of verse he was elected professor of poetry at Oxford. His livelihood, however, he earned as inspector of schools. These two elements in his

life, the aesthetic and the utilitarian, also divide his work. From being a poet and critic of poetry he became chiefly known as a critic of society. In "The Function of Criticism at the Present Time" (in *Essays in Criticism*, 1st ser., 1865) he pointed out the dependence of literature upon life. *Culture and Anarchy* (1869) is his characteristic work in social criticism.

Matthew Arnold illustrates the shift from the romantic ideals of the early nineteenth century to the preoccupation with problems of actual life pressing upon society in consequence of the new knowledge in natural science, the development of the industrial system and the urge toward democracy. In his preface to the *Poems* of 1853 he had stated the doctrine that the excellence of a poem depends upon the unity and totality of effect derived from a single noble action rather than upon the beautiful things said by the way. This classical principle of totality he made the core of his educational, social and religious teaching. He saw the modern world with its political institutions shaken and its religious beliefs threatened, falling into a state of anarchy. It was to combat this that he invoked the ideal of culture. Culture for the individual consists in the pursuit of "our total perfection" by "getting to know the best that has been thought and said in the world." In politics it leads us to subordinate our self-interest to the state, which is the organ of "the right reason of all of us." Though he believed that the conventional supernatural faith in "Bible Christianity" must go down before scientific truth, he tried to save the elemental fact of religion as an inward experience. In the interest of culture he deprecated the "Hebraizing" tendency of the English Nonconformists, and defended the Hellenic principle of total perfection. Arnold was an apostle of civilization to the middle class of Great Britain, whom he qualified as Philistines with reference to their materialism and trust in machinery, but in whom he saw possibilities of future fineness and beauty.

ROBERT MORSS LOVETT

Works: His complete works are published in 15 vols. (London 1904–05). The chief biographical source is his *Letters*, 2 vols., ed. by George W. E. Russell (London 1895). *Selections from the Prose Writings of Matthew Arnold* (New York 1897) is prefaced by an admirable essay by Lewis E. Gates.

Consult: Smart, T. B., *Bibliography of Matthew Arnold* (London 1892); Saintsbury, G., *Matthew Arnold*, Modern English Writers series (Edinburgh 1899); Paul, H. W., *Matthew Arnold*, English Men of Letters series (London 1902); Sherman, Stuart Pratt, *Matthew Arnold: How to Know Him* (Indianapolis 1917).

ARNOLD, THOMAS (1795–1842), English schoolmaster and churchman. He was educated at Winchester and at Oxford, graduating in 1814, and taking the Chancellor's Medal in 1815 for Latin and in 1817 for an English essay. He was elected fellow of Oriel in 1815, and four years later he settled at Laleham as a private tutor. In 1828 he was appointed headmaster of Rugby, where he remained till his death. He had in 1841 been elected regius professor of modern history at Oxford, but lived only to deliver one course of lectures.

Though he was a prolific writer engaged in many controversies and a prominent churchman closely associated with the liberal movement of his time, it is as "Arnold of Rugby" he is known. The social and political influence of the English public school has been immense; a study of Arnold's work at Rugby entails a complete survey of this important department of English education. Under Arnold public school education was for the first time based upon a definite social theory and informed with a definite religious and ethical ideal, and whatever may be said either of theory or ideal, it remains a fact that Arnold, more than any other man, set the public school upon the path it travels today. Nevertheless it is important to note that he worked within limits already clearly marked in 1828, his influence being rather stimulative than formative. Arnold's own writings are of little intrinsic value, but his *Sermons* (6 vols., New York 1846, rev. ed. London 1878) may usefully be consulted by the student.

FRANK H. DOUGHTY

Consult: Stanley, A. P., *Life of Thomas Arnold* (New York 1877); Fitch, J. G., *Thomas and Matthew Arnold* (New York 1897); Hughes, Thomas, *Tom Brown's Schooldays* (New York 1925); Arnold, Matthew, "Rugby Chapel" in *Poems* (Oxford 1926). Lytton Strachey includes Arnold in *Eminent Victorians* (London 1918) but must be corrected by the later revaluations of R. J. Campbell, *Thomas Arnold* (New York 1927), and Arnold Whitridge, *Dr. Arnold of Rugby* (New York 1928).

ARNOLD, WILHELM (1826–83), German historian. As a student in Berlin he came under the dominating influence of Jakob Grimm and Ranke. His service to science consisted in modifying their historical conceptions in order to allow a greater stress on economic aspects,

thus making room for the new approach which had gained prominence since 1848. As an instructor at Marburg he used the records of Worms as a basis for his *Verfassungsgeschichte der deutschen Freistädte* (2 vols., Hamburg 1854), in which he emphasized the tradition of Roman communal self-government. When he went as a professor to Basel he utilized the archives of that city in his famous study *Zur Geschichte des Eigenthums in den deutschen Städten* (Basel 1861), a work still valuable as an economic and social interpretation of the development of property in mediaeval municipal law. His treatise on *Recht und Wirtschaft nach geschichtlicher Ansicht* (Basel 1863) qualified him after his return to Marburg to teach economics in addition to history. A few years later his *Cultur und Rechtsleben* (Berlin 1865) and *Cultur und Recht der Römer* (Berlin 1868) gained prominence for him in the field of comparative historical jurisprudence. His last original contribution to the methods of economic history was the use of place names, chiefly those of his native Hesse, in his investigation of the *Ansiedelungen und Wanderungen deutscher Stämme* (Marburg 1875). Death interrupted his attempt at a popular synthesis of his results in a *Deutsche Geschichte* (3 vols., Gotha 1879–83). The first volume of this work was so successful that three editions were necessary in the course of three years. It was accompanied by a volume of his collected essays, *Studien zur deutschen Kulturgeschichte* (Stuttgart 1882).

CARL BRINKMANN

Consult: Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 760–65; Schmoller, Gustav, *Deutsches Stadtewesen in älterer Zeit* (Bonn 1922) p. 8–12.

ARREST. An arrest is the apprehension or detention of the person. Every system for the legal prevention of wrongdoing must begin with some method for stopping the wrongdoer by force or by threat of force. In Anglo-Saxon times, when law and custom began to restrict unbridled blood feuds and private warfare, there developed the right of *infangthief*, which permitted the victim to take private summary vengeance by killing a thief taken in the act. A closely similar legal right of private vengeance existed in the primitive Roman law during the regal period. In the case of a wrongdoer who could not be taken in the act, the Anglo-Saxon law developed an effective form of arrest in the hue and cry. Anyone robbed or attacked was expected to raise outcry; all the people of the neighborhood, with the sheriffs and bailiffs, were then bound to turn out in pursuit, track the felon to the edge of their township and there turn over the pursuit to the men of the adjoining township until he was taken.

The more convenient method of arrest under a warrant had a different history. The first efforts of primitive law have always been to induce the injured victim to substitute judicial action for private vengeance; in the early law the victim himself apprehended the wrongdoer and dragged him into court for trial. Later the court by its own officers secured the attendance of accused defendants. Between the fourteenth and seventeenth centuries, as hue and cry gradually fell into disuse, justices of the peace, first instituted in 1326 and charged with the general duty of keeping the peace, began to order constables to bring suspected persons before them for examination and issued warrants for that purpose.

The present right of arrest in Anglo-American law bears strong traces of its early history. The more usual form of arrest in criminal proceedings is upon a warrant, issued by a magistrate upon a sworn complaint, commanding an officer to arrest the body of the defendant accused of some specified crime and to bring him as speedily as may be before the magistrate for examination. A defendant may similarly be arrested upon a "bench warrant," issued by the court after indictment or during trial. The officer making the arrest must exhibit the warrant upon the demand of the accused.

The right of arresting without a warrant survives from the hue and cry. Any private individual, as well as an officer, has the right summarily to arrest without a warrant and to take before a magistrate for examination anyone reasonably suspected of felony, if the felony in fact has been or is being committed, or anyone committing a breach of the peace in his presence. A constable or peace officer has the further right to arrest anyone whom he reasonably supposes to have committed some felony. In many states officers, and in some cases private individuals, are given additional statutory authority to arrest for all crimes (misdemeanors as well as felonies) committed or attempted in their presence. The right of arrest carries with it the right of opposing force with force even, in felonies, to the extent of killing if necessary.

One of the great fights of English constitu-

tional history was against the tyranny of arbitrary and illegal arrests by royal authority. Out of this struggle developed the writ of habeas corpus, a mandatory writ of right by which anyone wrongfully imprisoned could have the legality of his detention tried in a king's court forthwith. In France the struggle revolved around the lettres de cachet.

In civil cases, since the object is reparation rather than punishment, the right of arrest becomes more and more attenuated as the law matures. Under the early common law a plaintiff was generally entitled to arrest the body of the defendant in an action of contract if the amount in controversy exceeded a certain sum; but the right of arrest on mesne process was practically abolished in England by the Debtors Act of 1869 (32 & 33 Vict. c. 62, s. 6) and has in America everywhere been greatly modified or, apart from exceptional circumstances, abolished.

In one important group of cases arising out of civil contentions, however, the power of arrest still remains a substantial factor. With the widespread growth of the injunctive remedy in labor disputes and with the issue of sweeping injunctions against whole groups of persons, the power of summary arrest and punishment for any disobedience of the injunction provisions, derived from the early power of equity courts to punish, by contempt proceedings, insolence in their presence or deliberate disobedience of their decrees, has become a powerful weapon in present day industrial struggles.

FRANCIS B. SAYRE

See: PROCEDURE, LEGAL; PROSECUTION; CRIMINAL LAW; JUSTICE OF THE PEACE; POSSE COMITATUS; IMMUNITY, POLITICAL; CACHET, LETTRES DE; HABEAS CORPUS; BAIL; INJUNCTION; POLICE; CIVIL LIBERTIES.

Consult: Stephen, T. F., *History of the Criminal Law*, 3 vols. (London 1883) vol. i, p. 184–200; Blackstone, W., *Commentaries on the Laws of England*, vol. iv, ch. xxi; Maitland, F. W., *Justice and Police* (London 1885) p. 118–25; Muther, Theodor, *Sequestration und Arrest im römischen Recht* (Leipsic 1856); Esmein, A., *Histoire de la procédure criminelle en France et spécialement de la procédure inquisitoire, depuis le XIIIe siècle jusqu'à nos jours* (Paris 1882), tr. by John Simpson as *A History of Continental Criminal Procedure*, Continental Legal History series (Boston 1913) p. 62–73, 151–53, 348–50; Voorhees, H. C., *The Law of Arrest in Civil and Criminal Cases* (2nd ed. Boston 1915); Wilgus, Horace L., "Arrest without a Warrant" in *Michigan Law Review*, vol. xxii (1923–24) 541–77, 673–709, 798–822.

ARRIQUIBAR, NICOLÁS DE (d. 1779), merchant and economist of Bilbao, Spain. His translation of the work of Charles Davenant on behalf of the Real Sociedad Bascongada de Vergara left him an admirer of the methods of political arithmetic but dissatisfied with some of Davenant's ideas, and led him to write his *Recreación política: Reflexiones sobre el amigo de los hombres en su tratado de población, considerado con respecto á nuestros intereses* (2 vols., Vitoria 1779), which appeared posthumously. He attacked the physiocratic notion of the exclusive productivity of agriculture, maintaining that the population and wealth of a nation were dependent upon all useful occupations. In his ardent defense of industry and commerce he pointed out that these were necessary to the existence of a market for agricultural products. Although he favored freedom of domestic and foreign trade in grain, with only such restrictions as would insure the national supply and a remunerative price to the farmer, he showed himself frankly protectionist regarding manufactures and urged the replacement of the taxes on necessaries and raw materials by luxury taxes.

GERMÁN BERNÁCER

ARSENYEV, KONSTANTIN KONSTANTINOVICH (1837–1919), Russian lawyer and publicist. He began his career as a lawyer in 1864, when the new law courts and the jury system were introduced. After a decade of service at the bar he summarized his views on these judicial reforms in his history of the activity of the St. Petersburg Council of Lawyers in the period 1866–74 (St. Petersburg 1875). Soon afterwards Arsenyev gave up the practise of law to devote his entire time to journalistic work. From 1880 on he prepared regular monthly surveys of the domestic political developments in Russia for the liberal magazine *Vestnik Evropi* (Herald of Europe). A number of these brilliant and enlightening articles were later republished by the author in his books on legislation and the press (St. Petersburg 1903), on freedom of conscience and toleration (St. Petersburg 1905) and in the collection entitled "During a Quarter of a Century (1871–94)" (St. Petersburg 1915). His quiet manner and scholarly way of writing generally saved his articles from mutilation by the censor, although they obviously represented the views of the more radical wing of Russian liberals. In them Arsenyev consistently exposed and criticized the abuses of power by the government and refuted the attacks of the reactionary press on the survivals of the period of "Great Reforms." He rebuked the attempts of the nobility and gentry

to dominate the *zemstvo* and municipalities. He protested against legislation by which the powers of local representatives of the central government were enlarged at the expense of local self-government. He censured severely the limitation of public education to the upper classes and the pressure exercised against liberal professors. He stigmatized the persecution of the Jews and Ukrainians and of Finland. Arsenyev thus played the part of leader of liberal public opinion for almost half a century.

From 1891 to 1907 Arsenyev was chief editor of the largest Russian encyclopaedia, Brockhaus and Efron. The judicious choice of authoritative contributors and skilful editing intended to preserve a unitary viewpoint represent Arsenyev's contribution to this important enterprise.

PAUL MILIUKOV

ART

INTRODUCTION ..... IRWIN EDMAN
PRIMITIVE ..... A. L. KROEBER
FAR EASTERN
India ..... ELIZABETH TODD
China ..... KIANG KANG-HU
Japan ..... LEO KATZ
NEAR EASTERN ..... SEWARD HUME RATHBUN
CLASSICAL ..... SEWARD HUME RATHBUN
MEDIAEVAL ..... HELEN GARDNER
RENAISSANCE ..... RACHEL ANNAND TAYLOR
MODERN ..... EDWIN AVERY PARK

INTRODUCTION. The consideration of art has from the time of Plato been an inevitable concern of the social philosopher and is coming to be recognized as of first importance for the student of the social sciences. So far from being concerned exclusively with paintings in museums, poems in books and symphonies in concert halls, it is rather to be identified with the whole process of intelligent or directed activity. Used in this sense, art is distinguished from and contrasted with nature and is the name for that deliberate and controlled contrivance by which man interferes with nature in the interests of realizing its intrinsic possibilities. A consideration of art is then tantamount to a consideration of the whole of civilization. The history of art as the history of human contrivance would comprise the whole enterprise of mankind—handicraft, industry and medicine, institutions governmental, legal, educational and religious. From the point of view of the philosopher or the social scientist, considering the whole economy of human interests, art may be described as reason or intelligence in operation. Reflection upon art is thus critical reflection upon all the distinctively human activities of human beings, the methods by which they modify a world which was not made for them but in which they have to grow.

The distinction is usually drawn, however, in aesthetics as well as in social theory, between the fine and the useful arts. The latter, including all industry, are those techniques or technologies which are practical in their results; that is, those which are concerned with the production of necessities, food, shelter, clothing or such refinements of these or such other goods as the more complex and developed demands of civilized life render necessary. These arts may vary from primitive handicrafts to the complex technologies of modern machine industry. The products, as in the case of Greek vases or basketwork among Indian tribes or furniture among German peasants, may incidentally be objects of art, that is, objects intrinsically interesting and, for their pattern, color or texture or their symbolic expressiveness of some human interest, things of beauty. They may, like the cheap tinware of standardized factory production, be merely things produced as instruments, things of use. But in either case they are distinguished by the fact that from the standpoint of the total economy of human interests they are objects primarily instrumental and serviceable, that they are biological or social necessities rather than luxuries to be enjoyed for their sensuous immediacy, their formal pattern or their expressive intent.

The fine arts are generally distinguished by the fact that they are not primarily valued for their usefulness or practicality, but are immediately enjoyable, the pleasure varying from a merely sensuous delight in the material to a highly intellectual pleasure in the formal pattern

or arrangement and in the work of art as symbolic of something more than is immediately present to the senses. The processes of the fine arts are distinguished from those of the useful arts, especially in the mechanical and industrial forms of the latter, by individuality, by a more refined and subtle deployment of materials and forms, by a greater concern with the meanings which those materials and forms may signify. The artist is more than an artisan; he is a creator and the process of creation is important and interesting to the artist no less, perhaps even more, than the object created. The routine and regimental actions of an operative in a factory, compared with the considered and spontaneous technique of the painter and the musician, are cases in extreme contrast.

In modern civilization since the industrial revolution the distinction between the fine and the useful arts has been rather clearly drawn, but they are not necessarily disparate nor have they always been considered so. In societies in which all the industries are handicrafts the work of the artisan and the play of the virtuoso are intermingled. A pot made to hold or to cook food is susceptible of and subjected to decoration interesting for its own sake and to forms delightful to the beholder quite apart from their utility. In many primitive tribes the basketwork and textiles, although industrial in the sense that they are made to be used, are none the less the work of craftsmen making the whole object and working with reference to beauty as well as to use. Even in an industrial civilization the fine arts and the industrial cannot always be sharply separated. All arts involve a certain amount of technical craftsmanship and even the most useful articles are made with some reference to their appeal as materials and forms. The fusion of beauty and utility is especially evident in architecture, where the beauty of a building and in fact its very existence are determined by considerations of utility and expense.

In a complex civilization, however, the fine arts as well as the artists and their works become comparatively isolated and rare. The term fine arts, therefore, is conventionally used to designate those arts which are concerned with line, color and form (painting, sculpture and architecture), with sound (music) and with the exploitation of words for both their musical and expressive values (poetry and prose).

From the beginning of speculation upon human conduct the fine arts have been subject to social criticism and review. It has repeatedly been observed by social and moral philosophers, from Plato in the *Republic* down to Tolstoy in *What is Art*, that the artist by arresting attention upon the sensuous surfaces of the world promotes interest in the senses and, it has been inferred, in sensuality. So common indeed has been the suspicion that the sensuous appeal of the arts has a sexual origin and results in sexual excitement—Plato, Plotinus, St. Augustine and Tolstoy all make this capital point—that the artist and his works have been looked upon with suspicion. This is especially true if, as in the case of Plato, an ascetic regime and, in the case of Tolstoy, an ascetic philosophy provide the canons by which any human activity is measured. The traditional quarrel between the artist and the puritan has been the quarrel between those who were frankly interested in the sensuous appearances and surfaces of things and those to whom any involvement or excitement of the senses was a corruption of the spirit or a deflection of some ordered harmony of reason. The history of censorship in the fine arts, if it could be told in full, would be found to revolve in no small measure around the assumed peril of corruption of the spirit by the incitements of the flesh through beautiful things. As St. Augustine put it, there is or should be only one beauty, God.

The moral critique of the fine arts has flowed also, however, from another consideration. That very character of the arts which is regarded as their peculiar excellence—their stimulation of the imagination, their suggestion of a "life beyond life," their character as fictions—has been a source of disturbance to philosophers. Works of art turn the imagination away from the actual social order to some imagined and more desirable world. It was on this account that Plato counseled in the *Republic* a censorship of the arts, so that only those myths should be told, those songs be sung, which would impress upon the popular imagination the fixed pattern of the prescribed perfect state. The artist has been justly regarded, as Shelley regarded the poet, as the "unacknowledged legislator of the world," but any society makes this admission only with alarm. Just as suicide is said to have become a fashion after Goethe's *Sorrows of Werther*, so any form, myth, pattern of life may seduce by its imaginative compulsion and discredit the socially established, the morally conventional pattern. It is not for nothing that rigid and fixed regimes, like those of Fascism in Italy or Communism in Russia, have

been scrupulously stringent in their control of the literary arts. And the plastic arts, although in lesser degree since their explicit expressiveness is more limited, may be deflectors from the established patterns. By the same token, however, an artist, if his imagination be in consonance with the established social, moral or religious order, may become its imaginative synthesis, as was Dante, or its imaginative defender and demonstrator, as was Milton in "justifying the ways of God to man." But in general the literary artist has tended to be a revolutionary rather than a conservative. To picture or even to mention "the light that never was, on sea or land" is to turn the imagination from what is to what may be or at least to what once to conceive would be to desire.

The arts are also suspect if judged by canons of practical or industrial efficiency. Unlike useful things or the tools used to produce them works of art apparently serve no function other than immediate enjoyment. "A thing of beauty is a joy forever," perhaps, but in a society where goods are measured by utilities aesthetic enjoyment is regarded as a distraction from socially more profitable pursuits, and aesthetic creation is considered the trivial pastime of citizens who might be employed in useful labor. A civilization predominantly industrial or pioneer, where the practical is or must be emphasized, is prone to regard with suspicion or contempt the apparently effete and unimportant activities of either the artistic creator or the connoisseur. The arts, considered practically, are the by-play of the aesthete or the virtuoso; they are not the serious concerns of the adult citizens of a commonwealth that has problems of food, shelter and complicated human adjustments to meet, that has disease to conquer and the land to cultivate, suffering to reduce and death to overcome.

The critique of the fine arts from the point of view of their sensuousness, their imaginative dissolution of prescribed social patterns or their practical uselessness has nevertheless been unable to obscure the fact that the arts are at once social in their origins and in their consequences and must be reckoned with as a central and ultimately as a self-justifying social activity. There are theories of art, like those of Schiller and Groos, that find the origin of the fine arts in the play activity of the individual or in one or another biological impulse, notably that of sex and sexual display. But the forms of art are determined and its themes are largely conditioned by the social circumstances in which the artist works, the themes that preoccupy the public to which he addresses himself. Thus in many primitive societies the arts of music and of poetry are closely associated with the ceremonial of war, work or religion. Greek drama began, as the modern anthropological study of Greek religion makes clear, in ritual, and Gothic architecture arose in the service of and as the expression of Christian creed and Christian church organization. In literature the themes of a writer, whether he is protesting against, expounding or simply representing his age, are reflections of his own social tradition. The history of art is thus the history of the embodied social imagination. Indeed from the point of view of the social historian, all objects of art—novels and poems and sculpture as well as buildings—are *monuments historiques*. The interests and absorptions of a period, a nation, a race or a social class may be studied in terms of what they produce and value in the fine arts.

If the arts are social in their origin it is also beyond question that they are, whatever the artist may say about art for art's sake, whatever the moralist may say about the individualism of the artist, social in their functions. Even the most esoteric tastes in the arts represent the preferences of a group, however small, and the shifting standards of taste throughout the history of any art are testimony to the operation of fashions, of social imitativeness, of social prestige operating in the arts as elsewhere. The history of a reputation in the arts is a capital illustration. El Greco was for centuries neglected as wild and uncouth, and Shakespeare's reputation in the eighteenth century, when "enthusiasm" was at a discount, was wholly different from his prestige during the romantic period in the nineteenth century, and in the twentieth. Works of art are thus embodiments of current tastes and values which are correlative to preferences in fields other than those purely aesthetic. They serve to express and to consolidate whole epochs of opinion and of emotion, so that the dress, furniture, poetry and architecture of a period, no less than its professed philosophy or religion, are the embodiment of its spirit or temper and its controlling social traditions.

But the social functions of the arts are more than the embodiment of current tastes and the satisfaction of current forms of the demand for sensuous excitements or formal pleasures. The arts serve in an important sense the same function in the race that play does in the indi-

vidual. On the part of the artist, despite the fact that the arts involve technical difficulties and that their pursuance often entails social sacrifices, they have something of the quality of play and they constitute a type of spontaneous action which any polity might well wish to insure for all its citizens. And for the aesthetic observer or participant they afford moments of immediate satisfaction, whether it be that of material, of form or of expressiveness as the symbolization of humanly interesting themes. The arts, then, are instances of spontaneous action and immediate enjoyment. They have often been regarded by social philosophers as anagrams of larger and more comprehensive arts. Thus to Aristotle statesmanship was an architectonic art and life, the "good life," itself an art whose fulfilment is happiness.

There are still further reasons, largely historical, why it is impossible to separate art in either theory or practise from social considerations. The history of the arts is conditioned not a little by economic circumstances, so that it is no accident that the greatest bursts of artistic production have occurred in wealthy and in leisure class societies: Athens in the classic period and Florence during the Renaissance. Their history in both the Occident and the Orient has also been closely intertwined with the embodiment of religious feelings and beliefs in ceremony, ritual and liturgy. The arts have at one time or another been the media of social or moral propaganda. In our contemporary civilization the increasing mechanization and industrialization of life and the pervasiveness of a mechanical theory of nature have made the arts for many a kind of romantic escape. It remains to be seen whether the new order, as its detail becomes familiar and emotionally realized, will generate an art as expressive of an age of science and machinery as the Elgin marbles are of Greece and as Chartres Cathedral is of mediaeval France. It remains further to be seen whether the dominance of a machine technique and the lapse of an aristocratic tradition will make possible the continuance of that tradition of craftsmanship out of which the artist class came in the past or that tradition of taste which has always been associated with a leisure class.

IRWIN EDMAN

PRIMITIVE. Two basic tendencies of expression are normally present in the graphic and plastic art of primitive and unlettered peoples: the decorative and the representative. These of course are to be found also among ourselves, but with the greater diversification of our art and culture as a whole they are generally more sharply segregated with us than among primitives. The relatively higher degree of fusion, or non-differentiation, of the decorative and representative impulses is one of the principal criteria distinguishing most primitive arts from our own.

Another difference is that uncivilized people, speaking broadly, tend to make with their own hands most of the art objects which they use, each individual for himself. The product of the best workers is indeed prized and sometimes traded at a premium. There are individuals who are master craftsmen and sometimes family lineages of such; or a whole settlement may become known as proficient in some ornamental handicraft and its wares be sought after. There is never, however, quite the degree of specialization that our culture has brought about, in which at best only an insignificant part of the art expressions which we use or own have been made by our individual selves. No one in primitive society earns his whole livelihood by practising art. In general every adult member of one sex in a tribe possesses at least a moderate proficiency in the arts in which a few are reckoned superior. This is a phase of the stronger participation of primitive people in the totality of their culture and the smaller scope of "personality" among them. It is a phase, too, of their tendency to think or feel in terms of making rather than, as we do, in terms of products.

Naturally, technological influences are strong in art. Ethnologists have often delighted in pointing these out. Sometimes they have thought themselves able to discover the origin of most or all aesthetic form and ornament in manufacturing processes or utilitarian devices. This view is psychologically too one-sided to be tenable as a general principle, but it is without doubt applicable in certain cases supported by historical or archaeological evidence. Bowl legs do sometimes come to take on the shape of fishes or men, handles degenerate into birds or heads. But this does not mean that all ceramic modeling originated in a utility, just as no economic system can be explained wholly in utilitarian terms. The textile arts, especially, lend themselves to derivation of design from manipulation. Twilling, for instance, is but a slight extension, mechanically, of the simplest

in and out wicker or checker work and necessarily produces a pattern even in monochrome, which the introduction of elements of another color accentuates. Plain twining with colored elements inserted one, two, three, four times in successive courses yields a right angled triangle; one, three, five, seven times, an equilateral one. But of course such "unnecessary" manipulations would scarcely have been attempted and certainly not regularly repeated if they had not been found intrinsically pleasing. Psychology cannot be left out in understanding art, primitive or civilized.

A frequent trait of primitive art is its so-called symbolical character. A part is made to stand for the whole. Less significant elements are suppressed. Among the Pueblos three lines down from a semicircle denote rain falling from clouds. Among the Haida a dorsal fin differentiates a killer whale from other mammals, or is even sufficient to indicate a killer whale. Sometimes, as in the Pueblo example, such symbolism has magico-religious significance. Sometimes, as in the Haida example, it has not, and is essentially a stylistic convention or heraldic device. In many cases the primary reason for the "symbolism" seems to be inadequate power of execution strongly fortified by stylistic hardening. In central and northern Australia the same figure may stand in different contexts for perhaps a tree, a frog, a grub egg, a locality or a person; but the figures used are of certain types, such as concentric circles, and never of others such as crosses. The art style is therefore determinant as well as the religious purport. In Navajo sand paintings, figures and their costumes are carried out with great exactness and different animals or plants invariably distinguished. In Luiseno sand paintings, circles stand indiscriminately for horizon, night, milky way, world and soul, and spots or heaps of pigment for mountains, places or animals; the mystic tendency is as strong as among the Navajo, the artistic execution far weaker. Much primitive symbolic art is not mystic at all, but is better described as representative through visually inadequate forms. It corresponds to such devices of our newspaper cartoon art as letters flowing out of the mouth, exclamation points about the head, the body falling over backward to express surprise, a log and saw in a cloud to represent sleep and snoring, a Maltese cross to denote the point of impact. Largely because of this quality petroglyphs, which are most often the work of scattered individuals, can normally not be interpreted by the tribe and soon have their meaning forgotten.

Conventionalization, due either to inadequacy of aesthetic means of expression or to repetition and loss of interest, is often progressive, until the original representation is no longer recognized by the makers. Parts are lost, disturbed or displaced; only a rudimentary abbreviation may remain. The end product may be wholly geometric in appearance or, in pottery design, come to resemble cursive writing. Art production for trade may lead to such simplification or slovenliness. It was at one time thought by some students that all geometric or purely decorative design could be derived from representations through this process of conventionalization; but this is as one-sided a view as the universal derivation from technique or from magic. There are some fairly well authenticated cases of progressive conventionalization, as in the carving of New Guinea and the pottery of Central America. Yet even in these instances the development or presence of a definite decorative style is as important a factor as the gradual loss of representative significance.

There is also reinterpretation of decayed designs or secondary interpretation of designs of technological origin. Such cases may be difficult to prove, but their possibility has always to be reckoned with. A figure occurring in the decorative art of a number of related or adjacent tribes may be read with a different meaning by all of them. The same cross may denote a star, a fly or the meeting of paths to as many groups; a zigzag, respectively a snake or lightning or a river. If the technology and the style coincide it is clear in such cases that the design has had a common origin and single history in the area, but that its several meanings had secondary and diverse histories.

The decorative tendency normally prevails over the realistic in primitive art, at least to our feelings. This effect is probably due in part to the high development of realistic achievement in occidental art of the last few centuries, which makes us see chiefly decorative value in products whose realistic or successfully imitative qualities are imperfect. The principal primitive arts that are frankly although simply realistic without attempt at formal decoration are those of later palaeolithic western Europe, of the Bushmen or their predecessors in South Africa and of the Eskimo.

These three arts are perhaps historically connected through the Bushman and Eskimo

cultures which are partial survivals in remote areas of the palaeolithic. This however is suspected rather than proved, and the origin of palaeolithic art in the Aurignacian and its disappearance from western Europe with the close of the Magdalenian period are unexplained. It also appears that the realistic Aurignacian-Magdalenian art had as contemporaries a semi-geometric Solutrean art in eastern Europe and a conventionally representative Capsian one in northern Africa. Even these realistic arts, with some doubtful and slight exceptions, do not attempt perspective, foreshortening, shadows or values, composition or landscape. They do represent skilfully the proportions, postures and even movement of animals, mostly in profile, but occasionally from front or rear or bending back. Human figures are less successfully portrayed. Artists of the palaeolithic culmination in the late Magdalenian shaded pigments into each other. Both this and Eskimo art carved in the round with equal aptness. The same diverse directions that are found in modern primitive arts were thus already being followed ten to fifteen thousand years ago.

The lack or meager development of perspective, values and other aesthetic devices in primitive art is not surprising in view of their incomplete rendering in such sophisticated and high arts as the Chinese, Japanese, Greek, Byzantine and Early Renaissance. Like harmony in music these objectives and devices appear only once in human history, namely in western Europe since the Renaissance. It is largely the absence of these same traits to which we are accustomed that makes even primitive arts of high quality tend to seem either grotesque or monotonous to us on first contact with them. The high formal or aesthetic value of some primitive arts is more quickly recognized by artists and of late they have begun to draw upon them, as a generation earlier they tried to be influenced by the Japanese. It is doubtful, however, whether modern art can borrow more than an occasional stimulus or suggestion from primitive art; as between harmonic and non-harmonic music the difference in basis of form, feeling and objective is probably too great to allow any really successful transfer.

A distinction deserves to be made between truly primitive arts growing up in isolation or in contact only with others of the same kind, and derivative primitive arts which are demonstrably more or less dependent on civilized ones. Peasant arts are essentially of the latter category; so are most of the so-called primitive arts of Asia, Malaysia and perhaps Africa. The appliqué, embroidered and painted designs of the Amur region tribes, for instance, have a character of their own, but most of the motives and stimuli go back to the Chinese. The Hindu influence in Malaysia and perhaps ancient Egyptian, Mediterranean and Mohammedan influences in most of Africa represent similar derivative tendencies. An unlettered people can occasionally achieve an art of high distinction on such foundation, as witness the bronzes of Benin in west Africa and the wood carving of several tribes there and in the Congo. But this seems to be the exception. Normally, dependent and peasant arts tend to geometric or floral design or a naive, somewhat inept realism. They please, but hardly stir.

On the other hand the arts of native America, Oceania, Australia and South Africa, which were much more remote from the high centers of Eurasiatic culture, bear to our civilized eyes a far stronger quality of primitiveness, that is, of mingled grotesqueness and creativeness. This does not mean that they are necessarily wholly original; but a substantial isolation in time and space has made them practically independent. Northwest coast American art may possibly derive its first impulses from eastern Asia, but such a derivation can no longer be traced and in the main the distinctive qualities of this art are a native development. Similarly Maori art may be related to that of Melanesia and ultimately Asia, as its spirals suggest; but its special aesthetic qualities must have been developed subsequently, after intercommunications had ceased. Of this same original quality are the high arts of Mexico and Peru, culminating in that of the Maya; and probably also of the ancient Egyptians and Sumerians. Early China seems promptly to have remodeled the western influences that at one time or another reached it; so did India, whose great sculpture is all post-Greek, although within a few centuries the proved Greek stimuli had been so readapted that only a specialist can find them. In general the primitive arts with a character of originality depict persons, animals or hybrids of these and avoid floral or plant motives; or they are wholly geometric like the basketry art of the California Indians.

Much has been learned about primitive art from the study of archaeology. Where inscriptions are lacking, stylistic relations and relations of physical association in the ground are the

two chief tools of investigation. In a number of instances archaeology has been able to work out a cyclic history of primitive arts more or less parallel to that of the historically documented arts, with archaic, mature, flamboyant and decadent phases. Spinden's treatment of Maya art (Peabody Museum, *Memoirs*, vol. vi, Cambridge, Mass. 1913) is an excellent case. The ceramic art of Nasca in Peru shows the same stages. The ultimate history is, however, quite variable. The Nasca art had passed its flamboyant phase when it was impinged on by the alien highland art of Tiahuanaco. It quickly became degenerate and soon died out completely. As the Tiahuanaco influence waned, a new local art grew up in the district, the so-called Ica style, which substituted textile-like geometric pattern and elegance of shape for the polychrome representative design and originality of form of the Nasca art. Aesthetically the Nasca and Ica styles have nothing in common, although their historical continuity through the intrusive Tiahuanaco style is established. In northern Peru the superb early Chimu pottery modeling and painting was displaced, apparently before its disintegration had commenced, by the same Tiahuanaco intrusion. But when this faded there was a genuine renaissance, and late Chimu came on the scene, a composite, eclectic style which retained many features of early Chimu but gave up its color and substituted varied elegance for the earlier imagination. The history of Peruvian art as a whole is one of replacement of originality by restraint; the last style of all, that of the Incas, is classically elegant in shape and severe, with floral suggestions, in design.

Maya art had passed through its archaic, mature and flamboyant stages when it was temporarily checked by a convulsion or readjustment of Maya culture as a whole. When it resumed, decorative tendencies were ascendant; representation maintained itself without becoming really decadent, although with loss of aesthetic vigor. Meanwhile, however, Maya art appears to have stimulated the peoples to the east, the Chorotega, and to the west, the Zapotec and Toltec. Both the latter achieved distinctive styles of their own of considerable merit; and on the Toltec was based that of the Aztec, which attained in sculpture a grandiose grotesqueness and severe exuberance. Chorotegan art, to the contrary, tended to lose both inner and outer meaning of form, perhaps because the general culture did not reach sufficiently intensive levels. None of the great American arts has been traced back beyond archaic, submature phases; the really formative stages remain unknown.

The question of the origin of the art impulse is a difficult one. It is not even certain that there is in man any innate impulse to express himself in visible art. The early efforts of civilized children to paint or draw prove nothing because they grow up in an environment of pictures, not to mention pencils, pigments and paper. It seems most reasonable to assume that there exists in man something of an inborn impulse to shape creatively, but that the form which this shaping takes is determined culturally. If a culture is pictureless no individual reared in that culture will attempt to make pictures and he may have difficulty in recognizing them as such on first experience. The problem cannot be answered categorically because no cultureless human beings exist. Observations on anthropoids, who seem to be wholly cultureless, show their fondness for draping swinging or vinelike objects on their bodies. The appeal here is primarily tactile or passively kinaesthetic, a heightening of body consciousness. Apes will also smear paint on surfaces, but without trace of design. The satisfaction in this case seems to be actively kinaesthetic and in the visual perception of the fact that an effect is being produced, much as an infant tears paper without attempting to shape designs. It is in impulses such as these, first kinaesthetic, then perhaps rhythmic, after a time with recognition of the visible rhythm pattern, that decorative art perhaps first began in man. Representative art may be a later stage of this development or a separate growth.

How far primitive folk derive an aesthetic thrill from their art is difficult to decide, because their cultures are not given to expressing finer distinctions in subjective states. It is clear that the artist derives satisfaction when his work is good and that the community shows quick appreciation of quality. A primitive community will as a rule esteem as superior the same particular specimens of its art which are highly valued by a civilized artist, collector or traveler.

A. L. KROEBER

See: ANTHROPOLOGY; TRADITION; MAGIC; RITUAL; ORNAMENT.

FAR EASTERN. *India*. The art of India is the art of many disparate territorial groupings, sometimes loosely independent, sometimes held

together by force of despotic imperialism, but never essentially unified. Differences in climate and soil, in racial make up and in language have emphasized the general oriental tendency toward localization of social and cultural organization. Absence of natural barriers between the several regions has, however, made possible the gradual interpenetration of cultural forms. At one time art forms may be found in significant evolution in one region; at another time in a very different region; but in the course of centuries such forms have been diffused widely over the whole peninsula. A history of Indian art, in so far as it is occupied with origins, will shift its attention freely from region to region, wherever the arts exhibit most vitality.

The most conspicuous of the integrating forces which have a definite bearing on the development of art are an almost fanatic veneration for tradition and authority and, closely connected with that spirit, a preoccupation with the ideals, the philosophy and the mythology embodied in Indian religions. There have been periods in the West, notably in the Middle Ages, when these characteristics have been dominant, and it is in the Middle Ages where the closest parallels with Indian life may be found. Mediaeval Europe exhibited the same communal idealism, the same preference for the traditional and authoritative, the same selfless devotion, as are to be found throughout the history of India except when the native temperament has been dominated for a time by foreign strength.

The themes of Indian art were customarily presented in the guise of religion. Love, nature, heroism, conflict can all find a place in the intricate mythologies that rise to flank a religion and give it secular intelligibility. In a hieratic art there is no actual limitation of subject but merely a difference in the spirit of approach. In India the concern of art was not the pursuit of beauty as an aesthetic abstraction but the revelation of beauty as a divine condition; not personal sentiment or self-expression but a rigorous adherence to a traditional hieratic canon. These have always been the characteristics of Indian art even when its theme or its purpose were not apparently religious, as in the crafts or secular architecture or occasionally even in painting or sculpture. Artists and craftsmen had a deity of their own, Visvakarma, in whom their skill was believed to originate, and they regarded their work as a sacred calling, to be approached in a spirit of divine devotion (*bhakti*) and with the intense concentration of mind (yoga) which combines the subject and object of creation, the worshiper and the worshiped. The artist was accustomed to meditate on his subject until the finished product was clear in his mind in every detail before he began actually to work. And every step of his procedure was made clear by the *Shilpashastras*, the divinely inspired books of rules which had been used for generations and which he had carefully memorized as part of his education.

The highly symbolic nature of Indian art is one of its most conspicuous qualities. This symbolism was an artistic medium of exchange founded in the ancient culture of the race and stabilized through long usage; it was not the eccentric invention of individual artists. If there was a resultant distortion of human attributes and proportions it was a distortion intrinsic in the mythology which inspired it, a philosophical rather than an artistic necessity. The artistry was in the handling of the problem when once it had been presented.

An art produced under such conditions of selflessness is naturally an art without names. Pictures were not signed; there was no concern for personal glory for the Indian was not self-conscious or egocentric. The dominance of the group is apparent in the inspiration, in the purpose, sometimes even in the very creation of his art. In many of the crafts there was communal workmanship, a product passing through the hands of four or five artisans in the process of its creation. Architecture developed through the talents of thousands of master builders, each one actually shaping his material and not merely following the explicit instructions of an absentee director.

It is likely that craft guilds in India were fairly well established by the sixth or fifth century B.C. From that time forward the craftsman had an assured position as the indispensable artisan of the village community, as the member of a well organized guild in the city or as the direct servant of the king or priest in palace or temple. He was thus assured of respect and protection and his position was established as hereditary, each generation instructing the next in the firmly established traditions of its calling. The painter, sculptor or builder also enjoyed the patronage of royal court or wealthy monastery. The caste of the artist varied, some even claiming spiritual equality with the Brahman priesthood, but whatever his caste he accepted it with the same unquestioning acquiescence

that he betrayed in the traditional character of his art. His caste was his foreordained lot and his duty (*dharma*), and it was alone through the performance of its requirements and the observance of its restrictions that he could progress to ever higher spheres.

It seems certain from later allusions and evidences of skill that painting, sculpture and even a developed architecture existed before Buddhism arose in the fifth century B.C., but they have left no remains. Buddhism was at first too abstract a philosophy to be an inspiration to artistic effort. It was also expressly anti-artistic, forbidding not only the representation of the Buddha himself but even of human or animal figures. As it became less austerely intellectual, however, in the course of its progress from a half dozen disciples to an entire nation, it became, to an image loving people, more adaptable to the uses of magic and mythology and the ever present desire to worship. Its doctrines were more fertile for an ultimate artistic development than were those of the contemporary Jain sect which, although intrinsically similar to Buddhism, remained faithful to a much more rigorous asceticism. When Buddhism was made a state religion by the ruler Asoka in the middle of the third century B.C., the process was definitely begun which would make possible a hieratic Buddhist art. Although the *stupas*, or reliquaries, and the stone pillars with inscribed edicts which were erected during his reign allowed little scope for creative imagination they did permit a religious symbolism. By the second century A.D. the Buddha himself appeared as a personal deity, although even then his image had almost certainly been used in private worship for some time. In the sculpture and in the great temples and monasteries which the engineering skill of that age was producing, the orthodox prohibitions were coming to be forgotten in the midst of generous endowments from royal princes and merchants and the pious enthusiasm of guild craftsmen.

There are sculptural remains at Gandhara, in the northwest of India, which date from the first to the fourth century A.D. and which have led many scholars to the belief that the primary impetus to early Buddhist art came from Greece. It has been fairly well established, however, that the Greek craftsmen of Gandhara were used by the kings merely for the creation of Buddhist art in an already established tradition. The quality of their work is below that of other contemporary Indian sculpture and its understanding of the subject is uncertain and even at times mistaken. There was also noticeable Graeco-Roman influence on the architecture of this part of India, but by the end of the fourth century practically all signs of these incursions had disappeared.

With the first of the Gupta rulers in 320 A.D. began one of the most brilliant periods in Indian art. The royal courts were the center of distinguished work in literature, music and drama as well as painting, sculpture and architecture. It was the period of some of India's greatest scholars. The courts were so renowned as centers of learning that pilgrims came from other lands to learn Hindu wisdom at its source. India's religion and art were having a profound influence in China, Korea and Japan, in Java and Ceylon.

This classical period represented a culmination of forces that had long been maturing. In religion Buddhism was fusing with the old Brahman theology and settling into the lines of present day Hinduism. Theme and manner in art had become familiar enough to permit a boldness and self-confidence of treatment, but not yet so familiar as to become habitual and formalized. Monasteries and temples were being erected in great numbers, and art had become recognized as an approved concomitant of religion. The cave paintings of Ajanta, which represent the finest remains of early Indian painting, were for the most part created during this period, although some of them can be dated as far back as the first century A.D. The themes of these works were taken from court life and religious legend, and their execution proves the fineness of taste and perception of which Indian art at its best was capable. At the courts the enthusiasm for art had gone so far that there was even some tendency to regard it as a social accomplishment, an attitude much more rare in India than it has been in the West; some of the rulers were themselves accomplished amateurs.

After the eighth or ninth century the development of the indigenous art of India was checked by a succession of foreign invasions—Hun, Mohammedan, Mogul, European. There had been invasions of the Huns from central Asia as early as the fifth century, but these first foreigners were absorbed into the native population. As the Mohammedans from the West poured into India, however, the entire country was thrown into a state of social as well as

political disorganization. From the eleventh to the sixteenth century India was plundered so completely by Mohammedan and Mogul that little energy was left for artistic creation.

The Rajput courts were the last great expression of Hindu polity. The splendid Rajput paintings which have been preserved are mostly of the seventeenth and eighteenth centuries, when the destructive phases of foreign invasion had ended. These paintings were also produced very largely under court patronage, but although they are essentially aristocratic in emotion and treatment they are in theme primarily a folk art. Every phase of the life of the people is represented—their interests, their activities, their mythologies, their naive but unsentimental emotions. Rajput paintings derived many of their themes from Vaishnava poetry, combining in an ingenuous way the motifs of daily life and sacred legend. The princes, refined and intellectual sometimes even to the point of mannerism, nevertheless shared and perpetuated in their patronage of the arts the religious ideas held by the common people.

The great period of Mogul art was largely contemporary with the best remains of the painting produced under Rajput princes. The Mogul dynasty began with Babur in 1527 and, under a lavish patronage of court and wealthy individuals, developed a splendid art which continued until the reign of the bigoted ruler Aurangzeb in the second half of the seventeenth century. After his death in 1707 the Mogul empire quickly disintegrated under the pressure of dissensions from within and European encroachments from without. Akbar was the greatest of the Mogul princes, both as ruler and as patron. He gathered together a great many painters, mostly Hindu, to make pictures for him and each week inspected personally the work they brought, giving rewards for the best. His son and successor Jahangir took great pride in his skill as connoisseur of painting and spent much of his time discussing over his wine questions of art with James 1's ambassador, Sir Thomas Roe, not even disdaining to bargain trading privileges in exchange for European pictures which pleased his fancy.

Mohammedanism forbade the worship of images and even the representation of living things, and this prohibition, although not always strictly obeyed, had much to do with the development of Mogul art. There was practically no sculpture and the painting produced under the patronage of the brilliant and dissolute Mogul courts was, for the first time in India, almost entirely secular in subject as well as purpose. Portraiture, the individual rather than the type, was held in high regard and so also were chronicles of court life and contemporary history. A great many of these paintings were signed by the artists. Calligraphy, an interest derived from Persia, exerted for the first time in India a noticeable influence on painting. As the Moguls continued in power, however, more and more of the Hindu tradition was assimilated into their art, and in the seventeenth century and afterwards the influence of a growing acquaintance with European art became evident. Under Aurangzeb all the arts suffered from his puritanical hostility and the wholesale vandalism which he directed. Even when artists found occasional patronage their work shows the poverty of spirit and inspiration which had come to them as a class. Mogul painting, although it achieved for a brief time a very high quality, was never close enough to the Indian temperament to remain vigorous when its immediate stimulant was gone. During the eighteenth and early nineteenth centuries, however, there was still genuine creative painting under the Rajput princes who had withstood the Mogul conquests.

Mohammedan architecture in India was, like the painting, produced principally by Hindu workers under Moslem patronage. In the twelfth and thirteenth centuries the masonic crafts, under the remaining Hindu rulers, had continued active. From the thirteenth to the sixteenth century thousands of Hindu masons were used by the Mohammedans, but a great part of their work consisted in destroying existing temples and using the same materials for the erection of Mohammedan mosques. These buildings were for the most part merely Moslem adaptations of already existing Indian traditions. Gradually, however, as the old materials were exhausted and as the first rush of temple building subsided there developed a more considered way of building. The new problems of construction and design were a stimulant to the Hindu craftsman, and the splendid architecture of later mosques and palaces, forts and tombs represents an integrated art no longer Hindu and Buddhist with a mere Mohammedan overlay. But the workers were under the stigma of slavery and many of them deserted their craft to follow the more profitable and more respected profession of arms. The vigor of architecture has been best preserved to the present only in territories outside the old Mogul dominion.

Great Britain's influence in India mounted steadily after the middle of the eighteenth century. By the end of the nineteenth century the cycle of genuine Hindu or even Hindu-Mohammedan art had entirely broken and India was submerged under the imported ideals of the British. Indian painting became little more than a callow attempt to reproduce what was conventionally admired at that time in the West. In civil architecture, under the direction of government officials, the ideal was an imitation, as realistic as possible, of current western architectural fashions with little more regard for native tradition than a cursory and condescending gesture toward native "ornament." Native taste was so generally polluted that the residences of the Indians themselves were built to look as much as possible like British barracks. Even the craft arts, which had hitherto retained a freedom of design and genuine vigor in spite of periods of hieratic stagnation and iconoclasm, were now degraded to cheapness and imitativeness. The magnificence of court life, to which the handicrafts of metal work, enamel, pottery, woodwork and jewelry had contributed so greatly, no longer existed, and the middle class Indian was not interested in indigenous products when he could have instead the glamorous commercial manufactures of the West or home made imitations of them. Moreover tourists and the export trade, instead of encouraging the old craftsmanship, reduced it still further by demanding cheapness in production and sensationalism in appearance rather than intrinsic merit. The decision that education in India should be conducted in English was to a large degree responsible for the weakening of the cultural traditions of educated Indians and resulted in a divergence between the ideals of the artistic castes and those who had always been their patrons.

Since the beginning of the twentieth century the initial confusion attendant upon foreign domination has subsided enough to allow the development of a more self-conscious analysis of the situation and a directed effort to meet it. The growth of Indian nationalism has resulted in the modern Swadeshi movement for the consumption of goods made in India. The textile crafts have been particularly encouraged and all over British India the presence of the hand loom is almost a symbol of Swaraj. Although the impetus of the Swadeshi movement is largely political, the spirit of nationalism is itself a necessary stimulus for any genuine return to the older ideals of craftsmanship. Indian music is still under the spell of western instruments, but literature and the drama have shown a conspicuous development during the past few decades.

The most significant modern art in India, however, is painting. The Calcutta School of Art has taken the lead in an attempt to reenforce the old ideals and to use traditional materials rather than affect an alien culture. It does not advocate conscious archaism or sentimental repetition, but is laying the basis for a vigorous national art which will not repudiate its own past but will use it instead as the only possible basis for the future. In the past ten or fifteen years the spirit which started in Calcutta about the turn of the century has spread throughout the country and India's contemporary painting is becoming recognized in the West as a significant national art.

ELIZABETH TODD

See: BRAHMANISM AND HINDUISM; BUDDHISM; YOGA.

China. Art as understood in the West is generally divided into handicraft and the fine arts but in China the dichotomy is usually literary and non-literary art. The three important branches of the former are poetry, calligraphy and painting. These have a common means of expression, the Chinese writing brush. Music, sculpture, architecture are non-literary arts. Since Chinese art has always been dominated by scholars and literati and since they have had greater influence in China than persons of other classes, literary art has always received the greater encouragement and respect from the government as well as from the community. Only poets, calligraphers and painters are considered real artists, while those working in other branches are regarded as mere artisans.

The invention of writing, which replaced the prehistoric knotting cords, the introduction of silk culture and the institution of state music, imperial palaces and military chariots during the reign of the Yellow Emperor (Huang Ti) about 2700 years before the Christian era marked the beginning of Chinese literary art. In the long Chow dynasty (1122–255 B.C.) both literary and non-literary art were under the supervision and inspection of the central government. The extant objects of art of the Chow dynasty and of the two preceding dynasties, the Hsia (2205–1766 B.C.) and the Shang (1766–1122 B.C.), are engraved bronze utensils, carved jade ornaments, inscribed stone monuments and

inscribed shells and bones. They show great skill and prove a high degree of artistic development.

After the abolition of feudalism and the union of China under an absolute monarch in the third century B.C. Chinese art developed chiefly through the encouragement and patronage of the various dynastic rulers. A new era was opened by the Great Wall and the numerous stone monuments erected by Shih Hwang Ti (the "First Emperor," 246–210 B.C.) of the Ch'in dynasty. The enlightened reigns of the two Han dynasties (206 B.C.–220 A.D.) increased the production of objects of art and improved their quality. Many Han relics of metal and jade articles, rubbings from inscriptions and drawings on stone are extant, among which the Stone Classics, the precursor of block printing, are of the most significance. The early intercourse between China and India which resulted in the importation of Buddhist classics and images to China (about 68 A.D.) marked the first foreign influence upon Chinese art. During the two Tsin dynasties (265–420 A.D.), when Buddhism became more powerful and popular in China and when China was constantly invaded and its northern part frequently occupied by the barbarian races, Chinese art underwent a remarkable change. It was greatly influenced by the Indians from the south and influenced in turn all the five conquering Hun tribes from the north.

After a period of disunion and disorder of almost three hundred years China was again brought together under the Suei dynasty (589). The T'ang dynasty (618–906) encouraged literature and art and produced many great calligraphers, painters and poets. There were visible Persian and Turkish influences on Chinese art. This was an epoch of expansion of Chinese civilization in general and of Chinese art in particular. All surrounding countries molded their lives and arts somewhat after those of China. Japan and Korea were the most pronounced examples. About this time the art of block printing was invented and perfected and despite another period of great confusion known as the Five Short Dynasties (907–960) printing and painting advanced.

The rulers of the two Sung dynasties (960–1279) rendered great service to the promotion of Chinese art, and the printing, painting and porcelain of these two dynasties have been the models of all subsequent ages. Moveable type printing was then invented and practised (1041–48). Sung art was more exclusively national and conventional than that of the T'ang dynasty. Through a long series of military conquests of China (approximately 937–1367) Chinese art permeated the conquering races but received very little from them in return for they had hardly anything to give. The last emperor of the first Sung dynasty, Huei Tsung (reigned 1101–25), was an artist himself and the greatest royal patron of pictorial art in Chinese history. He established the Court of Painters (Hua Yuan) and compiled the standard catalogue of all paintings then extant. Unfortunately his great art collection was partly destroyed and partly robbed by the conquerors when he himself was captured and his dynasty terminated. But all the great Sung masters during and after his time were either directly or indirectly under his encouragement and inspiration. The Yuan or Mogol dynasty (1280–1368) has been known as the golden age for drama and novel and also for a few noteworthy landscape painters. The art of the Ming dynasty (1368–1644) underwent another period of restriction and refinement similar to that of the Sung dynasty. Literary art, especially the scholarly painting of the southern school which was more idealistic than the northern school, reached its climax in the latter part of this dynasty.

The Ch'ing dynasty (1644–1911), that is the late Manchu, opened for Chinese art another period of expansion similar to that inaugurated by the T'ang dynasty. Racial absorption, military unification and literary enlightenment provided most favorable conditions. Literary and non-literary art alike achieved unsurpassed heights. The two schools of art, the northern and the southern, in opposition since the T'ang dynasty were united and the influence of western art became manifest.

Western influence has increased and has even dominated certain branches of Chinese art in the last two or three decades. In painting the old realistic school is revived with modern use of perspective. Oil painting is studied as well as water color. Monochrome landscapes give way to more decorative forms. Designs for porcelain, lacquer, metal and wood carvings, silks and cloths are accordingly modified and modernized. All new public buildings in the republic follow western styles of architecture and decoration. At the present stage of transition the imitation of the West and the neglect of her own culture are lamentable influences in Chinese art.

Calligraphy is one of the most important branches of Chinese literary art, not only because the language is composed of innumerable individual ideograms or characters but especially because the instrument for writing is not a stiff metal pen but a hair brush. This brush is also used in painting so that a similar technique and an equal skill are required in both cases. It is commonly believed by the Chinese that calligraphic writing expresses the character, disposition and inclination of the writer as well as his fortune and luck. To write well in the olden times meant success in official careers, for higher civil examinations depended largely on the mastery of calligraphy. Even in modern times it means an advantage in social distinction. Many Chinese made livings by selling their own calligraphic posters and scrolls as works of art and most of the great calligraphers were also great painters. Ancient calligraphies are treated in the same manner as are ancient paintings.

Chinese painting may be roughly divided into two classes, the T'u (drawing) and the Hua (picture). The former is a figure made of clear lines in likeness and proportion, such as a map, a portrait or an illustration; the latter is a painting in the true sense, more imaginary, generalized, idealized and artistic than the former. The oldest pictures we now see are rubbings of engraved drawings from stone walls of the Western Han dynasty and all belong to the T'u class. It is estimated that Hua painting was perfected as late as the Eastern Han dynasty (about the first century of the Christian era). Many famous paintings of this dynasty and of the period of the Three Kingdoms (221–264 B.C.) are recorded in the early catalogues, but none of them is extant. We have at present only some fragments of the works of the two Tsin artists and T'ang and Sung copies of ancient masterpieces.

The more conventional type of Chinese architecture is represented by palaces, temples and "yamens" and also by private mansions and residences. The buildings are usually separated into many groups, each having a courtyard in the center and four suites of rooms surrounding it. Not so conventional are the garden studios. They are most irregular and picturesque, with pavilions, terraces, stories, chambers, verandas, kiosks, arch "pai-lows" and bow bridges, all of different form; frequently there are also artificial mountains, tunnels and ponds. The marble stairways and colored porcelain tile roofs with gracefully curved eaves are typically Chinese. The pagoda although of Indian origin has long been a common decoration of landscapes in China. Chinese architecture generally uses stone for foundations, timber for frames, brick for walls and tile for roofs.

Sculpture as an art was never highly regarded by the Chinese, although their old examples are greatly admired by western artists. The ancient metal statues in the Chow temples and in the Ch'in and the Han palaces, recorded in official history, have long been lost or destroyed. There are in existence some gilded Buddhist images cast during the period of the Southern and Northern Empires (420–589 A.D.), huge stone images of men and animals guarding the graveyards and small clay figures (Yung) buried in the tombs since the time of the great T'ang dynasty or even earlier. Images of Buddha and of other Buddhist and Taoist deities have been made of all varieties of materials, but gold, silver, bronze, jade, stone and sandalwood are most common.

Jade is a special product of China and jade polishing and engraving are an important branch of her art. From the dawn of Chinese civilization up to the two Han dynasties jade was a common ornament for all occasions. Official ceremonies were never complete without the presentation of jade, and gentlemen always carried it unless they were in mourning. It was polished, cut and carved into various shapes, sizes and designs. Each was given a special name and used for a special purpose as either official or private ornament. Many ceremonial utensils and astronomical and musical instruments were also made of jade. Since it has become scarce in the last few centuries the ancient pieces have become rare and valuable. The material and the workmanship can hardly be replaced by later products. Official and private seals for government stamps, trade marks, family coats of arms and personal signatures are sometimes cast of metal but are more usually cut from jade or stone with character inscriptions and flowery designs. They are treated also as objects of art, and seal cutting is a special artistic profession.

Porcelain is another famous art of China. As early as the Chow dynasty porcelain work was under the supervision of the central government. The T'ang dynasty first established official kilns in various localities, the Sung dynasty opened the imperial kilns in the national capital and the Ming dynasty concentrated the trade in Ching Teh Chen, a special district of Kiangsi province, still the center of the industry

in China today, where the clay was said to be best for this purpose. Hundreds of kilns with myriads of artisans have been working there generation after generation. The hereditary professional secrets of the old systems have been combined with the high efficiency of management and minute division of labor which characterize modern methods.

Lacquer work is also old and famous in China. It has been greatly improved since the Sung dynasty and some articles of that period are still extant. The carved lacquer (Tiao Ch'i) of the Ming dynasty was the work of a painstaking craft. Among all eighteen provinces of China proper, Fukien is especially renowned for lacquer work. Other fine handicrafts worthy of notice are the glass thread weaving of Shantung, rice straw weaving of Kiangsi, bamboo cabinet work of Kiangsu and Chekiang, iron pictures of Anhuei, wood relief pictures of Fukien and ivory revolving balls of Kwangtung. All these works are the special products of their respective localities, not only because of the materials the places produce but also because of the professional secrets and skill employed by the native artists or artisans.

Weaving, brocade and embroidery are the branches of art chiefly mastered by Chinese women. The first two have lately been industrialized to a large degree, but embroidery as handwork cannot be replaced by the machine. Since the majority of Chinese women until very recently had no other occupation than housekeeping, the most interesting and intelligent task for them at home has been needlework and especially embroidery. Being their principal art in life it is not merely the manufacture of merchandise for the market. Embroidery flourishes in all the central provinces where silk is produced. Its designs, as those of other branches of Chinese art, are largely based on religious and historical motifs and have always been more symbolic than realistic. In the last few decades a realistic school of Chinese embroidery has arisen under the influence of western art.

KIANG KANG-HU

See: BUDDHISM; CONFUCIANISM; TAOISM; WRITING.

Japan. Art as an expression of the vital forces of social life seems at first to be more the influenced than the influencing factor. On closer investigation it is seen that in its expression of the rhythm and the energies of a culture the importance of art as safety valve for the general equilibrium should not be underrated, especially in the case of Japan, where the aesthetic factor is more prominent than anywhere else. More obvious is the importance of art as carrier of religious ideals, as broadcaster of national movements, as a living record of historical events and as the creative power stimulating every phase or detail of social life.

The Japanese Empire, in its enormous age and continuity as well as its close relation to art, has no equal in history with the possible exception of the Roman Catholic church. The mixture of Ainu and Mongolian blood in its population is responsible for a unique combination of the primitive intimate contact with nature and an uncanny ability to absorb and refine highly civilized forms of life.

The religious history of the country is of no less importance. Shinto, a naturalist religion, with its commandment to obey the mikado and its worship of the sun (Amaterasu) and invisible spirits (Kami) had no need for statues or pictures. But after the sixth century, as the different forms of Buddhism entered Japan from China and Korea, there arose new opportunities for the exercise of creative imagination in the portrayal of the gods. Buddhism, in its early pure form, which is essentially anticultural, never reached Japan. Among the six great and thirty-six minor sects of Buddhism in Japan, many developed elaborate ceremonial forms of worship necessitating innumerable idols, sculptured and painted. Architecture had to supply the stage setting for their rites, temples, treasure houses, monasteries. Ryobu Shinto, which arose in the eighth and ninth centuries, combined both Shinto and Buddhist deities in its pantheon and resulted in the popularization of Shinto Kami in art. The oldest painting in Japan (beginning of the eighth century) represents the first Buddhist missionary. During the great periods art concentrated mostly on the representation of the major and minor deities of the different Buddhist pantheons, but Hinduistic influences also found their way into Buddhist art.

The Shingon doctrine, introduced into Japan early in the ninth century, recognizes art as one of the noblest ways of reaching perfection in the Buddhist sense. The power of the spirit over the body and the translation of the invisible forces of the universe into a visible material, as demonstrated in art, were the reasons why to many idealistic minds the training with chisel and brush was a nobler, less egoistic kind of yoga, or union with the divine, than many other

disciplines which prescribed torturing of the flesh or concentration on breathing and other physical exercises. Technical perfection and aesthetic refinement were to them spiritualization of matter. The mandaras—hieratic Shingon paintings introduced from the continent—were sometimes elaborate compositions dealing in a symbolic way with the great cosmic principles and their order in the universe. They were objects of concentration for the training of the mind. The life of Buddha himself, however, was comparatively seldom the motif of pictures in Japan.

In cult objects a severe language of symmetrical, sacramental, impersonal treatment was used, approaching abstract purity of form as far as the subject would allow. The color was often rich and bright with much gold. In Shingon Buddhism colors were related to the "different stages of contemplative ecstacy, rising from the black through the blue, the yellow, and the red, to white, the pure and radiant source" (Binyon, *The Flight of the Dragon*, p. 90), but we also find colors associated with east, west, north and south, with the seasons, musical notes, wood, fire, metal, earth, water, emotions, the senses and flavors. Thus almost everything in life was linked up with the language of art.

The power of vision, the ability of the individual to identify himself with the divine, gave incredible prestige to the artist in the opinion of the Buddhist population. He was looked upon with awe and his work was at times regarded as the very incarnation of divinity. It is hard for western minds to realize the tremendous influence of art on the mind and life of a nation which for so many generations did not look upon art objects as decorations, utilities or objects to please their senses. The story of the erection of the colossal Roshana Buddha of Nara (known as the largest cast bronze statue in existence) may illustrate the tremendous importance of art in the national life during the Nara period (709–84). Giogi, the famous monk, carried to all parts of Japan a proclamation of his Emperor Shomu announcing the project of the statue. The text said, "It is our desire that each peasant shall have the right to add his handful of clay and his strip of grass to the mighty figure." The statue was planned to be the center of the Buddhist universe. The emperor and the whole court assisted at the erection and ladies of the highest rank are said to have carried clay for the model on their brocaded sleeves. More than twenty thousand Japanese pounds of gold were used to cover the statue (Okakura, *The Ideals of the East*, p. 122–23). The history of Europe offers no parallel to this illustration of the importance of art in the spiritual life of a whole country.

In sharp contrast to the style of the sacramental art of sects which grew out of Mahayana Buddhism is the art which took its inspiration from Zenism, a Buddhist sect which incorporated much of Lao Tsu's older doctrine of Taoism. Bodhi Dharma, an Indian prince who went to China as a monk in 520 A.D., introduced the Zen sect there, but it was not until the thirteenth century that it became established in Japan. The Zen was the "contemplative" sect and its severe doctrine knew no gods or powers outside of one's soul. The only Buddha that the individual could reach was in the center of the heart. The only road to salvation was merciless discipline, self-control, concentration on the treasures of the inner divinity. It was another attempt to free the soul from the weight of names and formulae or superficial knowledge. Like Lao Tsu's ideas the preachings of Zenism were of an anti-artistic and contracultural nature. Yet in the hands of the Chinese and Japanese they succumbed to the creative urge of those races, and after a period of almost iconoclastic character art became the very voice of those doctrines. The soft hair brush, which registers the faintest irregularity of the pulse and the slightest weakening of the will power, became an ideal instrument. With black ink, avoiding colors entirely, the artist concentrated on the power of the brush stroke in calligraphy and in painting, seeking not imitation of objects or facts, but the spontaneous inspired creation of indefinable rhythms, subtle relations between light and dark (notan) and the divine something which is life. Grass, birds, landscapes or figures could be the objects. With no rules to be learned, with no possibility of explanation, one had to develop one's personality in order to paint or to appreciate art. There could be no pretense. People had to learn and grow toward art.

The Kamakura period (1186–1394), which began with Yoritomo's establishment of the armed supremacy of the shogunate and the development of the samurai ideals of heroism, self-control, sacrifice and absolute devotion to their daimyo (chiefs), created a perfect background not only for Zen art but for the expression of a similar spirit in every function of life. Cha-no-yu, the tea ceremony which grew out

of this spirit, represents an unsurpassed form of refined social life and the most spiritual attitude toward art as its center. Compared with this sensitive cult of art the display of pictures in museums and collections and many other forms of art appreciation seem almost barbaric. Cha-no-yu influenced manners, costumes, the home, architecture, ceramics, the cult of flowers, gardening—everything that went into the life of the community. People became so sensitive that everything had to be a perfect aesthetic performance. "Our etiquette begins with learning how to offer a fan, and ends with the rites for committing suicide" (Okakura, *The Ideals of the East*, p. 176).

The Ashikaga period (1394–1587) brought forth great patrons of art. Sesshu, the Zen priest, towers above a long row of famous artists of that period. In that age of culture and refinement music grew out of the archaic Bugaku and developed into a mature national expression. The No dances, with orchestra and chorus on the stage, became a part of national life. Naturalism was here despised and subtlety of suggestion appreciated. The art of the mask for the chief actors was also developed to great perfection. The audience, attending performances which continued for a whole day, was likely to carry home more lasting influences from the stage than in the Occident. Ceramics, lacquer work, ivory carving, the art of the sword and its symbolic ornamentation had their significant place in social life and its etiquette. The Korin school (Koetsu, Sotatsu and Korin) expresses that spirit in both painting and applied art.

During the seventeenth century as a result of political conditions the lower and middle classes started to participate in the cultural life of the nation. Art became more secular. The Ukiyoye genre school, with its appreciation of worldly existence, the Shijo, Maruyama and Ganku schools, moved constantly further away from a spiritual toward a sensual conception. The development of the color print made it possible to reach a more numerous and less idealistic audience. Portraits or caricatures of actors, landscapes, genre scenes and figures advertising the charms of courtesans and popular houses of the Yoshivara, endless series of pornographic scenes, became very popular. Finally Japanese art succumbed to the influence of occidental art and played a part which has not been fully recognized in the westernization of Japan.

The first artists in Japan were Chinese and Koreans, immigrating in the seventh century with Buddhism. They were treated like honored guests and teachers. During the Nara period and later, artists were frequently powerful priests of great social and political influence. As in China they were exalted as spiritual leaders, as personifications of the divine. With the awakening of national consciousness during the Fujiwara period (898–1186) the artists gave to the country a real Japanese style independent of China. Afterward they became clever artisans supplying luxury and magnificence. In the last two centuries art has become more and more dependent on the buying public, and the artists have lived through humiliation and tragedies as they have in other countries where art is at the mercy of the vanity and ignorance of customers. At the present time, however, it should not be overlooked that Japanese artists have become prominent members of European and American art life.

LEO KATZ

See: SHINTO; BUDDHISM; YOGA.

NEAR EASTERN. *Egypt*. The personality of Egypt developed, inbred, for tens of centuries; it reached a climax and stiffened to an age-long formula. It symbolized itself in pharaoh, it acquired self-consciousness in the priesthood, it found the object of living in the preparation for another life. In all this it was severely practical, was not satisfied with ideas or symbols, always demanded facts. Granted these, Egypt rejoiced in whatever freedom the hierarchy of god, king, priest and noble permitted to the individual, who, from the evidence, was not generally unhappy within his limitations. The sure future compensated for the present.

All the secret of the art of Egypt is in the reaction of the national personality to the forms of the Nile valley, human, animal, floral, geologic. But we must insist upon the practical. What we now recognize as the work of art was not fashioned from any desire to create beauty —beauty was but incidental. Living animals were gods, but they were transient even as human life was transient, even as the mummied body was unstable. It was the business of the artists to serve eternity, to erect stone gods and temples for their residence and worship; to carve stone bodies for the dead and secret impregnable fastnesses for their hiding places. Beyond these major needs the result of art was in the embellishment of both eternity and

daily living. That there was consistency of art throughout the millennia of Egypt's life is evident in any comparison of architecture, sculpture, painting and the lesser craftsmanships. Dictated by the priests, the ideas which regulated the choice of form changed slowly; the national personality seemed almost a constant factor. The individual personalities which made form tangible were grouped as schools of artists in many of the larger cities, one or another dominating with the changes of royal power, but all compounded from the essence of a culture which never doubted the ideal and never contradicted the suggestions of environment. This consistency of ideal and personality resulted in a consistency of technique which merged the functions of the fine arts. Every art had its own perfection and stiffened to its own formula, but sculpture was painted, painting was often outlined by the chisel or modeled and architecture was carved and painted until columns and interior surfaces became vast continuous panoramas of Egypt in all the details of her life, her daily joys and sorrows, her wars, her worship, her practical common sense.

Egyptian artists attained their desires largely in stone forms and reached astonishing mastery of material, yet they sometimes failed in the translation of perceptions to plane surfaces. They did not understand perspective, but they discovered some geometry and applied it to their structures. Building was the royal art; the highest nobles assumed the title of architect with pride, although probably mere matters of practical accomplishment were left in better trained and more plebeian hands.

The several thousand years of artistic effort have been taken casually as a dead level of production, almost stagnation. This was not true. Granted that the social and religious forces which regulated the work of art encouraged formula to minimize experiment, the result of formula was to link periods of great attainment with intervals of standard average rather than to permit of degradation. We do not know beginnings. Egypt emerges from the sands with promise of her mature personality. The Old Empire, centering perhaps three thousand years B.C., the period of the pyramids and of the Sphinx, produced the most human and the most superhuman sculpture. Artists were keen to fix the actuality of life, to fix the nobility of royalty and eternity. The later formula was based upon these efforts. After the capital had shifted southward to Thebes with the opening of the New Empire, lesser men were satisfied with the practical results already achieved in stone, and sculpture stiffened while it often remained gigantic; architecture created tremendous temples, forested with columns; painting became more luxuriant with Egypt's self-revelation. The reign of Rameses II, roughly 1300 B.C., saw the ultimate magnificence, the apogee of bigness and of color, but except in the handling of the painting brought a definite decline in workmanship. This was the turning point. Formula gripped the nation and stifled art to a gradual extinction, but extinction was very slow and illumined toward the end—in the seventh and sixth centuries B.C., the Saïte Age—by a charming recrudescence, by a return to nature, to softer forms, to a more human point of view.

Tigris-Euphrates Valley. Where Egypt could be consistent in her mental isolation the states of the Tigris-Euphrates valley were subjected to the flux of conquest. Perhaps as old as that of Egypt and with some conjectural connection in beginnings, art responded to a different need in these potentially business minded city-states. For Egypt art bridged the gap to eternity; here we have little evidence that it was essential in the expression of the people. Ur, Kish, Tello, among many in Sumeria, and, later, Babylon were cities of the plain where stone was scanty. Architecture when it rose above the general level of the mud built houses was piled in brightly painted terraces of brick which have subsided to the plain again, hiding treasures only gradually exposed by excavation. We have jewels, bas reliefs and some sculpture in the round, almost all funereal, which may account for the general smallness of the scale. We see the results of real power of observation, considerable decorative sense and an evident love for color, texture and ornament; we feel a commercial culture developed by a stabilized nomadic population, but to the present we have found in the works of art no organic self-revelation of national personality.

Assyria conquered the river valley. Her great period began in the ninth century B.C. She assumed the culture of the related peoples she subdued, but she concentrated the expression of its art into a glorification of her kings: their gods, their wars, their pleasures. She continued the brick constructions, and many of the works which have survived are decorations of immense colorful palaces. The scale was increased. There remain guardian monsters, animal, human, superhuman, and there are tremendous, sig-

nificant reliefs, stiff row on row of profiled dignitaries, which reveal the tensity of the warlike Assyrian mind in the cruel preoccupations of her rulers. Assyria persisted in the accuracy of observation she had learned from her predecessors and, particularly in the delineation of animals, she carried truth and action beyond formula. She, at least, stamped her personality upon the stones she carved but her ideal did not carry beyond the physical desires.

With the later eastern empire makers, Medes, Persians, Arabs, Turks, where dominant racial personality shifted so easily, where extent of empire broke down consistency of environment and where change of power prevented personality from growing with environment, the works of art became eclectic, more or less haphazard compilations of borrowed ideas and motives. Persia softened and humanized the Assyrian brutality, lightened her fortresses with columns, added some grace to the heavy sensuality, was reacted upon by Egypt and adolescent Greece. The creative power of Asian art flickered between the contradictions of the importations.

And yet this eclecticism was not unfruitful. Egypt in her consistency completed herself, but from the very incompleteness of the Asian statements there were suggestions for the future, decorative motives, the Ionic luxury, the beauty of tile encrusted walls, the arch, the dome, the pointed arch. The old East, gorgeous and unstructural, in her hurry of changing conquest used facts without philosophy and left them not too much hampered by the stamp of her personality.

SEWARD HUME RATHBUN

See: ARCHAEOLOGY.

CLASSICAL. Classic art, literally, was the creative activity of fully developed Greece and Rome. The term classic has come into use since the centuries of the Renaissance found their canon for creation in the precepts of antiquity, and has gathered to itself a corollary suggestion of cold exterior finish which has little in common with the original.

Greece. Greek art produced a transcendent expression of that overtone from all conflicting and harmonizing individual personalities which we call national personality. It combined philosophy and religion and made both human; it drew from the past of its own environment, from Egypt and the nations of the nearer East and made a statement so purely Greek that without an analysis of beginnings it seems a miracle, an unparented creation, sudden born, as was Athene, to full maturity. The only miracle was that a gifted race developing on the complication of its past found clarity of vision and the full use of its creative faculty.

The homeland of Greece, a tangle of barren mountains and fertile valleys, scattered its outpost islands at the focal center of ancient civilization. For centuries it harbored a culture parallel to that of Egypt and of Asia, a culture which materialized in massive structures, frescoed walls, carved jewels, well wrought gold and bronze; a culture that only recent excavation has brought to light from behind the fog of myth which shadowed it; a culture already in stagnation when the Hellenic tribes, uncouth and warlike but virile, descended on it from the north, jostled the inhabitants, pushed them to the islands and the shores of Asia, killed them, bred with them and were civilized in turn by example and inbreeding. The result was Greece in all the complexity of its scattered centers, often antagonistic within the claim of cultural unity, always disdainful of the old nations which ringed the horizon. The old East had fed itself on intuition and evolved a gorgeous mystery; so far as Greece could go she faced reality and set up an intellectual standard of beauty for all time.

The climax of attainment in the realm of pure intellect as well as in the more human and more inevitable realm of art was reached by Athens, and in Athens by a few exceptional men; but the glory is not all for one city or for one group which lived almost within a generation. They culled the flower, but centuries of Greek rivalry were in the growing and more than centuries of older personalities matured the soil. It is significant for all Greece that the first archaic works of art resulted from an influence seeping back from the conquered peoples who had been driven eastward, and this is doubly significant for Athens since she boasted an existence unbroken by northern conquest. Athens turned her sympathy toward Ionia, but she was a polyglot whose unity had been attained by the absorption of the varied clans on the Attic plain into the power of the central citadel under the aegis of Athene. The virility of Athens, the clear vision, the power of definite expression, the intense love of beauty resulted from the most fortunate racial complication. In the end Athens could express Greece. Her expression was the result of conflict, conflict between ideas at home, conflict for mastery

with her neighbor states, conflict for existence before the power of Persia. The final statement of Athens was the paean of a city which had saved reason from the vortex of dogmatic mystery.

Greek religion was a mass of myth to explain nature and the desires, passions and fears of men; even in the earliest expression Greek imagination had formulated myth and the gods were distinctly Greeks. Philosophy and the work of art had their inception in religion and the direction of their development was implicit in the Greek mind. Formulation, ever increasing definition, characterized the method of creation. The mind which personified the gods in its own image civilized them as it visualized the relationships of life. There was conflict here as well. The gods lost power; philosophy erected systems which rationalized the immortals and left them unsubstantial in a skepticism of conjecture where mind ran shallow amid the maze of its definitions. But there was a moment of tremendous balance when religion dignified by intellect met intellect restrained by some real passion of belief and germinated the greatest expression of ideal in pure form that the world has seen.

Art served religion but followed the inevitable method of definition. It was swept onward by philosophy, reasoned, suspected in the general skepticism, questioned in the systems which found the aim of thought in the relationship between citizen and state. But this intellectualized artistic function resulted from the moment of climacteric balance rather than aided it and was more pregnant for the aesthetics of the future than participant in the Greek glory. Also it was preoccupied with the non-plastic results of art, with music, the dance, the drama. For the plastic arts of Greece we can ignore it so long as we remember that the mind which argued the aesthetic was the same which defined the ultimate form and was the same which permitted reason, too fine spun, to carry form beyond ideal to degradation.

We must understand the work of art from the remains of sculpture and of architecture. No great painting has survived, and indeed the finest statues are but memories, the most perfect buildings shattered and colorless. Time has taken the exuberance of personality from the Greek statement and left us a few fragments of organic form which many of us find cold until we look beneath the apparent coldness and find that exquisite sensitiveness of vitality which is immortal no matter how far the fires of youth have receded from it.

Greek sculpture and Greek building, since they were true expressions, paralleled the active facts of history. There was the age of fluctuating myth, solidifying here and there as we read its background, whence the semi-divine Daedalus projected half substantiated powers of craftsmanship to light the spark which should forge the completed bronze. There was the dark age of consolidation during which Greece searched for her self-consciousness and during which the germ of the man-god's image was latent within stone or rough hewn log. Dim creating figures were present, piling huge walls, fanning the spark which Daedalus had lighted or kept alight. Greece dreamed a past in which giants wrought; but indeed the Greeks bred giants from themselves and suspected that as well; there was no mawkish modesty in them and no sentimentality but always the urge for clarity of perception, for definition, for light. They lived intensely, truculently, often cynically, but they lived boyishly and built above the facts of life a boy's ideal which in itself was art, an ideal crystallized in the terms of excellence and beauty; excellence of mind, reason, intellect; beauty of body, muscles, action, texture; excellence and beauty interacting to produce that moderation, that rhythm of living, that intersaturation of mind and body which was the acme of the ideal. That this ideal emerged, unprecedented, sudden, against the background of barbarity, that art took at a single bound the final leap in its expression of the ideal, is the seeming miracle of Greek culture.

We visualize the dawn of sculpture about 600 B.C. The nude, flat planed Apollo stands like a Greek youth undeveloped, hesitating at the gateway of the primitive palestra; the smirking woman serves her goddess or her lover in the archaism of a prudery which echoes luxuriant Asia; the shrines are heavy with bulky columns and overswelling caps, their pediments filled with stiff, crudely painted deities and monsters. But Apollo entered the palestra to emerge vigorous, subtle, molded into that ultimate perfection of muscle and sinew which Greeks, training in nakedness for generations, knew and loved as no other race has done; the woman forgot Asia and became a maiden—or a goddess; the shrine was refined, proportioned, harmonized, with every detail interacting and fashioned to its purpose. Within two hundred years Greece reached the climax; gods and goddesses,

centaurs, heroes, athletes crowded the temples and the sacred precincts, for religion was still the center of that humanity whence art, tangential, reached to the ideal beyond religion which humanity had found within itself. Great names and great works multiplied; although somewhat scorned as manual workers, yet artists were among the favored with princes and city leaders; groups of pupils gathered round the masters to become masters and push the definition of the ideal to a yet further plane. Myron, Polyclitus, Ictinus, Phidias; the discus thrower, Athene Parthenos, Zeus of Olympia, the Parthenon; bodies of youths, bodies of gods, dwellings of gods. Bronze and marble and ivory and gold lent their textures and their colors where paint was not deemed necessary, but paint in many ways persisted; there was nothing cold in this first beauty of expression, but all the glamour of youth to temper the austerity of the ideal.

To illustrate this matter of ideal from the Greek expression we can find the excellence of mind in the philosophy, the rest in the work of art, the human beauty in the sculpture, the interpenetration of mind and body in the building which so balances form and reason that it totals the Greek synthesis. Ictinus, the architect, and Phidias, the sculptor, Athenians, contemporaries, stood at the apex. Before them struggle for freedom, struggle with perceptions, struggle with materials, steadfastness of ideal; after them political degradation, easy mastery of technique. relaxation. That last so carefully maintained reserve of generalization which kept the essential statement of humanity free from all idiosyncrasy of the individual was cut away. The god preferred the pleasures of this earth and frankly deserted Olympus. Passing emotions, sorrow, pathos, joy drove the serenity from his eyes; soon he was just a little in need of exercise. But he was very charming. Greece had not lost her power over form; indeed she loved it a bit too well and put it before ideal. Still the great names persisted; Praxiteles, Scopas, Lysippus carried on all but the summit of tradition, ennobled the Greek statement as the nation sank into servitude, imbued form with an idea which if it was less immortal in austerity was perhaps more easily understood by the conquered peoples when Alexander spread the influence of his Greek subjects throughout a supine world.

As the period of decline advanced, architecture and sculpture, open to the same influence, separated in their results. Sculpture softened, became restless, illustrative, personal; architecture stiffened to an attenuated dryness in which straight lines replaced the vital curves. Even tradition broke. The barrier between Greek and barbarian was dissolved, civilization was in flux; emotion, intellect, reality, mystery, acted and reacted on minds questioning the hitherto sequestered dogmas of nationality. Culture was sophisticated over an abyss of contradictory elements which were beginning their long preparation for the Christian synthesis. Art lost its grip on everything but form, spread far, but like thought ran thin in its many channels; it created a god with less devotion than it fashioned a king or general, was given a goddess to create and presented a harlot. The spirit of Greece was licentious on the one hand, arid and academic on the other, before Rome looming to the westward swept forward to the final slaving of the Greek lands and confronted with the limited intelligence of a commercial mind the already ancient glory of the most lucid moment that art has ever known.

Rome. Where Greece created Rome was satisfied to seem to copy. But even the visualization which attempts to reproduce is a sort of art, eventuating some added personality, and Rome had too positive a nature to succeed in copy. All the elements of Greek art as Rome saw them, elements of greatness as well as degradation, were transplanted to the Italian city which had not the power to discriminate. Greek works of art which had made an ideal tangible and which had been worthy offerings to the best spirit of the gods became the passing interests of rich collectors, were reduced to being parts of the ostentatious decoration in buildings shingled, unstructurally, with Greek structural motives, buildings which pampered the luxury and the pleasures of the people. Greek statues were imported, Greek craftsmen set to producing replicas more matter of fact with each sculptural generation. Art was subjected to waves of eclectic fashion, was even forced to a sophisticated archaism, aping simplicity to tickle the jaded tastes of the connoisseurs. But this after all was surface and there were other elements, Etruria, Egypt, Asia. Rome had the force to hold the whole disjointed world together, she had the power of arms and wealth and law. Art was not her great concern, but as she used it for a toy she stamped her personality on certain phases and did create.

Portraits are works in which art has become

commercial. They are frankly commodities ordered to please the vanity of the buyer, limiting the creative function of the artist by an external mind. Rome seized upon the secularizing and personal tendency already active in the Greek decline, developed portraiture and carried it to a point which has hardly been surpassed. The individuality of Rome confronts us in the heads and figures of men and women and youths, noble, cruel, empty headed, vicious, cut with all the lingering Greek power over form, incisive from the need to portray life to the satisfaction of the sitter and yet suggesting little of flattery. Rome was too strong, too proud, even in her viciousness, to desire her image softened in stone or bronze. Hers was the power, she was ready to stand on facts.

And this quality of portraiture was carried into further types of statement. The monuments set up to acclaim the victories of the emperors bristle with the robust vitality of the nameless individuals of the legions, with all the hard life of camp and conquest. There is nothing of ideal here, no possible connection with religion; even when the emperor offers sacrifice it is the emperor and his soldiers and the victim; the god is absent. Rome moralized the Greek deities, carved them as allegories, found them uninteresting and neglected them except in the formalities of statecraft. But in these intense bas reliefs where the soldiers twist upward from the bottoms of the columns she fixed her worldly self for as long as the stones shall last, fixed her lust for power and wealth in the sharply cut stern faces and sturdy pushing bodies.

But in the result Rome stood for a greater thing than her desires. Where Greece created philosophy Rome developed law; where Greece found her ideal of form in the perfect body Rome built roads; where Greece strove toward an ideal of human relationships Rome left a tradition of stability and order. Rome was the first great engineer among the nations, politically, materially. Under the tawdry colored marbles, statues, plaster decorations of her buildings there was a substantial core where real imagination had suspended brick and concrete in vast domes and vaults. When Rome envisaged art she was proud of the gorgeous riot of her own ineptness; she hid the new and tremendous balance of constructive forces. But as the increasing poverty of the weakening political fabric forbade the trappings some suggestion of a new synthesis between form and meaning became apparent. The architecture of the decadence was a more starkly Roman and a more creative art. Rome grasped Christianity too late to save herself, but she grasped it at a time when her own expression was shorn of pettiness, when even the degradation had a latent structural nobility.

Christian art developed from Roman art largely through the medium of architecture; it developed in the East rapidly as Greece reasserted her traditional power over form; it developed more slowly in the new Gothic West, but it reached a climax of attainment, building on Rome's structural suggestion, which made it the peer of Greece. Greece set an ideal of beauty in defining form; that was the imperishable glory of her art. It was Rome's more practical function to gather seemingly incongruous elements, to hold art in suspension until the Christian ideal was mature to begin that tremendous expression of spirit which should complement the human beauty of the Greek.

SEWARD HUME RATHBUN

See: CLASSICISM; MYTHOLOGY; ARCHAEOLOGY.

MEDIAEVAL. Early in the fourth century the youthful vigor of Christianity was permeating the highly organized but decadent classical civilization. In the East repressed indigenous energies were finding release; in the West invaders with primitive vitality were bursting the frontiers. It was the interpenetration and transformation of the older order by these dynamic forces that determined the culture of the Middle Ages and hence its expression in art. As the controlling power throughout this evolution was the church, art was predominantly ecclesiastical.

Geographically this evolution followed two lines, the eastern and the western. The eastern, the Byzantine, freed from Rome, unshaken by invasion, with learning still fostered, developed stably through a fusion of Hellenic, Roman, Near East and Christian elements to an early climax in the reign of Justinian (518–65). Iconoclasm and influences from Islam strengthened incipient tendencies: conventionalization of form, secularization or suppression of sculpture, development of symbolism and emphasis upon geometric and naturalistic ornament. Although the classical revival connected with the second climax (tenth to twelfth centuries) tempered rigidity, individual imagination was strictly limited by the authoritative forms established by the church. Within these limitations, in fact because of them, art reached a lofty height of craftsmanship and intensity of expression. In

building, the central type was most characteristic: Greek-cross in shape or polygonal and domed. The uninteresting exterior hardly suggested the contrasting aesthetic wealth within which resulted from the effectiveness of a boldly simple design of curves culminating in a dome, and from the luxuriant but subordinate decoration of colored marbles, gold ground mosaics, lacelike carvings; gold, silver, ivory, enamels and jewels about the sanctuary. Of these decorations mosaic reached an extraordinary synthesis of craftsmanship, decorative quality, didactic and religious significance. The technical demands of the medium as well as current traditions required stern simplification, which enhanced the decorative quality; the encrusted walls were an open book for the education of an illiterate people; and the dull splendor of harmoniously massed color and gold with hieratic figures seen in dim interiors had a peculiarly evocative power equaled, if at all, by early Gothic glass.

In the more thoroughly Romanized West the breaking down of the frontiers resulted in chaos. Hence reorganization required not only the stimulus of a new faith but the evolution, through the fusion of a primitive vitality and a ripened culture, of a new social order, which is reflected in the art expression as it moves from a primitive early Christian (first to sixth century) through an archaic Romanesque (sixth century to 1150) into the Gothic climax (1150–1550). In building, although examples of the central type occur because of strong Byzantine influence, the basilica type predominated largely because it suited liturgical needs so well. The plan was rectangular with a nave flanked by aisles, terminating in an apse; usually with a traverse aisle, an atrium and a campanile. The roof was usually wooden, partly from economy and partly from the loss of Roman skill in vaulting. The early Christian basilica was like the life it reflected: it presented a plain, rough exterior to a chaotic world, but with its rich interior decorations of marble, stone carving, frescoes and mosaics it afforded a quiet, enfolding security and stimulation within.

As disorder increased, Europe in the Romanesque age became largely a rural society with almost no intercommunication. Two resultant institutions were preeminent: monasticism and feudalism. The social religious monastery, a complete community in itself, produced the abbey church and the handicrafts of its shops. Feudalism contributed its ideal of chivalry, expressed in the *Song of Roland* and in the Arthurian cycle. About the year 1000 a burst of religious zeal characterized by pilgrimages and accelerated by the adventurous spirit of the knights culminated in the crusades which hastened incipient movements: a revival of intercommunication, the rise of towns and revolt from feudal lords and the extension of commerce and industry under the control of guilds. Along trade and pilgrimage routes traveled ideas and influences which stimulated art expression.

The rise of nationalities and differences of climate produced a variety of styles, but two general tendencies may be discerned in the revival of vaulting and of sculpture. The first concerned the need of a permanent fireproof roof for the basilica. In Lombardy especially, courageous attempts were made in rib vaulting which later, along the Rhine, in Normandy and England because of close relations with Lombardy, reached the Gothic solution The second tendency concerned new decorative schemes which refined without loss of vigor, reflecting the amenities which the barbarians were acquiring from the Mediterranean culture. In Italy this consisted of external arcadings, marble inlays and Cosmati work with geometric and fantastic motifs often Byzantine in origin. In France and Spain, in the deeply splayed portals carved with naturalistic and fantastic subjects both sacred and secular, the human figure appeared. In this reviving sculpture, as in the stylistically similar manuscripts and ivories, may be seen now the traditional sobriety of the late classical and Byzantine work and now a new life of extraordinary movement and emotional content. Romanesque, serious and monumental, partly savage and transfused with eager venturesomeness, is significant both for its own imaginative vigor and for the impetus which it gave toward a complete welding of classical, barbarian and Christian forces into Gothic.

Gothic, although widespread with local variations, was essentially French. Its loftiest expression was the cathedral, that perfect synthesis in stone and glass of community strength, religious zeal and intellectual vigor. More efficient kings, a curbing of feudal abuses and the rapid growth of towns laid a stronger economic basis and inspired a newly awakened civic strength. Religious intensity had its roots partly in theology and mysticism revealed in liturgy, sculpture and glass and partly in the popular worship of relics, pilgrimages, miracle and mystery plays and the stories of the Golden Legend. Intel-

lectual life busied itself vigorously with the subtle logic of scholasticism and with encyclopaedic knowledge applied to the doctrines of the church. It was the community church, the cathedral, that dominated and revealed all this life just as physically its bold mass soared above the huddling town. Stand before Chartres, Notre Dame or Amiens. Broad deep portals invite entrance and form a strong base of shadow. Line and light and shade move insistently upward. Within, the long, narrow, lofty nave is molded by vertical lines and pointed arches which carry the eye rhythmically upward into the shadow of the vaulting and down the deep vista of the nave to glowing masses of intense color. Only a strong economic basis and a resolute community spirit linked with religious enthusiasm could have carried on the building of such structures generation after generation toward a completion which was never entirely fulfilled.

The Gothic plan was an elaborated basilica; its structural principle, a skilful balance of thrust and counterthrust between the vaulting and its support, in which walls, having no functional value, disappeared, their place being filled by stone tracery and glass. Important in the complete synthesis were the glass and the sculpture concentrated about the portals, both fulfilling the requirements of architectural fitness and didactic need. The glass, most perfectly preserved at Chartres, not only filled in the sides of the structural framework, insuring seclusion, protection from the weather, and the light needed in a northern climate, but frankly decorated the spaces with flat masses of intense color, enhancing the feeling of ecstasy and also, like a brilliantly illustrated book, teaching the stories of the Bible and the saints. Many of the windows were contributed by the guilds to the chapels dedicated to their patron saints, evidence of the indissoluble unity in everyday life between economics and religion. The sculpture too was another great community book in which were pictured both literally and symbolically all knowledge and all belief. For iconographically both the sculpture and the glass, in fact all the art of the Middle Ages, was a "sacred script," a language of authority. The artists were craftsmen trained by the apprentice system in the traditional principles of this language and expressed not their own individual conceptions in either matter or form, but through forms dictated to them revealed the "corporate consciousness" of the age. The cathedral itself had a symbolic orientation. The types, attributes and positions of sacred personages and saints were well established. Added to these, around and above the portals, on the buttresses, pinnacles and towers, on the capitals, choir stalls and windows was the life of the universe—man and his labor, the arts, fauna and flora, grotesques—with both primary and symbolic meaning. Here in stone and glass the *Speculum* of Vincent of Beauvais found complete expression.

Concomitant with building were the minor arts produced so bountifully under a bountiful patronage of the church and the courts. Polychromed ivories preserved the traditions of sculpture. Gold work with jewels and enamels was in demand for the altar and its equipment. In cloisonné enamels the Byzantines attained on a small scale with precious material the same hieratic splendor as the mosaicists, while the Gothic craftsmen excelled in the bolder effects of the champlevé process. The eastern textiles were so powerful in design that they dominated European weaving until the Renaissance. The illuminated manuscripts, chiefly liturgical, furnish the chief criterion of mediaeval painting. The Byzantine examples show the characteristic solemn splendor of color and gold; the Celtic, beautiful uncial writing and an amazing intricacy of geometric and zoomorphic motifs in decoration; the flourishing Winchester school, sensitive line; and the French Books of Hours, a rare loveliness of color and form both in the borders containing fantasies of nature and imagination and in the miniatures which developed like the sculpture along the path of naturalism into a charming genre.

In all this mediaeval art there is a harmonious synthesis which rises from the submergence of the individual into the larger social unit. Hence there arose no great personalities. The age depended upon its modest finely trained craftsmen to express itself and not themselves. But with the climax of the thirteenth century the point of view had begun to shift from the Last Judgment to the secrets of nature; the individual was finding and asserting himself; new ideas were clamoring for a new kind of expression. The mediaeval cycle was completing itself with the crumbling of its social fabric and the primitives of the Renaissance were initiating a new age.

HELEN GARDNER

See: FEUDALISM; MONASTICISM; CRUSADES; GUILDS; CONSTRUCTION INDUSTRY.

RENAISSANCE. That profound alteration in the mental and spiritual attitude of Europe, historically known as the Renaissance, is not dramatically obvious, like the fault left by an earthquake. Not in sudden conflict and confusion did the great mediaeval tradition disappear. Rather did its ebbing glory, overcome by the energy released by the rediscovery of antiquity, softly interfuse with the New Learning and the new way of art, leaving one more elusive hue in the iridescent play of Renaissance life. Yet the transition, however subtle, was so cogent that about the beginning of the fifteenth century what we consider the "modern" attitude began. Men refused to live longer in faith and by authority; they became self-conscious, individualized and critical. The social systems of the Middle Ages were dissolved or dissolving, earth was opening new realms of gold, the very spheres were lapsing from their orthodox motions, and humanity, in an array of dazzling protagonists, for a time believed itself capable of satisfying all its desires and curiosities in an inexhaustible effort of creation.

This sense of intoxication and liberation, this realization of the beauty of the body as well as of the soul which was the gift of the new humanism—or the new paganism—naturally recharged and reshaped all the manifold forms of expression and impression known as art. Here alone the anomalies and conflicts of the Renaissance found their satisfying synthesis. No longer subservient to religion or even to the community, not only satisfying princely pride by its splendor or sensual pleasures by its imitations, art became an end in itself, enlarging, intensifying existence by restoring the pure aesthetic emotion lost with the Greek civilization. Naturally it continued to fulfil incidental needs, but, to be approved, it had first to seem "strangely beautiful."

The recovery of Greek art and religion, at least in the Renaissance prime, meant chiefly the restoration of vitality. It inspired emulation; it implied a novel realism, reminding artists that this visible earth and this present body possess the secret of beauty. And, since the fragments persuaded from rotten vineyard soil or yellow river bed seemed in themselves morsels of perfection, it originated a new idealism in the desire to create things not less ignoble. Some of the early enthusiasts of antiquity, like Brunelleschi and Donatello, deliberately tried now and then to outmatch their classic predecessors by mere miracles of technique applied to models more poignant than serene, for the Renaissance mind was scientific as well as aesthetic; and not until the Renaissance fever chilled did the mere copyists have their say. Each art became aware of its peculiar province, the painter of the potentiality of his paint, the sculptor of what shape lay preordained within his marble. Since the flexible and versatile artists of Italy were often masters in more than one medium, it was perhaps inevitable that the arts should also become aware of each other and that *tours de force* of virtuosity—painting effects in bronze or carven effects in paint—should confuse the aesthetic intention. The exquisite mediaeval arts of tapestry, enamel and stained glass, however gorgeous their variations in Renaissance France and Italy, lapsed from their perfection. Their peculiar and intense beauty demands a limited convention, a strictness of pattern which the protean Renaissance desire for largeness of rhythm, for fluidity of shape, could not but overflow.

Italy. Renaissance art fulfilled itself most variously, most sumptuously and most completely in Italy. In the fourteenth century her territories had fallen into powerful and jealous city-states, either nominally republics or frankly governed by despots, like Lorenzo de' Medici's Florence or Lodovico Sforza's Milan. These despots, whatever their sins or aberrations, did embody the ethos of their cities. The psychology of such princes, the vivacity of these city-states, explain why the Renaissance artist in Italy, although he had his trials, was more honorably used and more eagerly encouraged than in any other country. The individual artist, valued no longer merely as a link in the chain of imagers and builders that served a slowly growing mediaeval cathedral or palace of the people, was acclaimed as the possessor of a personal power to create unique things wherever he might be.

Mediaeval architecture in Italy had never entirely surrendered to the sacred spears of the Gothic ideal, but was disposed to remember Rome and Byzantium, to remain what is called Romanesque. Italy desired horizontal lines, round arches and the satisfying harmony of the dome. The Renaissance note in architecture, still the structural art that contained the rest, although pictures and statues began to escape from their niches to mingle with antique relics in the chambers of the amateurs, was gravely and nobly sounded in Florence, insisting upon living lines, happy proportions and calm spaces, with appropriate and delicate use of the new

ornament of vine and acanthus, loves and gryphons and garlands. But architects born or bred in Tuscany worked actively in other cities as well as Florence—Milan, Pavia, Rimini, Lucca, Venice and Rome. The hybrid beauty of their fabrics reveals the early Renaissance appetite for the reconciliation of contraries. The real Renaissance recapture of classic vision was a romantic adventure and broke more rules than it found. Alberti, Brunelleschi, Michelozzi and Amadeo of Milan serve the inspiration of the first period of the Renaissance.

But the manuscript of Vitruvius was discovered in 1452 and, as the pulse of Renaissance Italy slackened, architects began to ponder with superstitious reverence the rectitudes of column, pilaster and entablature, and the depressing problem of the arrangement of the orders. Florence, as she sank into slavery, saw the mighty Michelangelo severely rule out the spaces of San Lorenzo for his terrific monuments of despair. It was Rome, however, that witnessed the autumnal glory of the Renaissance in architecture The conception of the supreme dome of St. Peter's passed through the minds of Alberti, Giuliano da San Gallo, Bramante, Palladio, Raphael, Michelangelo. But the strict talents of Palladio and Vignola overcame such romanticism as Giulio Romano's. Authority in all things, terrified by siege and sack, by paganism and protestantism alike, hastily resumed its severity even in Rome.

The term Renaissance is too often limited to the mere epilogue of the period, to a classicism petrified into rules and conventions as sacrosanct as the decrees of the Council of Trent. This dead prestige did indeed prevail inexorably, for baroque and rococo are only such disturbances and deformations of impregnable laws as the sentimental moods of ages without heroic passion could provide. The sack of Rome, the sack of Florence, Reformation and Counter-Reformation, the vanishing of Hellenism, the domination of Austria and Spain, the intervolved tradition of Caesar and Brutus persisting through the revolution, left architecture in Italy abandoned to a cynical and languid aristocracy and to a church concealing the intolerance of its alarm by the false ecstasy of expression and the opulence of ornament adopted by Jesuitism. The severity of the Palladian style sagged into the curved lines and soft bosomed invitations of the baroque. In Genoa, rich with commercial prosperity, and in Naples, lazy and ungirdled, the style was so natural to the soil that it had its aesthetic victories. In fact a certain *brio* and grandeur often sustained the baroque. The inherent sumptuousness of Venice, investing all things with the soft sea-change, brought its qualities to gracious flower; but in Florence this stony rhetoric, antipathetic to the city's genius, meant merely the spoiling of accomplished masterpieces. Bernini in Rome was the triumphator of the baroque. In the eighteenth century, France set the fashion and one of the changes she rang on the classic model was the fantastic profusion of ornament called the rococo. Italy had little to say to it, although Salvi's Fountain of Trevi (1735) is a brilliant example, and Sicily and Naples played gaily with it. Even the great Piranesi, a Roman returned from the true Renaissance, trifled with it at Malta. In sad subjections Italy waited, dreaming of her past, for her day of reawakening.

Not since the days of Pericles had the sculptor triumphed as in the *cinquecento*. Mediaeval sculpture, especially in France, had been of extraordinary beauty, but the naked figure might not be seen unless as a warning, corroded by its mortality. To the men of the Renaissance antiquity revealed both the beauty of the body, especially the Hellenic beauty of young men, and the delight of flying raiment. All through Renaissance Italy we find effigies of early perished youth so tenderly laid to rest that they betray not only the Renaissance adoration for youth itself but an attitude toward death far from mediaeval. The great modelers thronged —Donatello, Lorenzo Ghiberti, Verrocchio, Jacopo delle Quercia, Luca della Robbia—in their diverse ways expressing the pathos, the energy, the triumphant beauty of their kind. In Michelangelo, however, all the plastic conflicts of humanity met and concluded. Laboring at the tombs of popes and petty tyrants whose lassitude retained nothing of their fathers but their vices, with forms wrought in irony, rage and a deathless passion for the body of humanity, he expressed the agony, the foreboding, the final melancholia of the dying Renaissance—a period that had dared too much. The conscious charm of Benvenuto Cellini's *Perseus* is still instinct with the last breath of Renaissance beauty in sculpture. Sansovino exhibited his bravura in Rome and Venice; Ammanati inflated his senseless shapes. The seventeenth century brought Bernini with all his swooning saints, his climax, the mystic sensualism of his St. Theresa. Life in Italy had lost the heroic quality

necessary to breed great sculptors. Primacy had passed to France, where one class at least still believed in its own divinity.

But painting was probably the supreme art during the Renaissance period. Not only did it completely reflect and heighten an existence amazingly colored and vibrating. Here was an art in which the rage of curiosity could carry the love of beauty into new exploits and unprecedented things be done. The gilded and exquisite art of the Sienese Duccio was a conclusion, not a beginning. From the tranquil movement of Giotto's figures and the human tenderness of his types it was possible to proceed. Even Fra Angelico, covering San Marco with ethereal visions, had some Renaissance skill in aerial perspective, some Renaissance gaiety in his passion for dancing. Early Renaissance Italian painting, while the dream of antiquity was still dewy, its beauty not yet overblown, its emotional quality not yet canceled by the zest for technique, makes a peculiarly lyric and piercing attack on the imagination as in the enchanting masterpieces of Botticelli.

Of the high Renaissance, apart from Venice, the three typical painters are Mantegna, Leonardo and Michelangelo. Leonardo's is the greatest of Renaissance names because he was *l'uomo universale*, the ideal type of the period at its highest. As a painter, although through accident and delay he left so little, he won and kept idolatry. He foreknew novelties of technique practised only in comparatively recent days, and astonished equally by the perfection of his craft and the spiritual mystery he deliberately conveyed. Michelangelo, fundamentally a sculptor, disdaining to be less than astounding in any medium, threw on the walls of the Sistine Chapel the history of the human soul in terms of the triumphal or tortured human body. The heroic Mantegna wrought out a Roman ideal, severe and noble. Raphael, persuasive transposer of all difficult themes, created his popular synthesis in sacred pictures, displayed his sincerer gifts on portraits of popes and princes and lavished his prodigious decorative power on the Stanze of the Vatican.

The great painters of Venice arrived late, flooding the dying Renaissance with color and music. From the grave and tender work of the Bellini family, through the romantic gaiety of Carpaccio, the exquisite Giorgione, whose sleeping Venus is one of the supreme expressions of the time, through Palma Vecchio's lovely women, through Titian's rapture of color and exultant vision of sea and sky and Tintoretto's fury of movement, the worship of the sea city went on, till the Inquisition laid a cold finger on the festivals of Paolo Veronese. Yet, even in the seventeenth and eighteenth centuries, Venice alone among Italian cities had her memorable painters, for, free or enslaved, she was the city of immortal pleasure.

The greatness of the Italian Renaissance dissolved in music with the name of Palestrina. Both in France and Italy the arts of dancing and music at this period developed a new significance.

France. Although the French Renaissance displayed a wonderful grace and elegance in the visible arts, it hardly throbbed with the intellectual energy of *cinquecento* Italy. The genius of mediaevalism had flamed magnificently in France through long and agonizing wars. She was still fatigued in spirit when she took the Renaissance contagion from the Italian cities that she ravished. None of her princes, not even Francis I at his best, had the comprehension of artists; so none of her artists had the ways of princes. Also, although Italianate notions had for long stolen in by way of Dijon and Provence, although Charles VIII and Louis XII brought priceless spoil and foreign workers from Milan and Naples, although Leonardo came to die in Amboise, a king unique and too strange to affect French painters as yet only fumbling at Renaissance technique, complete contact with Italian art was not effected until that art was languishing. Primaticcio and Rosso, after all, were but third rate artists in the Italian scale of values. Besides, the French Renaissance was cool enough to be critical in its temper and the greatness of its expression resides in the art of literature, in Ronsard, Rabelais and Montaigne. One must remember, too, that the visible arts were in France the affair of a jealously secluded and more and more centralized court. Their business was to minister to the personal luxury of the last Valois kings and their favorites. Women, and princes like women, dictated to artists whose rank was that of royal valets and who were denied such large applause as the Italian city-states could give. Yet the indomtable French spirit created under Italianate impulses things of apparently spontaneous delight.

Sixteenth century architecture was chiefly busied with providing cloisters of pleasure for the kings and the nobles, and the chateaux of the Loire realized the gaiety and grace of the French Renaissance. The Italian pattern was

superimposed on the Gothic; pagan arabesques and *amorini* wreathed round the doors; arcades, galleries and terraces combined with steep roofs, dormer windows, *tourelles* and carved chimneys. The French master masons soon had their Lescot and Nepveu to rival Rosso and Primaticcio at Fontainebleau. The Louvre façade of Pierre Lescot and Jean Goujon remains, in spite of the growing influence of Vitruvius and the formulae of Rome, a monument of delicate and dignified composure, and one or two Renaissance churches are invested with the ambiguous charm of commingled styles. On the whole, however, the spirit of the period was satisfied to penetrate the Gothic cathedrals with rood-screens, chapels, tombs—the offerings of personal pride.

The sculptors of the sixteenth century, admirably attuned to the architecture, kept none of the religious passion that had vanished from this age of religious wars; they were mundane and fastidious. The sincere simplicity of Michel Colombe soon passed. But Jean Goujon, so French, so supple, yet so restrained, carved his long twining nymphs with an antique grace, if only of the Tanagra degree; and set his caryatids finely in the frame of the Valois palace. The fashion for portraiture in the intriguing and scandalous court was served by the sensitive art of the Clouets. Primaticcio and Rosso had founded a new school of decoration, bright stucco and gallant painting intermingled, in the galleries of Fontainebleau, but the Flemish Clouets renewed the true French tradition. Enamelers like those of Limoges, engravers like Delaulne, makers of illustrated books such as were put forth in Paris, Rouen and Lyons, artists in faïence like the learned Bernard Palissy, disputed attention with the painters. Patrons liked to handle art as if it were a toy.

After a transitional interval the early part of the seventeenth century offered some unexpected beauty of painting in the dreamy and rhythmic landscapes of Nicholas Poussin and in the compositions of sea-space, woody worlds, golden light and classic fable evoked by Claude Lorrain. On the other hand the realism of the brothers Le Nain and the corrosive comments, engraved or painted, of Jacques Callot introduced into the painting of this period a French irony already very distinct in literature.

But the *grand siècle* belongs to the Sun-king and his stupendous court, for Louis XIV believed that art, as well as the state, was himself. Indeed art became part of the state, petrified by academies, authorized by Colbert with Le Brun as his lieutenant. Toward the end of the reign of Henry IV, architecture, after a chilly Palladian period, had broken for a time into the baroque, but the building of Versailles according to Vitruvian law, on the plans of Le Vau, was the seventeenth century's great architectural achievement. Cold, imposing, enormous, forced like a pyramid on its arid site, its correctness made tolerable by the formal but charming fancy of Le Nôtre, it provided a background for the glories of the king and his court, away from irreverent Paris. The court sculptors of Versailles peopled the palace and gardens with banal groups of mythic import, but the realistic busts and fair figures of Coysevox and Pierre Puget, whose ardent chisel forgot not the *fougue* of Provence, maintained a loftier tradition. Le Brun, "premier peintre du roi," covered the roofs and walls.

The last years of Louis XIV, superfluous and Maintenon-ridden, dragged to an end, and the children of privilege, weary of somber masks, began to enjoy their days before the deluge. In the dissolute period of the Regency and of Louis XV, French art became again a unity and set a pattern for Europe. In the rococo these elegant and insanely haughty aristocrats first rang their frivolous change on formalism by a decoration of carved wood, glass, garlands, dolphins, doves, *rocaille*. About 1750 Jacques Ange Gabriel, desiring a purer effect, adopted *le style Grec*. He made a graceful Petit Trianon and charming "hermitages" fastidiously shaped and sparsely decorated with Pompeian garlands of fruits and flowers. These rested in landscape gardens, for an English love of nature mingled with *le style Grec*. Soufflot built the Panthéon, grandiose and grave, while *petites maisons* and *folies*, dainty cubes guarded by sphinxes, lay hidden in foliage.

The sculptors maintained a clearer vision. Jean Antoine Houdon, in his pure and acute portraits, the poise and grace of his divinities, was a true successor of Jean Goujon. With Quentin de la Tour, who brought to perfection the fragile art of pastel, he kept alive all that was best of the eighteenth century.

The painting of this period, although it betrays the hectic radiance of a dying society, still wears an imperishable bloom. The white soft women of François Boucher, in tapestry colors of rose and blue, dissolve in sensual rapture; nevertheless, as the adroit interpreter of his day, this colorist has his value. A sharp

antidote was provided by Jean Baptiste Chardin, who with complete honesty, simplicity and kindness painted the quiet moments of the petite bourgeoisie. But the moving painters of the *fêtes galantes* are those who, like the later Venetians, invest the masque of pleasure with infinite regret. In the dulcet medium of Antoine Watteau are molten all the suavity, the disquietude, the irony, the languor of the embarkment for Cythera. Honoré Fragonard's world is radiant; in blue green depths of leaves the lovers laugh, knotted with flowers. His frankness is of the Renaissance kind. Among the portraitists Nicholas de la Largillière turned his sitters into ripe flowery goddesses; Hyacinthe Rigaud made grandiloquent shepherds of gentlemen in wigs and silks. Madame Vigée Lebrun pleased the sentimental Marie Antoinette; Jean Baptiste Greuze gave dishonest *leçons de vertu* and proffered pretty adolescents whose tearful sensibility is the rarest aphrodisiac for the rake. But Raphael Mengs made fashionable a raw and colorless antiquity. The tradition of tyrannicide that lived side by side with Caesarism in the Italian Renaissance was finally uppermost. In 1785 David exhibited *Le serment des Horaces*, and a reaction against all the tyrannies began by accepting a rigid convention of art. Republic and art alike proceeded to a new Caesarian triumph.

Spain. The Spanish peninsula hardly knew the Renaissance, in the stricter sense of the word. At first the taking of Granada, the triumph of the Catholic kings, the voyages of Columbus and the wars of the *conquistadores* preoccupied her with matter fit for truly mediaeval cycles of romance. Yet her Cervantes, her Velasquez, seized upon all the intellectual detachments and liberations of the Renaissance when Italy herself was lapsing into bondage.

In architecture she passed from the flamboyance of the Moorish Gothic to that of the baroque, a style on which her mysterious paradox of fire and ice, her mysticism of a St. Theresa doubled with that of a Torquemada, imposed its own sincerity. Her fusion of Moorish, Gothic, Flemish and Oriental elements with Italian motifs resulted in some strangely stirring efflorescences of decoration at places like Miraflores and Burgos; in Spain the baroque served Jesuitism with a somber excitement. Sculpture, often Franco-Flemish in its key, enriched the great iconostases and the tombs with rigid splendid figures that seem stricken in catalepsy by excess of emotion.

Painting at first showed an affinity with the Sienese, and the Lombard smile of Leonardo's followers occasionally allures. But the great painters of Spain arrived late. The Renaissance seeds did not ripen till the seventeenth century. The unearthly passion and strange color of El Greco are unique in their way. Jusepe de Ribera then displayed his violent chiaroscuro, Zurbaran the terrible intensity of his religious painting, Murillo the soft sentiment and theatrical assumptions which mingled curiously with his vivid realism. But the great Velasquez painted what lay before his eyes and altered it into an imaginative vision by the sheer perfection of his craft. The court of the mournful and senseless Philip IV—king, queen, heir, infantas, generals, fools and dwarfs—he presented with a grave attention and a complete understanding, leaving an immortal and startling pageant of inordinate pride, folly and suffering. In the eighteenth century, if Spain but coldly echoed in architecture and sculpture the fashions of France, in painting the excited and mordant work of Francisco de Goya y Lucientes registered the horrors of war and the sinister seductions of Las Mayas with the hallucinated violence of his race and with a startling impressionism of manner.

Germany. The spirit of Renaissance art had not penetrated the amorphous German states before the Reformation was sufficiently organized to discourage its audacities. The German princes were gross and sensual in their manners. The German humanists were jarring in their mood. Only the wealthy burghers of the great towns like Augsburg and Nuremberg had money and inclination for the luxury of art, and they imposed their own tastes on the artists, whose social standing was uncertain. The Emperor Maximilian had Renaissance tastes mingled with his knight errant ideals, but poverty was his constant squire. He had to be content with a "Triumph" in engraving; and the great tomb at Innsbruck was ingloriously unfulfilled. The discouraged artists, however, had the strong individuality, the eccentricity even, bred of long struggle. They did keep touch with Italy, although with Milan and Venice rather than with Florence.

In architecture the Romanesque and the heavier German Gothic persevered for long, although the prosperous mansions and townhouses in rich cities showed the Italianate manner. Some of the castles are illogical but picturesque medleys; the façade of Heidelberg

castle does not lose by its air of romantic ruin. Soon heavy palaces arose in the baroque style, while the eighteenth century saw a slavish imitation of Versailles in Potsdam and Sans Souci.

German sculpture even in the fifteenth and sixteenth centuries counted few great names. Study of the nude was regarded askance. Veit Stoss managed some ardent effects from wood, and Adam Krafft made an exquisite pyramid of stone for the Tabernacle of St. Laurence. But Peter Vischer of Nuremberg was the great German Renaissance sculptor. He wreathed Gothic with Italian ornament on the Shrine of St. Sebald, while his Theodoric and especially his heroic Arthur brought some kingly magnificence to the tomb of Maximilian.

At Nuremberg and Augsburg the new artistic impulse drove chiefly toward naturalism and technical achievement in painting. The burgher tastes of the patrons brought the artists to portraiture and later to landscape. Albrecht Dürer was as near as Germany could come to a Leonardo, but his sincerity in painting is depressed by the coarseness of his types. Contact with Venice fired him, yet the poetry of his imagination had its way best with his engraving on wood and copper. Martin Schongauer was pathetic and tender in the Catholic tradition; Mathias Grünewald's color, drama and audacious lighting foretold the baroque; Albrecht Altdörfer was an original engraver and landscapist. The nudities of Lucas Cranach, quaint ivory dolls, may have seemed daring to German Protestants. That great portraitist, Hans Holbein, began in Augsburg, but he learned elegance from the French masters and amplitude of style from coloring housefronts in Switzerland.

The Low Countries had been for a long time in traffic with Italy, giving and taking, but the serenity and sanity of Flemish art were indigenous qualities. When considering the *Adoration of the Lamb*, completed in the fifteenth century, few would dare to say that the Van Eyck brothers owed their realism, their beauty of feeling, their satisfying texture and their glory of light to any alien country. If the Italian Renaissance touched their followers it was as a kindling power. The tender Roger van der Weyden, Petrus Cristus, Hugo van der Goes, Thierry Bouts and the harmonious Hans Memling, calm master of his accomplished tradition, with his gracious poesy of temper, maintained the quietism of the Flemish mood. But in the supple sweetness of Gerard David there was an exotic note, and Quentin Matsys could paint a *Salome* with Lombard grace. Jan Gossaert of Maubeuge (Mabuse) was only too definitely Italian.

In the seventeenth century the two Low Countries definitely separated, and in the relief of their divorce the genius of each flamed up in the Renaissance manner. Flanders rose into a pagan *joie de vivre* with Peter Paul Rubens, whose immense vitality and joyous animalism refreshed not only Flanders but Europe. Hellenism, that prime factor in the Italian Renaissance, had never clarified the North, but Rubens caught some grandeur from Rome. The inflations of the seventeenth century baroque really expressed a thirst for energy, and he filled its pompous sails with the authentic wind of life. He lived like a Renaissance artist, like a great seigneur, and with the color and lyricism of his portraits, the hurtling tragedy of his religious pictures, the theatrical effectiveness of his court painting, the verve of his genre pictures, found nothing common or unclean. The brilliant little genre pieces of Teniers and the exuberant festivals of Jordaens were in similar moods. Anthony Van Dyck, another princely person of a refinement strange to Rubens, worked out a grave and enchanting convention of his own and found his ideal subjects in the haughty and elegant court of Charles I of England.

The Protestant temper of Holland limited the subject matter of the painters, confining them to portraiture, to genre and landscape easel pictures distinguished by deftness of execution. Frans Hals was a brilliant and temperamental exponent of gallant types, with the qualities and defects of an amateur of genius. But Rembrandt van Rijn was Holland's great justification in the world of art. Italy woke him, humanized him and inspired him to love, as did Leonardo, the contest of light and dark. A canvas like *The Syndics* transfigures his time to eternity; his etchings are the calligraphy of a lively and brooding imagination. The smaller Dutch masters evoked in different ways a surprising beauty from their familiar world. The famous Jan Vermeer, whose figures diffuse silence and silver light, excels them all with his intimate interpretations.

England. The Italian Renaissance, apprehended chiefly by indirect ways, really entered far into the English imagination, which had already drunk deeply of Italy in Chaucer's day. But this exotic influence is chiefly to be discovered in literature, the art dearest to a nation whose climate refuses frescoed logge and oblit-

erates any sculpture of a precious kind. In Elizabethan drama and lyric, in pastoral and masque, in translations of *novelle*, the Italian spirit stole the more subtly because it seemed half forbidden. The Renaissance also worked into the personalities of the "Italianate" young men. A line of brilliant courtiers from the days of Elizabeth to those of Charles II affected the jeweled manners of Italian youth.

Sculpture has never thriven greatly in the uncertain climate of England since the tradition of the mediaeval imagers perished. In the fifteenth century carving in stone suffered from the heavy Flemish transfusion of Italian notions. Torregiano in 1500–12 worked at Tudor tombs, but he as well as other visiting Italians lost his ardor in the alien island. The spirit of Puritanism was against Hellenism and sculpture, and the fair young men of England were not commemorated as were the fair young men of Italy. A period of stagnation was broken only by Nicholas Stone of Exeter, the Gothic meditator who carved the effigy of Donne. There was still vitality in woodwork, a peculiarly English craft, until Grinling Gibbons broke its gentle tradition with his ponderous ropes of naturalistic vegetables. Flaxman and the Wedgwoods, in their plastic mediums, attest the renewed taste for the antique in the latter part of the eighteenth century.

Renaissance gaiety in England impelled the late Gothic in architecture to fan out in such vaulting as that of Henry VII's chapel in Westminster. But the nobles, released from civil wars and enriched from their spoliation of the church, were bent on secular building. Italian masons brought their patterns and their cunning tools to help in the fair new houses built by the wealthy nobles. The Tudor style of mansion, adapting itself to capture air and light, opened out to a pleasant world in plans of H and E. The sunny and familiar parlor developed from the hall. Galleries and wide stairs provided space and majesty. The floors were parqueted, the roofs often wrought in stucco, the walls paneled with wood suggesting linen or field flowers, sometimes white or natural, sometimes picked out in gilt or color. Some great mansions, combining many influences, lay like little towns —Hampton Court, Knole, the vanished royal palace of Nonsuch. The manors settled more steadily into ease and comfort in the Jacobean period. But the Palladian phase of Italian taste found an eager exponent in Inigo Jones, who had followed Pembroke to Italy. The Banqueting Hall in Whitehall, despite the falsity of its façade, has a courtly air and a joyous spring in its pillars. Then the Great Fire provided opportunities for Sir Christopher Wren, who built St. Paul's according to late Renaissance conceptions and threw over it a dome that recalled Michelangelo's. His smaller churches, mundane and gracefully proportioned with friendly steeples, seem in accord with the very reasonable religion allowed by well bred men of the period. The domestic tradition was similar. The Queen Anne house was frankly inviting in its mannerly way. Unobtrusive, built of stone, brick angled, the pedimented doors just touched with fine carving, it expressed only the best people of its period. Sir John Vanbrugh imitated Versailles in Blenheim and Castle Howard. Palladianism became more rigorous during the sway of the useful William Kent, although the little temples in the gardens somewhat broke the monotony. Finally the Adam family, animated by a sincere desire for classic grace, although restrained by a sense of English needs, worked out in the real Renaissance spirit an ideal of dwelling which was English in its comfort yet shapely and decorated with a Hellenic purity of intention.

It was in the eighteenth century that England, while striving after an ideal of common sense in her hitherto romantic literature, first found herself in the art of painting and, very late in the day, brought her fair women and complacent men to the gallery of Renaissance aristocracy. For the eighteenth century was the golden age for the privileged in England as in France. Never before had they felt so secure. Until this time the people of leisure had been painted by foreign artists—Hans Holbein, Van Dyck and Rubens, Swedes and Germans. Now the great English portraitists arrived to flatter the sweetness, the kindness, the fresh beauty of English ladies, the dignity of their lords, all in an enclosed world of leafy parks and dreaming lawns. The antimasque was fiercely rendered by William Hogarth, satirist more than portraitist, whose subtly textured craft wound itself around the misery and vice behind this fair show. But he did not upset the authority of Sir Joshua Reynolds, who in thick brilliant painting evoked such warmly breathing yet poetic apparitions as his *Duchess of Devonshire*, his *Mrs. Siddons*, his *Nellie O'Brien*. Thomas Gainsborough, whose delicate tonalities of paint and of imagination make him a greater painter, George Romney who painted Lady Hamilton, John

Hoppner and the Scottish Henry Raeburn, Sir Thomas Lawrence, facile, seductive in his easy way, continued the aristocratic tradition in portraiture. The caricaturists, Rowlandson and Gillray, commented rudely on their polite era. Others strove dully after heroic painting; still others gave themselves up to the pure genius of landscape. And William Blake, one of those portents irrelevant to time and place, thrown like a brand by a mocking angel, painted his visions of heaven and hell, where folk with pink Flaxman-like faces rise rapturously or fall headlong on the tides of Jehovah's favor. The Romantic Movement was near.

RACHEL ANNAND TAYLOR

See: RENAISSANCE; REFORMATION; HUMANISM; CLASSICISM; RATIONALISM; SALON.

MODERN. Modern art may be said to begin with the end of the eighteenth century. It is the direct and immediate outgrowth of the inter-reaction of several factors: the death of the movement known as the Renaissance, clearing the field for further influences; the advent of democracy potential with individual freedom and eclecticism; the beginnings of man's new quest of knowledge concerning human life and the world, to supplant that mediaeval version which disappeared with the old order; machinery and the industrial revolution, both foster children of scientific investigation; science and modern thought itself, considered apart from their material application.

In art the Renaissance came to an end with the delicately high bred creations of the artists immediately preceding the French Revolution. These works reflect the narrow margin upon which aristocracy had come to operate. The building of Gabriel and the painting of Watteau abound in technical excellence and beauty, and in conception they are still creative. But they lack sincerity and stamina and this lack spells the end of a cycle. The background of society was wearing thin and cynicism threatened the roots of every faith. With the French Revolution society sank into the melting pot. Artists no longer painted voluptuous pastorals for aristocrats; the occasion for them had gone. The new pattern for art was the aesthetic counterpart of that classical idealism to which men now turned for salvation through democracy.

Before the French Revolution the mid-eighteenth century turn for archaeology had brought to light the remains of Palmyra and Baalbek as well as of Spalato in Dalmatia. The brothers Adam visited Spalato, and Piranesi the engraver immortalized their findings. These and other new classical models provided what was needed to lure creative art, already beset and confused by ideas and ideals, toward directly copying ancient forms. As early as 1757 Soufflot, designing the Panthéon, had so come beneath this influence that the building was more Roman than French. This classic revival was the turning point, the instant when the stage was set for modern art. The work of David, who imbued his paintings with the rigidity of Roman bas reliefs, is the outstanding example of the straining toward the purity of Greek outline. Whether retelling the tales of antiquity or painting Mme. Récamier, there was no escape from cold classical formulae. Throughout Europe this vogue obtained, this passion for rationalizing, destroying ancient myths, facing truth with classical clarity. The movement was felt with particular force in the architecture of the republican period in the United States.

Two more phases preceded the dawn of modern conditions while the forces of industrialism and scientific research gathered headway. The first of these was romanticism; the second was realism.

Romanticism swept Europe as the result of two centuries of rationalizing. In society as well as in individuals there must occasionally come a reckoning between intellect and emotion. In art this point came at the outset of the nineteenth century. Napoleon's wars had left delirium in the minds and tragedy in the hearts of all, a logical impasse from which escape came in a way already foreshadowed by Goethe, Rousseau and Beethoven, in a wild tide of pent up emotion. Chateaubriand, Delacroix and Wagner rushed with romantic yearning to release the feelings of Europe. Creative art had been reduced to a state of sterile copying; now the flame of emotion was rekindled although it was still within the borrowed classic or mediaeval mold. Throwing the restraints of David to the winds, Géricault and Delacroix painted pictures which resemble the works of their contemporaries in literature, Hugo and Scott. Later Ingres and Daumier added the weight of their powerful personalities to the movement, the one refining and concentrating expression, the other in his satirical lithographs giving romantic vividness to the play of contemporary life.

In architecture romanticism took the form of another revival, the Gothic. Originating in

England, where as early as 1753 Horace Walpole had built Strawberry Hill, it found favor as the national architecture of England where classical styles had never been thoroughly understood. Ruskin, Pugin and Scott raised it to the level of a crusade and littered England with wretchedly planned and thinly executed Gothic copies. In France Viollet-le-Duc restored the *cité* of Carcassonne, the Château of Pierrefonds and built several churches. France, however, instead of continuing the Gothic sentiment produced Duc, Duban and Labrouste, who made of the late classic revival a new and creative style known as the neo-Grec.

Realism in art was largely due to the newly created interest in landscape painting. This interest was first felt in England and came from the vogue for rusticity inculcated by Rousseau. Constable and Bonington proved how landscape could be painted for its own sake, naturally, and not as a grouping of classical fragments in a glamorous antique setting. It spread into France together with a vogue for rustic gardening. Thus in the mid-nineteenth century, with England painting landscapes and sentimental insipidities and building copies of Gothic architecture, France, having burnt out a fierce reaction from classical severity, turned gradually toward realism through landscape. A society so tremendously altered as that of Europe had now become, under the growing domination of scientific thought and industrial economy, could little longer sustain the dead weight of worn out revivals imposed upon the genius of her creative artists.

With the advent of machinery it was at first quite naturally attempted to reproduce in quantity the type of handcraft which had preceded it. The result was aesthetically disastrous. Craftsmen had to turn from creative work to tending the machine which performed their labor; this divorced the crafts from the fine arts and debased first the skill of the craftsman and, still further, public taste. About 1850 the confluence of factors contributing to the decline of craft reached a climax. Patrons of art seemed blind to its ugliness for they were more interested in the novelty of machinery. The crafts and applied arts and with them architecture labored beneath complete subordination to industrial ends.

A different development occurred in the realm of painting and sculpture. Unencumbered by the problem of finding an outlet through industry, painting moved in the wake of advancing thought and freeing itself for the last time from academic formulae sought more directly the elementary aspects of existence in unadorned realism. Landscape painting increased as men turned their attention to that twilight of natural phenomena which science had begun to illumine. Nature was no longer looked upon sentimentally or heroically, but as the little known and fascinating earth peopled by individuals interesting enough as human beings.

The realistic phase was followed by the first definite imprint of science on art. Physicists had shown the solar ray to be broken into the seven colors of the spectrum when passed through a crystal. Working with this discovery a group headed by Claude Monet and Auguste Renoir, labeling themselves impressionists, embarked upon the painting of atmosphere itself. They forgot the drawing of form in an attempt, called *pointillisme*, to juxtapose small flecks of pure color in such a manner that when observed at a proper distance the colors fuse, as do the primary light rays themselves, into semblance of living atmosphere. Only with new material, new questions to propound, could art increase its scope and emerge beyond a condition of limited repetitions. Democracy, altering society, disturbed the traditional balance while science held the lamp to new discoveries. For science, bursting in upon exhausted realms of mysticism and philosophy, took the dogma from art, substituting the play of sunlight, the rhythms of nature.

The great figure of the nineteenth century in painting is undoubtedly Cézanne. Coming late among the impressionists he profited by their knowledge of color but advanced beyond their narrow formula. Moreover he appreciated the magnificent wholeness of conception of the old masters and grasped the fact that for a century artists had been attempting the solution of single facets only of the problem of painting, one at a time. In projecting his personal experience, his own psychology, into his canvases, he set the pattern for all art since his day and made of painting once more a whole in which color contributed volume and in which the individuality of the artist comes to expression, replacing a content of set and stylized subject. Cézanne was the first artist to confess the dawn of an age of psychology and relativity. His curious personality, his way of subordinating actuality to his own point of view and his distorting and suppressing of externals in order to reveal the deeper, simpler truth are as yet

understood by few. He discovered the turning point and released art in a new direction so that since his time few have dared lift brush to commit the repetition of what had been already too often said. To Cézanne's should be added the names of Gauguin, also a Frenchman, and Vincent Van Gogh, a Dutchman painting in France. The former contributed, in his revolt from society, the exotic forms and colors of the South Seas where he sought exile, while the tragic half mad life of the latter became the subject, indirectly, of his passionately individual canvases.

While France, ignoring the presence of Cézanne in her midst, officially sustained the Academy and its train of waning romanticist tradition, England followed with delight the play of the pre-Raphaelites and their stylized insipidities under the guidance of Ruskin. Romanticism persists to this day in England, where Gothic is as popular as ever. The art of the remainder of Europe during the nineteenth century is marked by the same tendencies exhibited in France.

Sculpture followed the bent of painting. The classical phase is best represented by the remarkable reliefs of Rude on the Arc de Triomphe. During the reign of romanticism Carpeaux, Dalou and Chapu carved majestic and formal groups allegorical in sentiment. The new theme appeared with Rodin, who freed sculpture from its non-essentials, sentiment and over-rendering, substituted a knowledge of form itself and acknowledged the beauty of his elementary material, marble or bronze. Sculpture was thus brought once more into the realm of plastic form and revitalized in an attempt to purify it and to realize its greatest beauty within its natural scope.

It was due to the great expositions and to the idealism of one man that industrial art began its slow and painful advance. At the Exposition of 1851 in England William Morris beheld vast ugliness in the midst of spurring prosperity. He fought thereafter to awaken in industrial centers some aesthetic conscience and by his own example to show how machinery and art might harmoniously combine. But not even Morris went back to the point of asking what is the unique expression of machine technique. The answer to this problem was to come only with the substitution of thought for eclecticism.

Throughout Europe and the United States eclecticism, the practise of selecting and borrowing a style, continued in vogue even after the lapse of the classic and Gothic revivals. With the advent of photography and increased printing facilities information concerning the art of the past had become more available than ever. While conditions of life altered and the invention of iron and steel construction, elevators and electricity began completely to revolutionize the problems of building, architects still continued the practise of borrowing raiment for their buildings. Industrial art too followed this practise of borrowing. The habit of fitting form to function under new conditions had not emerged. The illogicality is evident of adorning a steel frame with classical masonry which instead of supporting itself must be drilled out and hung on supports.

The vogue of eclecticism may in part be traced to the condition of public taste during the spreading of democracy. In abolishing aristocracy society abolished that rich heritage of taste which, built up during centuries of upper class domination, had controlled all save peasant art. Artists in general were then under the patronage, directly or indirectly, of a social body given to leisure, wealth and power. Aristocracy had been the arbiter of both temporal and aesthetic welfare. *À bas les aristocrates*, the cry of the French Revolution, dragged with it both the taste of Europe and the position of the artist in society. Bourgeois ascendancy engulfed traditional taste together with the patron who recognized the merits of good art. It supplied nothing to replace this function. In France the Academy dogmatically persisted in keeping alive the traditional standards of painting but the effort was lacking in vitality and creative force. The effect on the artist was to plunge him from a position of power to one of dependence upon a public in general unable to distinguish between good and bad work. This led to the reputation for eccentricity which the artist even to this day enjoys, by inducing him to retire as an unappreciated individual to a corner where he might work out dreams unmolested by the ridicule of a prosperous middle class. From this impasse the materially successful artist has emerged only by taking the popular fancy. Painters of the obvious, the sentimental and, above all, reproducers of the historically sanctioned past have succeeded best. To the bourgeois eye the best is the safest and the safest is that with a pedigree.

Eventually there emerged from this situation a few men strong enough to stand on their own

feet and attempt to resist the inertia of complacency. William Morris, Cézanne and Rodin represent the leaders of effective revolution. Forced through idealism to stand apart from the rabble, their thought drove art forward. From them sprang directly a new creative progress once more growing and maturing. They gathered up the loose ends of tradition as a developing, not a static, thing and courageously searched their environment for the solution to their problems.

With the dawn of the twentieth century the seed sown by William Morris had begun to ripen into a well defined movement toward the improvement of industrial art and even of architecture. While England still labored with the situation, in France a movement initiated by Siegfried Bing known as L'Art Nouveau challenged the supremacy of academic eclecticism. L'Art Nouveau sought in a return to natural sources a means of rehabilitating design but it neglected the problem of materials and imposed upon larger forms motifs which could be successful only in the smaller field of jewelry and ceramics. Lalique had begun his laboratory researches, seeking new materials and processes to bring the industrial manufacture of glassware and ceramics into the modern world. A more profound note was sounded in Austria, where Otto Wagner led the "secessionists" in a war on borrowed form. Recognizing the inevitability of steel in all its significance, practical as well as aesthetic, he preached the doctrine of fitting form to function and produced the first thoughtful architecture of his age. His lead was followed in Germany, where the founding of the Kunstgewerbeschule resurrected and stimulated art among the people, with the result that even before the war Europe had its first view of the new German industrial art. This art, originating in the small industries, is chiefly responsible for the pattern of what is known as the "modernistic" style today.

The war while it retarded did not check the progress of industrial art. Immediately after the termination of hostilities France emerged with a startling array of new techniques and a well developed style which had left L'Art Nouveau far behind. This work was based chiefly upon the pre-war German patterns from Munich. The idea of the "ensemblier," one man as the designer of everything from the architecture to the upholstery of a house, originated in Paris. This resulted in the development of individual styles widely divergent in appearance but related by sharing a common modern spirit. The great Exposition des Arts Décoratifs of 1925 summed up this field somewhat prematurely. In this exposition decorative invention and new forms ran riot but only on the surface. Deeper down lurked economic and philosophic problems of vast significance. Despite this dazzling new technique, the problems of cost, how steel should be used and what modern life demanded in planning remained untouched. The great industrial expositions have always been commercial rather than artistic in their aim, yet their influence in the field of art has been enormous.

In the United States the World's Fair set the development of architecture back of the eclectic stage by a quarter of a century. With such men as Louis Sullivan already building creatively with steel, America gazed once more upon irresistible Rome and relapsed again into the habit of borrowing. Even in New York the skyscraper, a unique affair but one which stated the problem of steel, continued to be ornamented with columns and cornices. The expression of the beauty of this steel fabric in a purely functional façade was first introduced by Saarinen, the Finn, in his designs for the Chicago Tribune Building. The eyes of Europeans more than those of Americans were turned upon American architectural problems. The question was this: why, when Americans built steamboats, airplanes, bridges and locomotives directly and simply, did they become confused and baffled when it came to pure architecture?

The growing economic factor of quantity production in its relation to architecture has recently been logically met by several European architects of whom the spokesman is Le Corbusier. He represents the goal of absolute purism in architecture. He accepts every facet of the modern program and retains no vestige whatever of the past. His buildings of steel and reenforced concrete vary from anything ever seen before in their functional planning, expression of volume and restraint of decoration. His doctrine is that of *bel outillage* or accepting the machine age and living with it. He is thoroughly scientific and mechanical. His adversaries, the conservative modernists, are content to advance more slowly and see whether or not we want an exclusively machine built age.

In painting since Cézanne we find the field clearly divided. The conservatives, bitterly but steadily losing ground, cling to the Academy, to the canons, and yield only slowly to the

expansion of new ideas. The modernists, fully imbued with the sense of the new world of science, grasp the fact that today life is infinitely extended in time and space. Science has destroyed set form in thought, life and art. The modernist painter is wholly individual, part psychologist, part sociologist and part physicist. All of this has meant revolution in art with many different leaders. The first group to be noticed were the "Fauves," or wild men, led by Matisse. They emphasized flatness and extreme simplification. Seeking to reproduce the essence of things, viewed solely from the painter's unique angle, ignoring literal verisimilitude and photographic perspective, they kept only color and design. The naive Rousseau, "le douanier," painted his queer outlook on life with the vision of a child, with rare skill and sense of pattern.

Pablo Picasso studied the significance of Negro and Polynesian sculpture for plastic form. He may also be said to have invented cubism, the most important movement in modern art. Cubism is abstraction in terms of three-dimensional space. It comes directly from Cézanne. Defined somewhat mystically "cubism is not an art of imitation but an art of conception which strives to elevate itself to creation," or "the art of painting a new ensemble of the elements borrowed not from the reality of vision but from the reality of knowledge." Here is the scientific reintegration of consciousness in art. At this point objectivism ceases and scarcely a trace of literal subject matter remains in a canvas. The isolation of the individual artist's point of view and the subordination to it of all other considerations have reached a climax. To the layman nothing is revealed save a meaningless pattern of colliding lines and planes to which the painter and his initiates retain the key. The vogue for pure cubism has been for this reason somewhat limited. Its direct effect, however, in the matter of elimination and simplification has been felt by nearly every young painter of this day and attention more than ever has focused upon the essential issues of painting. In meeting these issues the shadows used by the impressionists have been supplanted by objects created in planes through the use of color. Derain has produced work of importance and also Raoul Dufy, Vlaminck, Marie Laurencin and Kokoschka.

During the first half of the nineteenth century, painting in the United States came increasingly beneath French influence as young American artists crossed the ocean to study at the École des Beaux Arts. Whistler and Sargent, both Americans, neglected their native land to follow the continental life and passed from Courbet to the impressionist group. Other American impressionists include Mary Cassatt, Childe Hassam, Robert Henri and his pupils, the best known of whom was George Bellows. Today, strongly influenced by cubism, a group of young Americans are attempting to throw aside the continental tradition and paint in their own manner. John Marin, using water color, paints vigorous abstract landscapes; Georgia O'Keeffe abstracts the forms of plants and flowers; Charles Burchfield paints the pathetic grotesqueness of mid-western cities; and Charles Demuth executes landscape and still life. All of these artists confine themselves almost entirely to the small picture, since economic pressure has had its effect on wall space. There are few homes today large enough to hang a big canvas, a factor of great importance in present day development. The names of Max Weber and in particular Eugene Speicher, one of America's greatest living portrait painters, must also be included.

American art is still nebulous. Up to the present the United States has had nothing to say about itself, a condition to be anticipated in so new and strangely compounded a civilization, lacking strong tradition. Today, however, there is an astonishing number of young artists, well trained and infatuated with the ideal of a national art. They are laying the foundations of an articulate expression.

EDWIN AVERY PARK

See: DEMOCRACY; INDUSTRIALISM; SCIENCE; PROLETARIANISM; COMMERCIALISM; PURITANISM; REALISM; ROMANTICISM; MEDIAEVALISM; PRIMITIVISM.

See also: ARCHITECTURE; DANCE; MUSIC; LITERATURE; WRITING; THEATER; MOTION PICTURES; INDUSTRIAL ARTS; DRESS; MACHINES AND TOOLS; SYMBOLISM; TRADITION; CULTURE; CIVILIZATION; STANDARDIZATION; COMMERCIALISM; EXPERT; AMATEUR; ARISTOCRACY; PATRONAGE; SALON; ART COLLECTING; TASTE; CRITICISM; CLASSICISM; ROMANTICISM; REALISM; HUMANISM; RATIONALISM; MEDIAEVALISM; PRIMITIVISM; COSMOPOLITANISM; LOCALISM; DECADENCE; MUSEUMS AND EXHIBITIONS; LEARNED SOCIETIES; EXPOSITIONS, INDUSTRIAL; CIVIC ART; PURITANISM; CENSORSHIP.

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ART COLLECTING. Generally speaking, the private collector is a rich and powerful individual, a merchant or a lord who, after time and connoisseurship have established the unique values of works of art, surrounds himself with rare and costly objects. This acquisitive instinct was first manifested on a grand scale by the wholesale transplantation of Grecian art by Roman conquerors and proconsuls, and later on, in a much more shameless fashion, by Napoleon Bonaparte, whose artistic indemnities, extracted from his victims to enrich the Louvre, reached the total of two thousand objects. The earliest and perhaps the most intelligent examples of private collecting, as it relates to organic production, are to be found in Italy during the middle and high Renaissance when the great families, notably the Sforzas, Gonzagas, d'Estes and the Medici, adorned their palaces with pictures and sculptures executed by contemporary artists. Cosimo, the founder of the Medici fortunes, also collected manuscripts, and antique gems and coins; his successor, Lorenzo the Magnificent, organized the first private museum to house his Graeco-Roman treasures. But this collection was more than a tribute to his wealth and aesthetic attainments. It was open, as an academy, to the most promising art students of Florence, to whom Lorenzo granted subventions and princely encouragement. It was in this museum that Michelangelo received his first training in sculpture.

The Renaissance is one of those rare periods in history in which the collector was also a true patron of the arts. The cardinal, the duke, the titled banker may have been autocratic in his dealings with painters, and his interest in art may have been in many cases vainglorious; but his major concern was in the art of his own time. He provided the artist with commissions and paid him well for his services. Furthermore his example was imitated by men of lesser means who absorbed the productions of secondary talents. The aggregate effect of this relationship, in so far as creative activity may be attributed to a satisfactory economic adjustment, was that art was a well organized industry, flourishing with health and vigor in all its departments from the simplest manual crafts to the most complex forms of imaginative genius. The artist was assured of a steady market for his works, and the collector, great or small, was a patron in the sense that he was a dependable consumer of goods which were valued for their intrinsic excellence and not for their scarcity.

Since the Renaissance the divergence between artist and society has constantly increased, and the history of collecting centers for the most part around wealthy families—in Europe, the royal houses, in America, multi-millionaires—whose hoardings and purchases have established a mischievous precedent of false appraisals. In America particularly, art collecting in all its ramifications has developed into a mania. As it concerns the manual arts, such as ceramics, weaving and furniture, the displacement of handicraft by machined wares may in a measure explain the craze for antiquities. Thus Byzantine enamels—little trinkets fashioned in great abundance by slaves in the twelfth century—fetch enormous prices in our auction rooms; and colonial furniture is bought and sold by brokers for sums generally associated with precious stones. In justification of this trafficking in small wares, it may be said that the consumer gains ultimately, when the collections are dispersed. He genuinely desires to improve his domestic surroundings and, unable to find anything in the contemporary market that is rare and durable and of good design,

follows the fashionable pursuit of the antique.

But the trafficking in the plastic arts, above all in painting, however beneficial it may eventually prove to be to American museums, has become almost a national menace. The spiritual value of a Raphael or a Rembrandt cannot be assessed in terms of money, and the fierce rivalry among modern collectors has distracted the public from the fundamental human purpose of art. Within the last ten years the prices of old masters have been pushed to incredible figures. The bad effects of this situation are not, unfortunately, confined to the dealers and collectors. The public is led to believe that all the masterpieces have been painted, that art is a luxury which none but the very wealthy can afford, and that its value is proportionate to its rarity. In addition fantastic collecting of this sort enforces the snobbery of art, and the English portraitists, Reynolds, Gainsborough, Lawrence and Romney, whose sitters happened to be socially distinguished, are more ardently coveted and exploited than painters of far greater accomplishments.

The current tendency to monopolize works of art and to hoard them as priceless commodities has enlarged the sphere of operations of the dealer. It is he more than any one else who is responsible for the fabulous prices of paintings. His policy is to attach a legendary valuation to all pictures and, instead of creating a market for contemporary art as does the publisher with his authors, he holds his pictures for the high prices which he knows he can receive. This practise has an unfortunate effect upon the artist, who has usually no other outlet for his product. Aware that small prices in art are considered by Americans as indications of mediocrity, he derives what solace he may from the belief that eventually his dealer will sell his paintings for high sums to the credulous and wealthy collector.

Another disastrous issue of modern collecting is the international rivalry and bad feeling which it has promoted. The director of the National Gallery, London, has warned the British that the dwindling resources of the empire can no longer safeguard her art treasures against depletion by American wealth and that the only remedy is an embargo on exports. On the other hand American artists, bemoaning the popularity of French painting, the only modern painting that has an appreciable market in America, are seriously agitating a protective tariff on recent art productions and have formed a league with that end in view.

The advantages of private collecting may be briefly stated. The collector is a man of strong prejudices and extravagant fancies which he is prepared to indulge to the limit. When he invades a particular field of art he is not satisfied until he has swept it clean, and his expenditures in certain directions often exceed the appropriations of the largest public museums. As a consequence his collection, in its own special province, will be extraordinarily rich and complete. His rare possessions are often housed magnificently in buildings of excellent design, with perfect lighting, ample space between objects and every facility for the comfort of visitors, although as a rule the private collection is inaccessible and, even when open to the public on the most generous terms, is not very largely attended because of its situation and its cloistered atmosphere. The most valid excuse for the existence of these private collections is that their priceless contents are ultimately bequeathed to public institutions. The Uffizi, in Florence, developed from a nucleus of treasures formed by Lorenzo de' Medici, and in similar circumstances most of the other great European galleries came into existence.

THOMAS CRAVEN

See: PATRONAGE; AMATEUR; AUCTIONS; MUSEUMS AND EXHIBITIONS; COMMERCIALISM; FASHION.

Consult: Holmes, C. J., *Old Masters and Modern Art* (New York 1928); Singleton, Esther, *Old World Masters in New World Collections* (New York 1929); Phillips, Duncan, *A Collection in the Making* (New York 1926); Pach, Walter, *Ananias; or, The False Artist* (New York 1928); Fry, Roger, *Vision and Design* (New York 1924) ch. v, and *Transformations* (New York 1927) chs. ii–iii; Simonson, Lee, *Mine Prophecies* (New York 1927) ch. ii.

ARTEL. The word originated from the Turkish *orta*, which means "association" or "community." Russian equivalents for artel are *druzhina*, *vataga* and *skladshchina*, which mean "comradeship," "brotherhood," "association," "cooperation" and "gang." The Russian artel of the past was a natural outgrowth of the kinship organization of society and a supplement to it. When a separate family unit was inadequate for the achievement of certain economic tasks such as hunting, fishing, clearing and cultivation of land, a number of related families used to join together under the leadership of their patriarch to perform these tasks by collective effort. Originally such artels were composed of persons related to one another and of the members of the same village community. Later the role of

kinship faded somewhat, and artel began to signify a free union of an indefinite number of persons, usually male peasants and laborers, who joined together on an equal basis for the performance of certain types of work.

Specific characteristics of the artel were: equal standing of members; an elected leader (*starosta*) who represented the artel to the outside world and who performed the organizational and managerial functions; collective responsibility; and solidarity of relationship between members. Each member was entitled to equal standing and remuneration, to a voice in the election of the leader and to participation in the assembly of the artel—its supreme authority. Since the artel was a free union of private proprietors for the collective achievement of a definite economic purpose it was neither a communist nor a socialist institution, as has occasionally been asserted by exponents of populist socialism in Russia.

The artel appeared early in Russian history. Documents of the fourteenth century mention the artels of fishermen, hunters, agricultural laborers, brigands, boatmen, salt producers and the like. Simultaneously or very nearly so, artels of peasants for mutual help and for collective renting and cultivation of land; artels of masons, carpenters, singers, musicians; artels for the home manufacture of various products, for collective buying and selling, came into existence.

At present artel generally means a cooperative organization. Under the capitalist system the old form of artel changed and it has been transformed into a modern cooperative union. According to the nature of the cooperative organization artels are usually classified as producers' artels (including both producers at home and migratory laborers), consumers' artels, credit artels and insurance artels. In some of these artels, especially in those of the migratory agricultural laborers, porters and longshoremen, the old elements of mutual solidarity, collective responsibility, discipline and good conduct were still alive before the revolution.

After the inauguration of the New Economic Policy the formation of artels in handicrafts and agriculture was encouraged by the Soviet government as the first step in the direction of socialization of small scale production. Subject to certain limitations as to membership, personal participation in work and use of hired labor, any association of producers for the purpose of joint ownership of machines or tools, joint contracting for work, joint purchase of raw material or sale of output was recognized as an artel and treated as a cooperative organization. This policy led to an increase in the number of artels, of which two thirds were in agriculture. This increase and the change in the character of the artel from a free organization typified by a gang of migratory laborers working and living together to a semi-compulsory organization designed to serve narrowly defined ends are fairly indicative of the present day situation. It is doubtful whether the new artel preserves the genuine spirit of the old.

P. A. SOROKIN

See: MIR; MIGRATORY LABOR; PRODUCERS' COOPERATION.

Consult: Kalachov, N. V., *Arteli v drevney i nineshney Rossii* (Artels in ancient and modern Russia) (St. Petersburg 1864); Isayev, A. A., *Arteli v Rossii* (Artels in Russia), published as volumes xxvi and xxvii of *Vremennik Demidovskavo Yuridicheskavo Litseya* (Publications of the Demidov Lyceum of Law) (Yaroslavl 1881); Staehr, G., *Über Ursprung, Geschichte, Wesen und Bedeutung des russischen Artels* (Dorpat 1890); Apostol, P., *Das Artjel* (Stuttgart 1898); Koniukov, I. A., *Kollektivnoe zemledelie* (Collective farming) (2nd ed. Moscow 1925); Bukhov, M., and Lipets, A., *Trudovie arteli* (Labor artels) (Moscow 1925).

ARTHUR, PETER M. (1831–1903), American labor leader and head of the Brotherhood of Locomotive Engineers from 1874 until his death. He was elected to office at the same time that the brotherhood changed from a non-striking, purely "uplift" and mutual benefit organization into a trade union with an aggressive collective bargaining policy. In the period of depression following 1873 the brotherhood conducted with a varying degree of success a number of strikes against wage reductions. For a time the opposition of the railroads and the loss of two important strikes in 1877 threatened the existence of the organization. However, under Arthur's leadership it survived and, with the improvement of economic conditions after 1880, secured favorable written agreements from practically all the railroads of the country. Like other labor leaders of the business type Arthur believed in a unity of interests between capital and labor, considered the strike a useful instrument to be employed only as a last resort, foreswore violence and relied heavily on collective bargaining and the faithful observance of written agreements. He differed from them in advocating arbitration of disputes, perhaps because of the public nature of the railroad industry. He kept the brotherhood aloof from

all other labor organizations. His conservatism won for him in later years the confidence of many railroad officials. He was very popular with the rank and file of the membership although at times, especially toward the end of his life, there was strong opposition to his conservative policies.

JACOB PERLMAN

Consult: ***Brotherhood of Locomotive Engineers Journal,*** vol. xxxvii (1903) 568–72; *Literary Digest,* vol. xxvii (1903) 127–28; Lindsay, S. M., "Report on Railway Labor in the United States" in United States Industrial Commission, *Report,* vol. xvii (1901) 821–25.

ARTICLES OF CONFEDERATION. The importance of union to the minds of members of the Second Continental Congress in 1776 is indicated by the appointment of two committees on the same day: one to draft a declaration of independence and the other "to prepare and digest the form of a confederation." Immediately after the Declaration of Independence was adopted the second committee made its report in the form of Articles of Confederation. The form that the report took, and much of its content, can be traced back directly to the Articles of the New England Confederation of 1643, through the plan that Benjamin Franklin submitted to Congress in 1775, with modifications to be attributed to the Plan of Union recommended by the Albany Congress of 1754, for which plan also Franklin was largely responsible.

The report was debated at intervals for over a year and, with some changes, was finally agreed to November 15, 1777. It was then submitted to the states for approval, but ratification was not obtained until March, 1781, when the revolution was drawing to its close. The delay was caused by the question of the ownership of the land beyond the Allegheny Mountains. Some of the states, by right of their colonial charter grants, laid claim to large parts of the western region. The non-claimant states demanded in self-protection that the western lands should belong to the nation. It was not until New York in 1780 and Virginia in 1781 offered to cede to the United States their claims to the western lands that ratification of the articles could be completed. In the meantime the very necessities of the situation had forced Congress to proceed as if the Articles of Confederation were already adopted.

The provenance of the Articles of Confederation is essential to the understanding of that instrument, because some important provisions date back to an entirely different condition of colonial affairs, and others are to be attributed to the Americans' state of mind at the outbreak of the war when the people were willing to act in the common interest without compulsion.

The Articles of Confederation for "The United States of America" first declared that "Each State retains its sovereignty, freedom and independence, and every Power . . . which is not . . . expressly delegated to the United States." The purpose is then set forth to "enter into a firm league of friendship," and careful provision is made for the utmost freedom of intercourse between the citizens of the several states.

The organization of a government provided simply for a Congress in which each state had one vote, and the delegates were appointed, paid and subject to recall by their respective states. Before proceeding to enumerate the powers of Congress, a long article was inserted placing restrictions upon the states in interstate and international relations. Extensive powers were vested in Congress, but none of these powers could be exercised unless nine states voted in the affirmative, and even then there was nothing to compel the individual states to comply, beyond the mere declaration that "every State shall abide by the determinations of the United States in Congress assembled." Provision was made for admitting Canada whenever it acceded to the confederation, "but no other colony shall be admitted . . . unless . . . agreed to by nine States." Finally, changes in the Articles of Confederation required confirmation by the legislature of every state.

Congress could declare war, but it could not compel the states to send the quotas of troops necessary to carry on war; it could determine the necessary expenses, but could not oblige any state to meet its share of the obligation; it could borrow money, but could not repay it; it could decide disputes, but could not force the parties to accept the decision; it could make treaties, but could not make the states observe them. An illuminating commentary upon the type of political organization that was set up may be found in an editorial of the London *Spectator* of October 26, 1918, that presented a plan for a league of nations avowedly based upon the American Articles of Confederation.

The ineffectiveness of the confederation was evident when the ending of the war revealed that the selfishness of the individual states was

stronger than the bonds of union. The somewhat factitious prosperity that came with peace was only short lived, and was succeeded by a commercial and business depression that was severe enough to be sometimes referred to as the "panic of 1785." Widespread discontent developed into riot and even into insurrection, as in the case of Shays' Rebellion in Massachusetts in 1786. The culmination of hopelessness was reached when the treasury was becoming bankrupt because Congress had no power to levy taxes. The only remedy seemed to lie in amending the Articles of Confederation, but here again the selfish interests of the several states interfered. More than one amendment was proposed and failed because the approval of all the states could not be obtained.

The confederation was lacking in effectiveness. So much may be conceded, but a government that had been of service in holding the states together during the struggle for independence is entitled, as John Marshall said, "to the respectful recollection of the American people," and a government that could produce the Land Ordinance of 1785 and could frame Jefferson's Ordinance of 1784 or its more famous successor, the Ordinance of 1787, for the government of the territories of the United States, is entitled to universal respect.

MAX FARRAND

See: FEDERATION; CONSTITUTIONS; CONSTITUTIONAL CONVENTIONS; DECLARATION OF INDEPENDENCE; STATES' RIGHTS.

Consult: United States Continental Congress, *Journals, 1774–1789*, ed. by W. C. Ford and G. Hunt, 25 vols. (Washington 1905–22) vols. ii–xxi; Fiske, John, *The Critical Period of American History* (Boston 1916); McLaughlin, A. C., *The Confederation and the Constitution* (New York 1905); Farrand, Max, *The Fathers of the Constitution* (New Haven 1921); Mathews, L. K., "Benjamin Franklin's Plans for a Colonial Union, 1750–1775" in *American Political Science Review*, vol. viii (1914) 393–412.

ARTIFICERS, STATUTES OF. *See* LABOURERS, STATUTES OF.

ARTIGAS, JOSÉ GERVASIO (*c.* 1764–1850), the national hero of Uruguay. He was descended from a well known family of Montevideo and passed his early life on a hacienda. After May, 1810, when an uprising against Spanish rule occurred at Buenos Aires, Artigas relinquished his office in the Spanish military service because of ill treatment by a superior officer and became the leader of a secessionist band. In April, 1813, when a constituent assembly of the revolting Spanish colonies was held at Buenos Aires, he instructed delegates from the left bank of the Uruguay River to propose that the provinces of La Plata should adopt a declaration of independence from Spain and establish a federation. Each province of the former viceroyalty was to be allowed to organize its own local government and a national government was to be established to carry on federal business. The federal government was to insure to each province a republican form of government. These instructions, which were obviously influenced by the Articles of Confederation and the Constitution of the United States, have become famous in South American history.

After the constituent assembly refused to admit his delegates Artigas became in 1814 the champion of a movement for the independence of the disputed land of Uruguay, then claimed by Spain, Brazil and Argentina. He succeeded in capturing Montevideo in 1815, but was defeated by Brazil in 1817. After another defeat in 1820 by one of his own lieutenants, Ramírez, he was exiled in Paraguay. Although his historic role is still a topic for debate between Uruguayans and Argentineans there is no doubt that he spread a knowledge of federal ideas in the basin of La Plata and struck the first great blow for the independence of Uruguay.

WILLIAM SPENCE ROBERTSON

Consult: Acevedo, Eduardo, *José Artigas, jefe de los orientales y protector de los pueblos libres*, 3 vols. (Montevideo 1909–10); Cavia, P. F., *El protector nominal de los pueblos libres* (Buenos Aires 1818).

ARTS AND CRAFTS MOVEMENT. *See* INDUSTRIAL ARTS.

ARWIDSSON, ADOLF IVAR (1791–1858), poet, journalist, historian and one of the founders of the Finnish nationalist movement. He studied at the University of Åbo, where he was appointed docent in history in 1810. Convinced that the political autonomy granted to Finland after the Russian annexation in 1809 would be ineffective in preventing the absorption of the country by Russia, he sought to quicken the national consciousness of his people and thus arouse them to a realization of the danger of Russification. In 1821 he founded the *Åbo Morgonblad*, the first political newspaper in the country, and filled its pages with nationalist argument and severe criticism of those in power. As a result the paper was soon suppressed and Arwidsson himself expelled from the university.

Because of the hostility of the authorities he was unable to obtain another position and emigrated to Sweden in 1823. There Arwidsson became connected with the Royal Library in Stockholm, of which he was appointed librarian in 1843. He was keenly interested in the past of his native land and in the history of his adopted country and published several works dealing with Finnish and Swedish history.

JOHN H. WUORINEN

Important works: *Lärobok i Finlands historia och geografi* (Textbook of Finland's history and geography) (Stockholm 1832); *Handlingar till upplysning af Finlands häfder* (Documents on the past history of Finland), 9 vols. (Stockholm 1846–57), an important source collection; *Svenska fornsånger* (Old Swedish songs), 3 vols. (Stockholm 1834–42).

Consult: Danielson-Kalmari, J. R., *Tien varrelta kansalliseen ja valtiolliseen itrenäisyyteen* (Along the road to national and political independence) (Helsingfors 1928) p. 152–289; Estlander, C. G., "Arwidsson som publicist i Åbo" (Arwidsson as a publicist in Åbo) in Svenska Literatursällskapet i Finland, *Skrifter*, vol. xxviii (1894) 90–180.

ARYANS. This term is used in two distinct senses. It is correctly applied to the Sanskrit speaking people who invaded India and to the ancient Persians, inhabitants of Airyana or Iran, both of whom called themselves Aryas. Its second use is as a substitute for "Indo-European" or "Indo-German" to designate a family of languages or even of races or peoples.

This second use of the term has played an important role in philological, anthropological and historical discussion since the middle of the nineteenth century. By that time the studies of philologists and grammarians had made clear numerous similarities among what are now called the Indo-European or Aryan tongues. Certain similarities between Sanskrit and the classical and modern European languages were first pointed out by Sir William Jones in 1786. The later work of Friedrich Schlegel, James C. Prichard, Adolphe Pictet, Franz Bopp and others showed that the Sanskrit, Greek, Latin, Celtic, Germanic and Slavonic languages all belonged to the same family. These discoveries set going a vast amount of speculation as to the origins, history and interrelations of the early and modern Aryan speaking peoples. It seemed obvious that all the related languages must have been derived from a common source. Accordingly it seemed logical to conclude that there must have been a race or people which spoke the original parent language. Moreover it followed that this supposititious Aryan race was especially gifted with culture producing capacities and had, indeed, been the creator of all the great civilizations both ancient and modern.

There began active speculation as to the location of the cradleland and the racial characteristics of the original Aryans. As early as 1840 A. F. Pott had placed the homeland of the original Aryans on the slopes of the Hindu Kush mountains. Pictet pictured (1859–63) Bactria as the primitive but idyllic homeland. He had many imitators on the continent, and with Friedrich Max Müller, who also accepted an Asiatic origin, set the dominant pattern of thought for a quarter of a century. The latter, in his famous *Lectures on the Science of Language* (2 vols., London 1861–63), declared that the common ancestors of the Hindus, Persians, Greeks, Romans, Slavs, Celts and Germans once lived together in central Asia "within the same enclosure, nay, under the same roof," and spoke a language containing the germs of all the great tongues.

The probability of a European origin was suggested by Bulwer Lytton (1842), and arguments therefor were developed by J. J. d'Omalius d'Halloy (1848), R. G. Latham (1851 and 1854) and A. Schleicher (1853 and 1861). It was pointed out that inflected languages are more widespread and more highly developed in Europe than in Asia, that the Asiatic origin of Europeans is probably mythical, and that all the Celtic speaking peoples seem to have descended from autochthonous Europeans. Thereafter the cradleland was placed in various parts of Europe—north of the Black Sea, in the plains of Hungary, south of the Baltic, north of the Baltic, or in southern or central Russia. The American anthropologist D. G. Brinton (1890) argued in favor of a north African origin, a view supported by the eminent English ethnologist A. H. Keane (1896). Thus the round of possible habitats was complete. Similar speculations have been revived since the war, usually in favor of one or other European locality, in the work of G. Kossinna, *Die Indo-Germanen* (Leipsic 1921); Peter Giles, "The Aryans" in *Cambridge History of India* (vol. i, Cambridge, Eng. 1922, p. 65–76); H. H. Bender, *The Home of the Indo-Europeans* (Princeton 1922); Harold Peake, *The Bronze Age and the Celtic World* (London 1922); and V. Gordon Childe, *The Aryans: A Story of Indo-European Origins* (London 1926).

Controversy over the physical traits of the idealized, culture producing Aryans was equally riotous and inclusive. The original Aryans were

described in books now as long heads and now as round heads, as blond and brunet, as tall and as medium in stature. The most influential work of this sort was the now famous *Essai sur l'inégalité des races humaines* (2 vols., 2nd ed. Paris 1884; bk. i tr. by Adrian Collins, London 1915) by Count Arthur de Gobineau. In this he pictured the Aryans as blond long heads of heroic stature, and declared the Teuton to be the purest modern and historical descendant. While this work was wholly neglected at the time, it was later taken up by Richard Wagner and his circle. Various writers had made Germany the original Aryan homeland, and others, notably Theodor Pösche (1878) and Karl Penka (1883 and 1886), had made the original Aryans tall and blond. The Gobineau Vereinigung, formed in 1894, became a chief agent of propaganda; H. S. Chamberlain lent fresh credence to the rising racialist faith by his *Grundlagen des neunzehnten Jahrhunderts* (3 vols., Munich 1901), while numerous others, especially Otto Ammon and Ludwig Woltmann in Germany and G. Vacher de Lapouge in France, gave what they called a "scientific" basis to the belief in blond racial supremacy. There was thus aroused in Germany before the war an ill founded race idolatry which intensified antisemitism, strengthened an aggressive, expansionist spirit and sanctified the desire to dominate.

The sequel of nineteenth century Aryanism in Germany was, however, paralleled by similar phenomena in other countries. French scholars fortunately were divided among themselves. While some of them identified the so-called Celts with the tall long headed blond and thus lent credence to doctrines becoming popular in Germany, it was more in harmony with patriotic requirements to identify the mythical Aryan with the medium statured, round headed, brunet Alpines. Anglo-Saxonism in England and America and Nordicism in post-war Germany and America represent transmutations of Gobineau's brand of Aryanism.

Nevertheless skepticism in scholarly circles grew rapidly after 1880. The obvious impossibility of actually locating the Aryan cradleland; the increasing complexity of the problem with every addition to our knowledge of prehistoric cultures; the even more remote possibility of ever learning anything conclusive regarding the traits of the mythical "original Aryans"; the increasing realization that all the historical peoples were much mixed in blood and that the role of a particular race in a great mélange of races, though easy to exaggerate, is impossible to determine; the ridiculous and humiliating spectacle of eminent scholars subordinating their interest in truth to the inflation of racial and national pride—all these and many other reasons led scholars of the first rank even before 1890 to declare either that the Aryan doctrine was a figment of the professorial imagination or that it was incapable of clarification because the crucial evidence was lost, apparently forever.

FRANK H. HANKINS

See: RACE; RACE PREJUDICE; ANTISEMITISM.

Consult: For modern forms of Aryanism the works mentioned above; for history and criticism, Taylor, Isaac, *The Origin of the Aryans* (London 1902); Reinach, Salomon, *L'origine des Aryens* (Paris 1892); Simar, Theophile, "Étude critique sur la formation de la doctrine des races au XVIIIe siècle et son expansion au XIXe siècle" in Académie Royale des Sciences, des Lettres, et des Beaux-Arts de Belgique, *Mémoires*, Classe des Lettres, 2nd ser., vol. xvi (1922) no. 4; Hankins, F. H., *The Racial Basis of Civilization* (New York 1926).

ARZRUNI, GREGOR (1845–92), Armenian publicist. He finished school at Tiflis and visited the universities of Moscow, St. Petersburg, Zurich, Geneva and Heidelberg, where he studied political economy and natural sciences and became an enthusiastic admirer of German culture. His first knowledge of his native language was acquired in Vienna and Venice during visits to the Mkhetarist congregations (founded by Mkhetar in the eighteenth century for the purpose of reviving the ancient Armenian language and literature). In 1865 he began his literary and journalistic career, writing chiefly for two Armenian periodicals. His opinions being highly progressive, his opponents accused him of exaggerated cosmopolitanism and of not sufficiently appreciating the historical traditions of the Armenian people. He was in favor of popular lectures, coeducation for boys and girls (mixed schools then being a great novelty in the Near East) and feminine emancipation. In 1872 he founded in Tiflis a progressive daily paper, called the *Mshak* (The worker), which became the chief Armenian paper until the Bolshevik upheaval. *Mshak* advocated general education, popular theaters, the amelioration of the material conditions of the peasants, the reform of the church and the cultural union of Russian and Turkish Armenians. Arzruni may be considered the true creator of the Armenian press.

V. TOTOMIANZ

ASCETICISM is derived from the Greek ἄσκησις, "training." The ascetic is one who "goes into training" in order to become a moral or religious athlete. In this general sense all forms of moral and religious discipline may be called ascetic. In the narrower sense asceticism means the attempt to annihilate bodily desire through severe austerities because of a belief either that life in the body is in itself an evil or that the body is an impediment to the realization of the highest life. The ambition for spiritual perfection remains in any event the defining characteristic of asceticism and distinguishes it from things having only a superficial resemblance. For example, "the sacred" is "not lightly to be approached" and is therefore the source of various peculiar prohibitions, but these do not involve the idea of spiritual discipline and are therefore better classed with tabu than with asceticism. Again, religious insight may reveal a good which eclipses the value of all natural goods. Abstinence from sensual pleasures then becomes a by-product rather than a condition of mystical attainment, and connotes superiority to the world rather than hatred of it. Socrates and Jesus may be taken as representatives of this attitude.

The ideals of asceticism, however, have often been corrupted. It has been used, especially in India, as a means of gaining magical powers. Competitive ambition and spiritual pride have also cheapened the concept. Like other athletes the ascetic, in his endurance of self-imposed tortures or privations, has been tempted to aim at "breaking the record." The idea of discipline is forgotten, and he wears his achievements as though they were medals. Again, the extinction of bodily desire sometimes ceases to be regarded as a means to the soul's development and is taken to be an end in itself.

The general judgment upon asceticism in the western world today is unfavorable, if not actually hostile. There are several probable reasons for this attitude. Asceticism is dualistic and otherworldly, whereas we tend to look upon the body as the organ of, not an impediment to, spiritual life. Preoccupation with problems of personal holiness drains off the energy and enthusiasm that the modern man is inclined to feel should go into the tasks of social life. Since a complete renunciation of the world is manifestly impossible for all, asceticism involves a double standard of holiness and thus offends against prevalent ideals. Moreover the method of asceticism is self-defeating, for to attack temptation consciously is not to put it out of mind but to keep it in mind; he who has an enemy is not yet free. Psychologists are inclined to see in asceticism, on the one hand, a pathological pursuit of pain for its own sake, and, on the other hand, a fruitful source, under modern conditions, of inhibitions, phobias and anxiety neuroses.

These strictures, however well founded, do not justify a radical condemnation. They ignore the appeal of asceticism to normal elements in human nature. Asceticism is in part only an exaggerated form of that love of purity which is shocked or offended by contact with the sensual, that fastidiousness which is an essential ingredient in moral judgment. Moreover any enthusiastic devotion needs to feel and test its power by overcoming opposition; passion generates a hunger for suffering. There is, besides, a permanent attraction in that ideal which lies behind asceticism—inner freedom, self-sufficiency and independence of things and instrumentalities. In general we may say that while asceticism in the broad sense of training has the value which self-discipline everywhere possesses, it is in its restricted meaning significant for two reasons. First, in periods of self-indulgence and soft living it is a demonstration that man is not enslaved to the external and transient. Its heroic austerities are at once a proof of the soul's powers and a challenge to them. Second, there is a sense in which it is true that a life of ease is a fool's paradise, while pain introduces one to reality. Deliberately to expose oneself to the worst that the world has to offer in the way of suffering is to plumb the depths of reality. The ascetic is one who "voluntarily takes the great initiation" (William James). From this point of view asceticism is a profoundly interesting form of "ontological ambition."

CHARLES A. BENNETT

See: MYSTICISM; RELIGION; CHRISTIANITY; BUDDHISM; CELIBACY; RELIGIOUS ORDERS; MONASTICISM; PRIESTHOOD; PURITANISM.

Consult: James, William, *The Varieties of Religious Experience* (New York 1902); Ellis, Havelock, *Sex in Relation to Society*, Studies in the Psychology of Sex, vol. vi (Philadelphia 1927) p. 143–77; Montmorand, B. de, "Ascétisme et mysticisme" in *Revue philosophique*, vol. lvii (1904) 242–62; Adam, James, *The Religious Teachers of Greece* (Edinburgh 1908); Lecky, W. E. H., *History of European Morals*, 2 vols. (3rd ed. New York 1879) vol. ii, p. 101–60; Suso, Henry, *The Life of the Blessed Henry Suso*, tr. from the German by T. F. Knox (London 1913); Zöckler, O., *Askese und Mönchtum* (Frankfort 1897); Hardman, Oscar, *The Ideals of Asceticism* (London 1924).

ASCHAM, ROGER (1515–68), English humanistic educator. His literary gift prompted his guardian to send him to Cambridge where he identified himself with the spirit of the early Renaissance. His scholarship, appealing style and Protestant attitude made him a much sought lecturer on Greek authors. He became preceptor to Elizabeth and later Latin secretary to the crown. With Colet and Lilly he gave to Greek an assured place in the curricula for three centuries.

The Scholemaster (1570, Westminster 1903), a posthumous publication, is the first English treatise on education and establishes Ascham as a representative Renaissance scholar. Like the other humanists he saw in education the social instrument for developing virtue and enhancing cultural attainment through literary study. Like them he failed to analyze his basic terms, virtue and culture, and sacrificed the aesthetic and social values for the purely linguistic aspects of literature. Education was never directed participation in life. *The Scholemaster* deals with classroom procedure, not with educational principles. Grammar and language forms are enthroned; social studies and science are secondary. Ascham urges, "Teach cheerfully and plainly the cause and the matter," and thus bases retention on rational rather than mechanical association. To combat the brutality of prevailing discipline he pleads for judicious praise "to sharpen a good wit and encourage a will to learn." While he opposes corporal punishment as a means of stimulating learning he regards it as both a corrective and an incentive in proper conduct. Ascham's influence on educational practise remained insignificant, for his highly formal curriculum failed to identify education with intelligent living.

PAUL KLAPPER

Consult: Monroe, Paul, *Textbook in the History of Education* (New York 1905) p. 382–85.

ASCHEHOUG, TORKEL HALVORSEN (1822–1909), Norwegian political scientist and economist. He studied law in the University of Christiania (Oslo), where he was appointed lecturer in 1852 and professor *juris* ten years later. His investigations in public law bore fruit in subsequent works, among them *Das Staatsrecht der vereinigten Königreiche Schweden und Norwegen* (Freiburg 1886) and *Norges offentlige ret* (4 vols., Christiania 1866–85), the second part of which was republished as *Norges nuvärende statsforfatning* (3 vols., Christiania 1891–93). From 1869 to 1882 he was a member of the Storting and as conservative leader worked toward closer union with Sweden. When in 1886 he began to lecture solely on economics and statistics his characteristic energy manifested itself. He conducted an extensive inquiry into the whole field of economics. He wrote on various subjects—on Norwegian population and agriculture in the seventeenth and eighteenth centuries, on the history of corn prices and the history of value and price theory. At the age of eighty Aschehoug began publishing a systematic handbook on economics, *Socialökonomik* (3 vols., Christiania 1903–08). This work, the result of many years' labor, is standard in Scandinavian literature; the logic of its systematic construction is sometimes impaired by Aschehoug's honest attempt to do justice to all shades of opinion. Conscious of its defects Aschehoug began to revise it shortly before his death. The revised edition was later published by Thorvald Aarum.

HARALD WESTERGAARD

ASHBURTON, ALEXANDER BARING, FIRST BARON (1774–1848), British financier and statesman. He succeeded his father, Sir Francis Baring, in 1810 as head of the great financial house of Baring Brothers, whose service he had entered in early youth. His marriage to the daughter of Senator William Bingham of Philadelphia twelve years before had brought him important American connections and investments. His firm, which served for years as the financial agent of the United States government abroad, arranged for the transfer of the purchase price of Louisiana to France. By speeches in Parliament and by his pamphlet, *An Inquiry into the Causes and Consequences of the Orders in Council* (London 1808), he sought to restrain British violations of American neutral rights. Later he played a helpful role in connection with the negotiations which preceded the peace treaty of Ghent.

The commercialization of a large part of the French reparations burden, which speeded the evacuation of France by allied troops after the Congress of Vienna, was Ashburton's most important achievement. He was an important factor in the migration of British capital to North and South America. When an epidemic of repudiation swept several American states after the panic of 1837, the Barings obtained the legal advice of Daniel Webster. Not long after, Alexander Baring, who had been created Baron Ashburton in 1835 after serving as president of the Board of Trade in Peel's first admin-

istration (1834–35), negotiated with Webster the celebrated treaty of August 9, 1842. This treaty settled many troublesome issues between the United States and Great Britain, particularly the Northeastern Boundary dispute. He opposed the Bank Charter Bill of 1844 in the House of Lords and in *The Financial and Commercial Crisis Considered* (London 1847).

JAMES P. BAXTER, 3RD

Consult: Adams, E. D., "Lord Ashburton and the Treaty of Washington" in *American Historical Review*, vol. xvii (1912) 764–82.

ASHLEY COOPER, ANTHONY. *See* SHAFTESBURY, THIRD EARL OF.

ASHLEY, WILLIAM JAMES (1860–1927), English economic historian, economist, educator and public servant. As a student at Balliol College, Oxford, Ashley came under the inspiring influence of Stubbs, Maine and Arnold Toynbee. He developed an interest in economic history which was fostered by travels in Germany and by wide reading in the literature of the German historical school. Following his graduation he continued to reside at Oxford, first as coach and after 1885 as fellow of Lincoln College. He left England to become professor of political economy at Toronto (1888), and in 1892 came to Harvard to occupy the first chair of economic history established in any country. Nine years later he returned to England as professor of commerce at the University of Birmingham, where he remained until retirement in 1925. During this period Ashley's attention was diverted from economic history. He organized the first university school of commerce in England, became the leading academic exponent of Chamberlain's tariff policy and served on various public commissions. During and after the World War he devoted an increasing amount of his attention to these commissions.

Ashley did more than any one of his contemporaries to put English scholars in touch with continental literature and with continental problems. He recognized the need for mastering the work of the German historical schools although advocating the rejection of certain of their dogmatic conclusions. He did not stand alone in urging economists to abandon heated discussions of method, but no one stated more aptly nor developed more notably the constructive concept of economic history as a border line discipline embracing problems both of historical criticism and of theoretical analysis ("On the Study of Economic History" in *Quarterly Journal of Economics*, vol. vii, 1892–93, 115–36). Because of the high qualities of judgment displayed in Ashley's concrete historical studies even his earliest work is still significant, despite the subsequent research of many students with leisure and facilities for archive work which he never enjoyed.

ABBOTT PAYSON USHER

Important works: *James and Philip van Artevelde* (London 1883); *The Early History of the English Woollen Industry* (Baltimore 1887); *An Introduction to English Economic History and Theory*, 2 vols. (London 1888–93, 4th ed. London 1914–23), translated into German (1896), Russian (1897), French (1900) and Japanese; *Surveys, Historic and Economic* (New York 1900); *The Adjustment of Wages; A Study in the Coal and Iron Industries of Great Britain and America* (London 1903); *The Tariff Problem* (London 1903, 3rd ed. London 1911); *The Progress of the German Working Classes in the Last Quarter of a Century* (London 1904); *The Economic Organisation of England* (London 1914); *Business Economics* (London 1926); *The Bread of Our Forefathers* (Oxford 1928).

Consult: Clapham, J. H., in *Economic Journal*, vol. xxxvii (1927) 678–83; Weinberger, Otto, in *Jahrbücher für Nationalökonomie und Statistik*, 3rd ser., vol. lxxii (1927) 630–38.

ASIENTO, a term of ancient Spanish public law, designates a contract by which the execution of a public service, such as public works, colonization, collection of taxes or provision of supplies, was farmed out by the administration to an individual. The Spanish possessions on the American continent were developed by asientos of colonization, of cultivation and especially of the supply of Negro labor. It was this last asiento which had the greatest financial, economic and diplomatic importance.

The need for labor made itself felt shortly after the conquest as it was seen that the natives were unfit for the necessary work, their numbers being rapidly decimated as a result of cruel exploitation. The problem was complex. The slaves had to be secured in the markets on the shores of Africa—regions not under the control of Spain, as her colonial activity had been directed toward America by the celebrated bull of Pope Alexander III. The African trading posts were in the hands of the Portuguese, French and English; and the Spanish government, by virtue of the uncontested dogma of colonial exclusivism, refused foreigners access to her own possessions. The commercial monopoly of America was jealously guarded by the kingdom

of Castile, and all economic relations with the new continent were farmed out to the University of the Merchants of Seville, under the administration of the Consulado (commercial tribunal) of Cadiz. However, the Spanish administration was never able to control effectively the commerce of the asientists nor to prevent their conducting an active smuggling trade in Spanish possessions under cover of the Negro traffic. Outside of the commercial and maritime administration of Cadiz the regulation of the Negro traffic came under the jurisdiction of the Council of the Indies, which controlled it through commissary judges, often in the service of the asientists. When the asiento passed into the hands of powerful foreign companies these companies diverted to their own profit the commerce and exchange with the Indies.

The earliest shipments of slaves were undertaken under licenses issued by the treasury. This permitted the bestowing of favors on friends of the king and the collection of high duties as security for loans. A first concession was granted in 1528 to two merchants of Seville. Afterwards the concessions reverted to the state until 1590. When Philip II reunited Portugal with Spain (1580–1660), the asiento in spite of Castilian resistance fell into the hands of the Portuguese factories in Africa (Coutino, 1601; Coello, 1609; Lamego, 1623; Angel and Sossa, 1631).

Following Portuguese independence, negotiations were conducted with two Genoese (1662) with a view to curbing the business of the Dutch who had established themselves in the Portuguese possessions, notably at Curaçao, a veritable fortress from which they flooded the Spanish colonies with merchandise. The English were equally active in Jamaica. The Consulado tried to conduct the slave trade on its own account, but the Dutch firms formed arrangements with the Spanish asientists and one of these firms, the house of Coymans of Amsterdam, secured the concession (1670) under pressure of the diplomacy of the States General. This was the first foreign asiento. Attacked as heretical by the Council of the Indies, which feared the diffusion of Protestantism as much as it did interloping, Coymans had to abandon his contract.

Portuguese diplomacy succeeded shortly afterwards (1696) in obtaining the asiento for the Cacheu Company, in which the king was interested. Madrid hoped thus to neutralize the contraband activity of the other occidental powers, but conflict with Lisbon soon arose and lasted until the death of Charles II. At the accession of Philip V to the throne of Spain, French diplomacy secured an ephemeral alliance with Portugal by means of heavy indemnities in favor of the Cacheu Company (Treaty of Alliance of June 18, 1701). At this time the government of Louis XIV, on September 14, 1701, awarded the asiento to the French Guinea Company represented by Admiral Ducasse, governor of Santo Domingo. The aim of the French government was to restore prosperity to the Spanish Indies, to exclude English and Dutch commerce from them and to reap its reward by the profits of the asiento. The two kings were each interested in this international contract to the extent of a quarter, but the company, obliged to furnish Negroes to the French colonists as well, was inadequate to the task and negotiated with its competitors. It succeeded, nevertheless, with the complicity of the Spanish governors and officials, in laying hands on a large part of the commerce of the Atlantic, of the South Seas and of the interior of the vice regencies. The king of Spain borrowed large sums of money from it.

After the War of the Spanish Succession the English government resolved in its turn to demand the asiento. A contract had been prepared in 1710 and the celebrated South Sea Company was organized in London to exploit the privilege which Philip V granted in order to retain his crown. This was one of the major negotiations of the Congress of Utrecht, at which English diplomacy secured the asiento at the cost of important economic and political claims. Although the treaty signed at Madrid, March 26, 1713, gave the asiento to England for thirty years, she kept it for nearly forty. Among other favors the English received the right to send annually to the fairs of Cartagena and of Porto Bello a registered ship (*navio de registro*) with 500 tons of merchandise. This privilege was abused, for the ship was constantly replenished surreptitiously. Then too the right of internal transportation made possible the introduction of merchandise into the interior of the country. When England renounced the asiento in 1750 in the Treaty of Madrid, all the commerce of the Indies had been diverted from Spain through interloping, which had proceeded with the connivance of authorities and colonists even during the war. Although the two crowns were interested in the enterprise, the stockholders of the South Sea Company

never ostensibly did a profitable business, for the Negro trade was no more than a screen. In fact it was through interloping that the directors and agents grew rich, and the conduct of the enterprise gave rise to serious scandals.

In 1750 the Spanish government reverted to national concessionnaires and divided the enterprise into partial asientos. Often, however, foreigners engaged in the business under assumed names. As the economic and commercial policy of Spain became more liberal, the institution lost its political interest. With freedom of trade it disappeared and was no more than a memory by the time of the humanitarian campaign against slavery and the slave trade.

The asiento was not one of the determining elements in the extension of the slave trade; on the contrary, it served indirectly to check the extension of this trade, since the monopoly of the slave traffic was employed as a cover for general commercial operations. The asiento had another result. It allowed the Spanish possessions which were being smothered by colonial exclusivism to live a tolerably comfortable life economically and to circumvent the home monopoly, which was incapable of supplying them adequately. In this way it acted as a safety valve which for a time retarded the movement of the Latin American states toward independence. The asiento also brought about a community of commercial interests among the European nations supplying the new continent and thus prepared the way for the doctrine of the open door.

GEORGES SCELLE

See: SLAVERY; SLAVE TRADE; COLONIES; ECONOMIC POLICY; MERCANTILISM; CHARTERED COMPANIES; CONCESSIONS; MONOPOLIES, PUBLIC; REVENUE FARMING; SMUGGLING.

Consult: Scelle, G. A. J. J., *La traité négrière aux Indes de Castille. Contrats et traités d'assiento*, 2 vols. (Paris 1906).

ASOKA, third sovereign of the Maurya dynasty of the Indian empire of Magadha, which included most of present day India together with Afghanistan. Asoka came to the throne about 273 B.C. and reigned until about 242. The date of his death is uncertain. Originally a devotee of the Brahmanical religion, about the year 260 he became converted to Buddhism. A profound change took place thereafter both in his character and in his policies. He accepted completely the principle of non-violence (*ahimsa*) and applied it not only to the world of man but to that of dumb animals and birds as well. He abandoned aggressive warfare, enjoined religious toleration and called for the proper treatment of slaves and servants. Asoka has often been called the "Constantine of Buddhism." Just as Constantine opened a new era in the development of Roman law, with Christianity as a potent factor, so Asoka exerted himself strenuously to make *dharma*, the religio-legal system which Buddhism had been developing for three centuries, the law not only of his individual life but of his realm. Two factors contributed to perpetuate and extend the legal system which he established; first, the inscription of his edicts, aggregating over 5000 words, on pillars and rocks over a vast area; second, an intensive, comprehensive missionary effort which resulted in spreading his cherished faith over most of Asia.

The most authoritative edition of Asoka's edicts is that of E. Hultzsch in vol. i of *Corpus inscriptionum indicarum* (Oxford 1925). A more popular edition is that of Vincent A. Smith (Oxford 1909).

CHARLES S. LOBINGIER

Consult: Smith, Vincent A., *Asoka* (3rd ed. Oxford 1920); Mookerji, Radhakumud, *Asoka* (London 1928).

ASQUITH, HERBERT HENRY, FIRST EARL OF OXFORD AND ASQUITH (1852–1928), British statesman. His father, Joseph Dixon Asquith, was a merchant, a man of culture and refinement; and his mother was the daughter of William Willans of Huddersfield, a friend of Cobden and Bright and a prominent Liberal and free trader. Educated at the City of London School, Asquith had a distinguished career at Oxford, where he was scholar and fellow of Balliol and president of the Oxford Union Debating Society. He went to the bar and achieved a reputation by his work on the Parnell Commission (1889). For some time he contributed regularly to the *Spectator* and the *Economist*. In 1886 he was elected Liberal Home Rule member for the Scottish constituency of East Fife and in 1890 was appointed Queen's Counsel. His gifts as a platform speaker and debater were quickly recognized by the party, and at the suggestion of John Morley he was included in Gladstone's last administration (1892) as secretary of state for the Home Office. He held this position under Lord Rosebery until the defeat of the Liberal government in 1895.

Asquith's highly efficient administration of the Home Office was distinguished by the ap-

pointment of a chief woman inspector for factories. Under the influence of Lord Rosebery, Sir Edward Grey and R. B. Haldane his Liberalism took a somewhat socialistic and decidedly imperialistic turn, and as a result he became separated from John Morley, Sir William Harcourt and Sir Henry Campbell-Bannerman. This divergence became acute in the Boer War, which Asquith supported as vice president of the Liberal League. After the war, when Joseph Chamberlain started his tariff reform agitation, the breach was healed; and Asquith distinguished himself as champion of free trade and as the most effective of Chamberlain's critics. In the Liberal administration of 1905 he was appointed chancellor of the exchequer. In this office he paid off many millions of the national debt and by prudent finance paved the way for old age pensions. On Campbell-Bannerman's resignation shortly before his death (1908) Asquith became prime minister, an office which he held until 1916, when he was forced to resign to make way for Lloyd George.

As prime minister Asquith was responsible for the establishment of old age pensions and of unemployment insurance. He also carried the Parliament Act limiting the veto of the House of Lords, which was secured only after two successive general elections in 1910. As an international figure Asquith will always be remembered as the man who brought Great Britain into the World War on the side of France. He remained leader of the Liberal party after his elevation to the peerage (1925); and one of his last public acts was, during the General Strike of 1926, to refuse further collaboration with Lloyd George in the councils of the party.

Asquith wrote little, but delivered many speeches, which are available in collected form. His *The Genesis of the World War* (New York 1923) is a temperate presentation of the British case for joining in the war. It is weak and imperfect, however, in its discussion of German and Russian diplomacy. Asquith also published *Fifty Years of the British Parliament* (Boston 1926). Asquith's diary, *Memoirs and Reflections, 1852–1927* (2 vols., Boston 1928), was published posthumously.

FRANCIS W. HIRST

Consult: Alderson, J. P., *Mr. Asquith* (London 1905); Elias, Frank, *The Right Hon. H. H. Asquith, M.P.* (London 1909); Spender, Harold, *Herbert Henry Asquith* (London 1915); Notestein, Wallace, "The Career of Mr. Asquith" in *Political Science Quarterly*, vol. xxxi (1916) 361–79.

ASSASSINATION. Used in a political sense assassination refers to the killing of a person in public life from a political motive and without legal process. The motive may be limited to some real or fancied wrong impelling the assassin alone, or it may be the belief that the assassin or the group whose attitude he shares stands to benefit by the removal of the victim. Assassination is to be distinguished from the death of political figures in civil conflicts which are tantamount to warfare and from the execution of political offenders where, although the political purpose served may be similar to that of assassination, the act is performed by the group in de facto political power and with at least the semblance of legal process. Where the victim of a murder is in public life but has been killed for non-political reasons the act is homicide in the category of criminal law and not, like assassination, in the category of public law.

The essential relation of assassination is with the struggle for political power. As a technique in this struggle it has been used in every period of history and under a variety of governmental forms. Assassination is most rarely found in primitive groups, where political power is mainly potential in the compulsions of the group and where, moreover, the tabus with which the chief is invested inspire a fear which precludes the possibilities of violence. At the other extreme—that of complete political disorganization—assassination shades into open conflict. Being essentially extra-constitutional, assassination implies the constitutional forms which it supplements. When, in the sequence of political institutions, unchecked violence is displaced by constituted methods for the succession of power, furtive and secret death crops up continually in order to attain what the constitutional procedures do not permit. Assassination is thus an index of the gap between the driving political impulses of men and the limits for their attainment set up by the existing political forms.

Among the various types of assassination the most significant division is between the dynastic and the revolutionary. While not primarily chronological such a division corresponds roughly with the pre-modern and the modern periods. In its dynastic form assassination has found its classic expression in connection with the hereditary monarchy, although the struggles within a hereditary nobility do not differ essentially from it. Through its recurrence in the annals of every monarchy the dynastic type of assassination has become familiar in historical

literature. At an early period it had acquired almost the status of a fine art at the hands of Egyptian Pharaohs, Babylonian, Assyrian and Persian kings, Roman and Byzantine emperors. The pages of Herodotus and Gibbon describe with a melancholy splendor the processes of dynastic conflict in terms of decadence, corruption and perversions. An explanation in ethical terms seems unsatisfying, however, since it is still necessary to explain the emergence of the moral obliquity.

The fault seems to have been at bottom not moral but political and social. Where power is centralized in a single person assassination recommends itself to dynastic intrigues and ambitions as easily the best method for seizing it. Dynastic assassination has occurred most frequently therefore in periods of the formation or degeneration of kingdoms and huge empire-masses. Every increase in absolutism has increased the desirability of the power held by the king; and the fact that the government is in such cases generally centralized in a capital city and subject to the vicissitudes of a praetorian guard increases its vulnerability. Under such conditions the monarchy becomes a prize to be fought over by every aspirant who can fashion a lineage or hire soldiers to aid him. Even the political inventiveness of the Persian and Roman rulers, while expending itself on administrative centralization, did not create a mechanism for the succession of power which could bear up under the pressure of assassination. The power of the ruling dynasty—hedged about though it was by divinity and by other sanctions, sacred and secular—was not proof against frequent attempts at the seizure of power.

But behind this vulnerability of governmental structure lay a more fundamental fact. The empires of antiquity were built up by the process of conquest, the process of destroying the close knit tribal allegiances of kinship groups and substituting for them looser political allegiances. The absolutistic monarchies were thus without roots in the political needs or desires of the governed. Except for self-interest or fear, no strong tie bound subject to ruler. This fact, while it stripped court intrigues of any deep social significance, made it possible for them to go on without hindrance from the population and lent to every contestant for power who was liberal in his offers the aid he needed. Everything that went with power—splendor and wealth and the enjoyment of sensual delights—was limited to the strategic position from which levies could be made on the underlying population. In minds trained in the ideals of a military aristocracy the impulse to power overrode every other consideration. Where the cultivation of the industries and the arts—everything that in modern times serves to encompass the energies of men and to offer them a diversity of careers—was excluded as ignoble, all that remained for the aristocracy was the passion for power. In such an atmosphere political careerism flourished and dynastic assassination went with it. Such a governmental and social structure was in antiquity most closely associated with the dynasties of the East; and there the psychological atmosphere too nourished assassination as a recognized political method.

At the end of the eleventh century a secret society of the Ismailite sect of Mohammedanism was founded in Persia by Hassan Sabah with the object of disseminating heterodox doctrine. Hassan Sabah seems to have been a man of genuine political inventiveness who recognized the crucial and precarious position that the monarch held in the highly centralized, loosely integrated governments of the East. He saw that a small but compact force that could move swiftly and strike suddenly at king and vizier could have the entire territory at its feet. Fortifying itself in secure mountain castles this society with its Grand Master, the Old Man of the Mountain, terrorized Persia and Egypt for centuries by the suddenness and effectiveness of its assassinations and maintained a veritable *imperium in imperio*. In organizing his method of violence in systematic fashion Hassan displayed considerable administrative genius. After feeding hashish to a select band of young men the Grand Master would give them a glimpse of the sensual joys that awaited them in heaven; they were then ready, even at the cost of their lives, to do his bidding with a robot-like obedience. The Crusaders, who came in contact with them in the twelfth century, learned to know them as "assassins" (*Hashishin*) from the role that hashish played in their novitiate; and struck by the demoniac efficiency of the system they brought its name and fame with them when they returned to Europe.

The method, previously known in Europe but never on so systematic a scale, had remained relatively unused, except in the Byzantine Empire, since the disintegration of the western Empire and the effective advent of Christianity. The role that Christianity had played had been to sap the vitality of assassination by emphasiz-

ing the sanctity of human life. The rigorous control which the mediaeval church exercised upon the lives and consciences of monarchs and nobles, through its use of excommunication and its general dominance over mediaeval thought, did much to soften violence in a lawless period of feudal strife. But with the Renaissance it became apparent that the principal effect of Christianity upon dynastic assassination had been not so much to nullify it as to make it more covert, force it into concealment and compel it to evolve a justifying theory. The change in the intellectual atmosphere of Europe, the revival of pagan attitudes and the loosening of repressions that are associated with the Renaissance qualified the strength of Christianity and converted it from a principle of inner coercion into an instrument of rhetoric. The Renaissance republics, the seats of the revival of learning, became also the centers for the revival of assassination. The records of the Venetian republic reveal a series of political murders committed by the order and with the reward of the Council of Ten and afterwards hushed up. Machiavelli's prince is advised to extirpate anyone who challenges his hold on power; but to the advice are added hints as to how such proceedings may be justified on grounds of state and how they may be reconciled with behavior becoming a Christian prince. This motif—of using the rhetoric of Christianity to defend the logic of violence—became widespread throughout Christendom, and the reconciliation of the two constituted the task of a school of political theory in the sixteenth century. It is significant that this period, when theory came to bolster and rationalize the practise of assassination, was also the period of the building of the national state in Europe. Kings were now eager to use every resource to consolidate their power against the claims of the nobility and against such autonomous associations as the church and the communes. In such a struggle death dealt to a dangerous opponent by some serviceable subject was a welcome instrument. But since, before the development of a theory of absolute sovereignty, the king's fiat was not deemed sufficient, a "higher law" was called in to strengthen it.

A similar normative tendency showed itself in regard to the assassination of one's foreign enemies. There was developing a body of international law on the subject whose principal text was that assassination as an instrument, while permissible during a state of warfare, was not permissible otherwise. This distinction was considerably qualified in the period of international religious conflict that followed the Reformation. In the gigantic struggle between the Reformation and the Counter-Reformation the principal strategy was to capture the thrones of Europe for one creed or another. The life or death of a handful of individuals became, or seemed, pivotal, and no king or religious leader was safe from assassination when a dagger thrust home or poison skilfully administered might decide the fate of Europe.

From the conjunction of these two forces—the struggle of the nobility and autonomous associations like the church against the absolute monarch, and the struggle of creeds to control thrones—there emerged a theory of the permissibility of regicide which not only furnished a theoretical basis for the assassinations of the period but by its subsequent importance in the struggle for political liberty also laid the basis for revolutionary assassination. The Greeks, in their doctrine of tyrannicide, had considered the slaying of a tyrant an act of civic virtue; the neotyrannicide of the Roman Republic had made the name of Brutus a synonym for patriotic passion undaunted by the necessity for murder. The Monarchomachs now proceeded to take these doctrines out of the context of the political institutions and traditions of the city-states of antiquity, and made them the instruments for the political purposes of their own period. Assassination became equated with a self-sacrificing nobility of motive in carrying out the demands of an ideology. When to this was added the crusade against authority by the *philosophes* of the French Revolution and its resultant glorification of the value of the individual judgment, the scene was laid for the various phases of ideological, or revolutionary, assassination which added much to the turbulence of nineteenth century political history.

The ideology in defense of which Ravaillac leaped upon the carriage of Henry IV and stabbed him had been mainly religious; that which prompted Charlotte Corday had been mainly political. With the industrial revolution and the creation of a disinherited population the emphasis in the motivation of assassination began to shift from these to a predominantly economic ideology. The political ideals still made a great noise in the nineteenth century, however. Mazzini advocated the assassination of Napoleon III, and Orsini did his best to carry it out. In a transmuted form—the struggle of submerged racial groups for nationality and

autonomy—the ideals of political liberty retained their role in the motivation of assassination, especially in Central Europe and the Balkans, and promise to have considerable viability in the future. The equalitarian struggles of the eighteenth century spawned in the nineteenth a host of republics, especially in Central and South America; there the democratic procedures, grafted upon a national psychology inherited from a monarchical tradition, resulted in a chronic tendency to assassination of presidents and presidential contenders which, while actuated by the rhetoric of political ideals, is essentially dynastic.

But all these political motivations of assassination represented the end rather than the beginning of a tendency. The principal accession to the vitality of assassination came from the world wide struggle for economic equality. The assassin tended gradually to turn his attention from the political despot to those who stood for an entire system of economic despotism. Assassination consequently became of increasing importance in those countries where the contrast between unearned wealth and extreme poverty created the most pervading sense of injustice. It was, however, when the sporadic assassinations all over the world gave way to the systematic nihilism developed in Russia that the conservative forces of the world grew really terrified. The philosophical desperatism of nihilism based upon a revolutionary socialism presented the alarming spectacle of an organized technique of murder to carry out a conscious program of social reconstruction. Russia became the *locus classicus* of this new creative development in assassination; and the psychological types drawn in the novels of Turgenev and Dostoevsky and actualized in a series of assassinations culminating in that of Alexander II became archetypes in the imagination of the western world. The high point of the theory of assassination was reached in the doctrine of the "Propaganda of the Deed."

It was inevitable that the techniques evolved in the prosecution of revolutionary radicalism should be taken over, when no better weapons offered, by ideologies of a completely different type. The rootlessness and disorganization of post-war society in 1918 and the social psychoses engendered by the war were a favorable milieu for assassination. In Germany and Hungary, in Italy and Spain, the forces of extreme reaction and extreme radicalism made use of the same weapons, with the balance of effectiveness decidedly on the side of the former. In Germany secret societies founded by returned soldiers whose demobilization could not under the circumstances be completed, and disguised as agricultural colonies, employment bureaus, veterans' associations, athletic clubs and choral societies, organized assassinations systematically. In the midst of the general anarchy they functioned with deliberateness and despatch; and to the organized murder there came accessions from the psychical contagion that resembled other post-war hysterias. Gumbel records that in the four years covered by his study there were 354 assassinations by the Right and 22 by the Left. With an unerring appraisal the youthful Brutuses who in the main carried out the assassinations selected as victims the effective and creative radical and liberal leadership—Karl Liebknecht, Rosa Luxemburg, Kurt Eisner, Walther Rathenau. And in the general disorganization most of the assassins went practically unpunished. In the process of creating dictatorships in Hungary and Fascist Italy there was a resort to similar methods on a smaller scale, the most bruited incident being the assassination of Matteotti.

The distinction between dynastic and ideological assassination offered above was not intended as a dichotomy. There have been many instances in which the assassin has been impelled neither by political opportunism nor by a set of social tenets, but by what seems to us the distorted impulse of insanity. The psychological difference between Brutus and Guiteau can, however, be overemphasized. Essentially the psychology of every assassin is an abnormal psychology, the psychology of obsession and monomania. The thwarted individual who kills for exhibitionism, the anarchist who kills for a theory and the man who has been sent by God to rid the world of its worst enemy have in common a complete and unreserved devotion to a mental construct, of which, however, one instance might appear less reasonable than another to a "reasonable man." But to every assassin the logic of his act is as straight and unerring as the course of his bullet.

The actual efficacy of assassination as a political method is less certain. The ethical opprobrium attaching to the act has usually precluded an appraisal of its social value. Assassination as a political method is fundamentally destructive and negative. In the past, when the role of particular individuals counted for more in the governmental structure than it does today, appreciable shifts in the alignment of power could

be accomplished by the death of a crucial individual. But more and more the despairs out of which grow the impulses toward assassination are directed against institutions and not men. The weapons that assassination has perfected—poison, the dagger, the revolver, the bomb—are futile against an institution like property. Assassination can therefore merely select as its victim the symbol of the thing hated. The loss to society consequent upon the death of the victim often turns, as in the case of Lincoln, on issues which the assassin was incapable of appraising. The most important function that assassination serves is that of a vehicle of protest against injustices which the existing constitutional procedures seem incapable of remedying. But even in this respect assassination generally defeats its own ends. The hidden fears of society are aroused and a revulsion of feeling is awakened by the enormity of the act. Thinking himself a martyr, the assassin succeeds only in creating a martyr for the cause he hates.

MAX LERNER

See: POWER, POLITICAL; VIOLENCE; TERRORISM; MONARCHY; ABSOLUTISM; COURT, ROYAL; ANARCHISM; NIHILISM; REVOLUTION; CIVIL WAR; POLITICAL OFFENDERS.

Consult: Liman, Paul, *Der politische Mord im Wandel der Geschichte; eine historisch-psychologische Studie* (Berlin 1912); Johnson, Francis, *Famous Assassinations of History* (Chicago 1903); Melville, L. (L. S. Benjamin), and Hargreaves, Reginald, *Famous Duels and Assassinations* (London 1929); Hammer-Purgstall, J., *Geschichte der Assassinnen* (Stuttgart 1818), tr. by O. C. Wood (London 1835); Platzhoff, Walter, "Die Theorie von der Mordbefugnis der Obrigkeit im XVI. Jahrhundert" in *Historische Studien*, ed. by Emil Ebering, vol. liv (Berlin 1906); "Political Assassination" in *Edinburgh Review*, vol. clxvi (1887) 35–63; Figgis, J. N., *From Gerson to Grotius* (2nd ed. Cambridge, Eng. 1916) ch. v; Gumbel, E. J., *Vier Jahre politischer Mord* (Berlin 1922); Gillet, Louis, "L'école du meurtre en Allemagne" in *Revue des deux mondes*, 7th ser., vol. xxi (1924) 919–31; Masaryk, T. G., *Zur russischen Geschichts- und Religionsphilosophie*, 2 vols. (Jena 1913), tr. by Eden and Cedar Paul as *The Spirit of Russia* (London 1919); Gorki, Maxim, "Assassins (Extrait de mon journal)," tr. from the Russian by Dumesnil de Gramont in *Europe*, vol. xvi (1928) 5–20; Bebel, F. A., *Attentate und Sozialdemokratie* (Berlin 1898), tr. by Boris Reinstein as *Assassinations and Socialism* (New York 1898); Carlyle, Thomas, *The French Revolution*, 3 vols. (new ed. by H. Traill, London 1837) vol. iii, p. 164–72; Gendreau, Jean, *La vie tourmentée de Jean-François Ravaillac* (Paris 1928); Figner, V. N., *Memoirs of a Revolutionist*, translation from the Russian ed. by A. S. Kaun (New York 1927). A penetrating fictional study of the mind of an assassin will be found in O'Flaherty, Liam, *The Assassin* (London 1928).

ASSEMBLIES, LEGISLATIVE. *See* LEGISLATIVE ASSEMBLIES.

ASSEMBLY, RIGHT OF. The right of assembly is guaranteed by all but three state constitutions (Minnesota, New Mexico, Virginia) and by the United States constitution. The latter, however, restricts only Congress, which is unlikely to legislate against meetings. Historically and in constitutions the right of assembly is connected with the right of petition, first protected by the English Bill of Rights of 1689; but most assemblies now are held for other purposes such as discussion, exhortation and demonstration. In practise these clauses have even less effect upon governmental action than have free speech clauses. Both rights are judicially confined to situations which do not offer serious danger to public safety, order and morals. An assemblage of human beings, like a publication, may cause evils through the eventual spread of the ideas uttered, but it also presents the danger of immediate harmful acts by the assemblers or their opponents. Unfortunately judges and officials have often failed to realize that these risks must be overlooked as much as possible if the constitutional right of assembly is to have any real value.

Certain limitations apply to the right regardless of the place of the assembly. Thus several persons planning a crime, e.g. Stevenson's "Suicide Club," cannot secure constitutional immunity by meeting together. Again a meeting assembled for the use of open force is unlawful. Even if persons gather for a lawful purpose they will become an unlawful assembly by committing or intending a breach of peace or creating in neighboring persons a reasonable fear that they will commit such a breach. The fear that opponents of a meeting will break it up by violence does not ordinarily render it unlawful. The authorities should arrest the assailants, not disperse the meeting. If, however, the assemblers provoke such attacks by scurrilous speeches or banners, their meeting becomes unlawful. And even an innocent gathering may be dispersed by the authorities as a last resort, if that is the only way to keep the peace from being broken by opponents. It is exceedingly doubtful, however, if the meeting may be forbidden in advance on this ground. Finally, whenever three or more persons create a tumultuous disturbance of the peace calculated to terrify others, such a disturbance constitutes a riot, a much graver offense than unlawful assem-

bly, especially for those who continue to participate in the meeting after a magistrate gives an order of dispersal—called in England "reading the Riot Act."

The place of the meeting may involve further limitations. Outdoor meetings on private land with the owner's permission are subject only to the rules mentioned above; but street parades and gatherings on sidewalks or in parks may interfere with the public rights of passage and enjoyment. Municipal authorities are often legally empowered to issue permits for such uses of public property and to punish those holding meetings without a permit. There is much divergence of judicial opinion as to whether the authorities may validly be given unlimited arbitrary discretion to refuse permits. In practise, however, such refusals are frequent to unpopular groups and in times of excitement, when the privilege of assembling has its greatest value. Indoor meetings even in private buildings may be regulated to prevent fire and collapse, and the possibility of such dangers is often made the pretext for prohibiting discussion of topics distasteful to the authorities.

Legal sanctions against the improper dispersal of a lawful assembly by the police are practically ineffective. The assemblers may lawfully resist the police, but not to the extent of causing serious bodily injury. It is hardly worth their while to try to collect damages from the police for battery. If they prefer to continue the meeting until forcibly dispersed and to defend prosecutions, they cannot secure acquittals or a judicial decision that the meeting was lawful until weeks afterwards, when the occasion for gathering is long past. Thus the real decision as to the propriety of a meeting lies with the police and the municipal officials. The constitutional right of assembly is safeguarded only by their good sense and by public opinion.

The English law is about the same as the American, despite the absence of constitutional guarantees. In practise, meetings are freer from police interference and may be held in Hyde Park, London, without any permit unless the park is closed to the entire public. In France and Germany, instead of a system of permits, notification of the meeting must be given in advance to the police, who must issue a receipt, which serves as evidence of lawfulness. The notice enables the police to be on hand in sufficient force to preserve order.

ZECHARIAH CHAFEE, JR.

See: FREEDOM OF ASSOCIATION; FREEDOM OF SPEECH AND OF THE PRESS; CIVIL LIBERTIES; BILLS OF RIGHTS; ANTIRADICALISM; CONSPIRACY, CRIMINAL; INJUNCTION; LICENSING; POLICE POWER; LABOR DISPUTES.

Consult: Dicey, A. V., *Introduction to the Study of the Law of the Constitution* (8th ed. London 1915) ch. vii; Freund, Ernst, *Administrative Powers over Persons and Property* (Chicago 1928) p. 28, 69, 440–44; "Public Meetings and Public Order" in *Law Quarterly Review*, vol. iv (1888) 78–80, 159–71, 257–65, a series of articles on Italy, Belgium, France, Switzerland and the United States, by various authors; Chafee, Z., Jr., *Freedom of Speech* (New York 1920) p. 177–87, and *The Inquiring Mind* (New York 1928) p. 143–61; Brooks, John Graham, "Freedom of Assemblage and Public Security," and Woods, Arthur, "Reasonable Restrictions upon Freedom of Assemblage" in American Sociological Society, *Publications*, vol. ix (1914) 11–35; "Validity of Statutes or Ordinances Prohibiting or Regulating Holding of Meetings on Street" in *American Law Reports* (annotated), vol. x (1921) 1483–86, vol. xxv (1923) 107–14; "Parades by Strikers" in *American Law Reports* (annotated), vol. xlvii (1927) 745–54; "What Constitutes Offense of Unlawful Assembly" in *American Law Reports* (annotated), vol. lviii (1929) 751–57; "Restrictions on the Right of Assembly" in *Harvard Law Review*, vol. xlii (1928) 265–69.

ASSESSMENT OF TAXES. The word assessment in connection with taxation means the process of listing and valuing the taxable objects on which a tax is to be levied. The term is sometimes used to refer to the process of levying the tax or to the amount of tax that is levied; but this usage is elliptical, since the listing and appraising process precedes the computation of the tax that is due.

The technique of assessment varies greatly with different forms of taxation. In the case of property and estate taxes the chief problems arise in the valuation of large property aggregates; in income taxation questions of discrimination between expense or loss items and true profit, between capital increments and income, the determination of proper depreciation and similar matters demand a different but equally specialized technique; while in the customs still a different type of problem is presented. The essential elements of the process of assessment are, however, to be found in all taxation. They are: first, the determination of the taxable objects to be assessed; second, the time and place of assessment; third, the standard of assessment; fourth, the officers responsible for assessment; fifth, review and equalization or correction of assessments; and sixth, measures for the prevention of fraud and evasion.

The first step in tax assessment is the determination of the objects to be assessed. Tax laws furnish a general description of taxable objects

and a list of specific exemptions. In general property taxation the principal exemptions are public property, the property of religious, educational and philanthropic institutions not operated for profit, and minimum amounts of property to individuals. In income taxation the taxable object is usually net income, which is determined by deducting certain forms of expense and outgo from the enumerated forms of gross receipt of income. Under the inheritance tax the taxable object is ordinarily the beneficiary's share of the net estate. Customs and excise tax laws enumerate the taxable objects in detail. These objects may consist of certain forms of property or, in the case of the excise, certain transactions, acts or privileges. In the United States there are no settled principles determining the tax exemption policy; the practise is a result of administrative expediency, sentimental influences and public welfare considerations.

The time and place of assessment vary with the nature of the tax to be levied. When the liability to taxation is contingent upon the occurrence of a certain event, as the death of a property owner, the importation or sale of a commodity, the time of assessment is thereby automatically determined. When the tax is periodic, the date of assessment must be arbitrarily fixed. The date is particularly important in income taxation because there it affects the magnitude of the taxable object. Income tax laws not only designate the time interval within which returns may be made but also prescribe the period to be covered by the return. Ordinarily this is a calendar or a fiscal year; but it may be a shorter period, as in the return of wages under the British income tax, or the average of a longer period, as in the Wisconsin income tax act of 1927.

The question of place of assessment involves the important issue as to which governmental authority is to benefit by the payment of a tax. No uniformity of practise prevails on the subject, chiefly because no government readily surrenders its power to tax: frequent cases of double taxation are the result. The place of assessment is most easily determined in the case of customs duties and of excise taxes: it is the point of entry or place of production or shipment. In property taxation real estate and many forms of tangible property are assessed in the district of location. If subject to taxation, intangible personal property, like stocks, bonds, notes and money on deposit, is ordinarily assessed at the domicile of the owner. The separation between the domicile of the owner and situs of the property leads to troublesome questions in inheritance taxation and results in taxation by several authorities. In the United States each state now has the right to assess for inheritance taxation real property and tangible personal property situated within its borders, and a series of reciprocal agreements is bringing acceptance of the rule that the state of the decedent's residence should assess the intangible property. The provisions determining liability to income tax vary in different countries. The federal income tax law in the United States requires all citizens, regardless of residence, and all resident aliens to report their incomes from all sources; while non-resident aliens are required to report the income received from sources within the country. To avoid international double taxation, credit is given on a reciprocal basis for income taxes paid to the country of citizenship or residence.

The central problem of assessment is that of valuing taxable objects. It is natural to assume that value for taxation purposes should not differ from market value. In many types of taxation, such as income taxation and excise and customs taxation, where the kind of market value to be employed is definitely designated by law, it is not difficult to arrive at this fairly objective basis for the levying of the tax. On the other hand the problem is often extremely complicated in the taxation of property. Many property tax laws employ such phrases as "fair value," "full and fair cash value," "actual value in money," "true value in money," which are hangovers from earlier conditions when most forms of property were freely transferable. Literal compliance with such standards is impossible today in the assessment of many kinds of property, such as railroads, great office buildings and other large aggregates, for which there is no genuinely competitive market. Modern property assessment technique requires therefore the application of complicated rules and methods to establish a reasonable approximation to the value that such property would have in a free market. Because of the complexity of the situation, and in order to reduce as far as possible the notorious arbitrariness of assessments, certain mechanical rules such as the Somers System have been devised for urban valuation to guide the assessor. In the American general property tax the situation is still further complicated by the fact that both legislation and

custom have at times sanctioned the listing of property at less than true market value. In income taxation the basis of assessment is the taxable net income which is the net income less credits and personal exemptions.

In view of the difficulties of assessment and of the wide discretionary powers vested in the hands of assessment officers, considerable importance attaches to the procedure of appointing assessors. In most countries they are centrally appointed and controlled. The weakest point in the American system is that the property tax assessors are elected for a term of one to four years by counties or townships, except in some cities where they are appointed. The low salary paid for this work and the political necessity of maintaining the good will of constituents militate against the achievement of the most accurate and impartial results. The situation was somewhat improved when the assessment of corporations was transferred to central boards of assessors or state commissioners.

Like any administrative act a tax assessment is subject to review for the purpose of correcting any unfairness to the individual taxpayer which may have crept in because of error or favoritism. Depending upon existing regulations the appeal may be taken either to a superior instance in the machine for tax administration, to a special administrative court forming a part of the same organization or to an ordinary court of law. In the United States the right to a hearing on any assessment is now well established under the due process clause. Review under the federal income tax has been quite unsatisfactory, and the whole procedure has now become distinctly judicial rather than administrative in its conception and operation. Under the general property tax, assessments are first reviewed by local boards which act for the town or county with power to correct individual assessments, and then by a state board of equalization with similar powers. Appeals from local equalization may be taken to the courts or in some cases to the state tax commission.

In the case of the general property tax the review and equalization procedure has still another purpose, that of securing a uniform basis of assessments among different districts so that county and state taxes may be equitably distributed. The necessity for this geographical equalization arises from the fact that the percentage of true value at which property is assessed may vary from one district to another. County and state boards of equalization merely manipulate assessment totals, leaving to the local tax officials the task of prorating among individual taxpayers the changes thus made. This type of equalization is generally limited to real estate assessments.

It is of the greatest importance to protect the integrity of the assessment process by the prevention of fraud and evasion. The most generally employed devices are fines and penalties for evasion, fraudulent statement or other attempts to defeat the purpose of the law. These are effective if applied impartially and if they are not so severe as to induce improper leniency in their administration. The use of affidavits and of sworn returns is also fairly general. These have come to be regarded as virtually worthless in the case of the property tax and, were it not for the support of other agencies, would probably be as useless in other cases because of the limited prospect of prosecution for perjury. Tax ferrets and informers have also been tried, but have not proved conspicuously successful in improving the property tax. The federal income tax administration tolerated for a time a species of informing against the government by permitting former employees to appear for large taxpayers who were asking for reductions of assessment. This condition has now been checked by disbarring a former employee from appearing within two years as a taxpayer's representative. The customs administration has also encouraged the services of informers.

The most hopeful measures for dealing with fraud and evasion in a permanent fashion are those which point in the direction of a higher caliber of public official, better equipment and training for the difficult technique of assessment, relief from partisanship in tax administration and the general acceptance of a policy of vigorous, impartial and intelligent administration of the tax law under the direction of suitable central agencies. Since assessment is the point at which the tax collection agency comes in contact with the individual taxpayer, it is important for both the government and the people that it be administered with unquestioned honesty and efficiency.

HARLEY L. LUTZ

See: VALUATION; LAND VALUATION; TAX ADMINISTRATION; FINANCIAL ADMINISTRATION; GENERAL PROPERTY TAX; INCOME TAX; INHERITANCE TAXATION; EXCISE; CUSTOMS DUTIES; DOUBLE TAXATION; COURTS, ADMINISTRATIVE; JUDICIAL REVIEW.

Consult: Seligman, E. R. A., *Essays in Taxation* (10th ed. New York 1925) ch. xiii; Lutz, H. L., *Public Finance* (2nd ed. New York 1929) p. 355–68; Lyon, W.

Hastings, *Principles of Taxation* (Boston 1914) p. 90–95, 103–08; Shirras, G. Findlay, *The Science of Public Finance* (London 1924) p. 244–53, 445–49.

ASSESSMENTS, SPECIAL. *See* SPECIAL ASSESSMENTS.

ASSIGNATS were the paper money of the French Revolution. With the exception of the post-war inflation in several European countries they offer the most spectacular example of paper money made worthless by overissue as well as the most interesting instance of a close relation between the fluctuations in money value and the political and economic policy of the issuing government. The distinguishing feature of the assignats was their rapid transformation from short time obligations, secured by the confiscated crown and church lands, into irredeemable paper money, whose connection with the land security underlying it was no more direct than the similar relation of later fiat money issues to the entire resources of the state by which they were presumably guaranteed.

In the early stages of the revolution the National Assembly was confronted with a large public debt, inherited from the *ancien régime*, and a growing deficit in the current budget. As a matter of principle it would not repudiate the former and for reasons of political expediency it could not raise taxes. It appealed to the nation for a *contribution patriotique* and pending the sale of crown and church lands, which had previously been proclaimed to be at the disposal of the nation, issued short time obligations to be redeemed with the proceeds of the sale. In December, 1789, the National Assembly authorized an issue of 400 million livres of 5 percent treasury bills called assignats. Printed in very large denominations, they were intended for discount with the Caisse d'Escompte, which had the monopoly of legal tender note issue. The assignats were to have no circulatory power, except that they were to be accepted from purchasers of national land. When received in this way they were to be destroyed, but no provision was made for the automatic withdrawal of assignats when the land was paid for by other means. In April, 1790, when interest on them was reduced to 3 percent they were declared legal tender, without, however, the obligation to receive them at par with other types of lawful money.

The next step in turning assignats into currency was taken in September, 1790, in connection with a new issue of 800 million. Both the new assignats and the old were made non-interest bearing, and bills in considerably smaller denominations were printed. It was realized by contemporaries that they were dealing in effect with money, which had been distrusted since the time of John Law. The claim was made, however, that the assignats were a lien on confiscated lands, the value of which was estimated at from 2000 to 5000 million; nor was the fact disregarded that they were an excellent means for uniting the economic interests of the entire population with the fortunes of the revolution.

In the course of 1791 two more issues amounting to 900 million livres were made. Coming at a time of weakening confidence in the new regime, these additional issues led to a noticeable depreciation of the assignats. While in the beginning of 1791 they were at a discount against gold of only 9 percent, in the summer of the same year the discount fluctuated between 13 and 18 percent, and in January, 1792, stood at 28 percent, according to treasury tables based probably upon the quotations of bullion. This measure of depreciation does not of course reflect the fluctuations in internal purchasing power of the assignat; of the latter little is definitely known, except that internal depreciation was greater in rural districts, particularly in those where anti-revolutionary sentiments were widespread.

In February, 1792, the property of the *émigrés*, most of whom belonged to the landed aristocracy, was confiscated and soon afterwards put up for sale. But this measure did not arrest depreciation. Beginning with the spring of 1792 the country was involved in external war, and during the course of the year three new issues of assignats were made to the amount of 1000 million livres. By June, 1792, as a result of a weakening of confidence in the new regime the assignat lost 43 percent of its face value. After the French victory of Valmy in September, however, it stood again at 72 and remained approximately at that value until the end of the year.

On the whole, during 1791 and 1792, inflation gave to the country a certain spell of prosperity. Exports were encouraged and imports checked, while purchasers of the nationalized property profited by making their payments in depreciated currency. But as a result of the wild rise in prices life in the cities became hard both for the classes with fixed incomes and for the working classes. Riots against the "monopolists," "starvers of the people" and "profiteers" were growing

frequent in 1792. In several districts the peasants refused to be paid in paper money and kept away from the city markets.

During the first half of 1793 the issue of 2000 million additional assignats was authorized because the government had no alternative resources with which to meet war expenses and pay the salaries of the civil servants. Although a part of former issues was being withdrawn there were in August of this year 3776 million assignats still in circulation. At the same time the war both external and civil was becoming increasingly critical. In April the assignat in Paris was quoted at 43 percent of its par value in terms of gold and in August at 22 percent. Depreciation was even more marked in the provinces and expecially in those where war was being waged. The prosperous trade of the preceding two years vanished. The leap in prices became a predominating factor in the struggle between the Jacobins and the Girondins which ended in the victory of the former and the establishment of the Reign of Terror.

The Jacobins tried to halt this depreciation by threatening with harsh penalties, even with death, those who refused to accept assignats as legal tender or who sold coin or in any transaction differentiated between the two media. In their attempt to stabilize prices they decreed that the prices of goods could not exceed by more than one third or wages by more than one half those prevailing in 1790. They demonetized assignats of all denominations over 100 livres, which amounted to some 558 millions, and also made an attempt to collect 500 to 700 millions of taxes in arrears. Promising to use the proceeds to cancel an equal amount of assignats, they decreed a forced loan to be assessed on income. The proceeds which had been calculated as 1000 million amounted eventually to only 200 million. These measures, combined with the successes of the French armies against external and domestic enemies, stopped depreciation for a few months. The assignat, which according to treasury tables stood at 27 in September, 1793, rose to 33 in November and to 48 in December. In January, 1794, local quotations varied within the wide range of 18 and 75.

During the second half of 1793 and the first half of 1794, 4900 million more assignats were issued. The result was a tremendous leap in prices and in wages. Unskilled workers in Paris who in 1790 had earned a daily wage of 32 sous protested in the spring of 1794 against the decreed maximum of 48 sous and even though their hours of work had been reduced from twelve to ten they demanded 65 sous. Masons who earned 45 sous in 1790 demanded from 80 to 100 sous in 1794. In the country the day laborers refused to work at the maximum legal price. In general maximum prices by causing an unwillingness to sell had a paralyzing effect on trade. The government was obliged to exact a part of the taxes in kind and to requisition supplies by force.

On December 24, 1794, the laws of the maximum had to be repealed and business began to revive. If inflation had been stopped the repeal of the laws of the maximum might have been the first step toward economic recovery. In fact, however, 14,812 million more assignats were issued during the year ending September, 1795. By October, 1795, the treasury had issued 22,801 million livres of paper currency, of which no more than 3339 had been withdrawn, leaving 19,462 still in circulation. Two thousand million more were issued in October, 1795. As a result of this rapid inflation the assignat quickly fell in value despite the confidence created by the recent military victories against foreign armies and by the suppression of domestic revolts. While in January, 1794, it was quoted according to the treasury tables at 40 percent of its face value, it depreciated to 34 in July, to 20 in December and to 3 in July, 1795. By the following December 100 livres of assignats brought only 0.52 in coin. Outside of Paris assignats were no longer accepted. The salaries of the public officials, although raised thirty times, still had no purchasing power. A judge in the district of the Seine died of hunger. Public administration was thoroughly disorganized because the officials refused to serve. During the last two months of 1795 and the first three of 1796 the deluge of issues continued; in March, 1796, 36,000 million livres of assignats were in circulation. In the same month 100 livres of assignats were worth 0.36 in coin, according to official quotations. Since their actual value was less than the cost of manufacture there was no longer any advantage in printing them. Coin, grain and other commodities became the normal media of exchange, the legislators themselves computing their allowances in terms of grain. The Jacobin laws against differential prices were a dead letter. On February 19, 1796, by authorization of the government the engraving plates and the presses used in printing the paper money were solemnly destroyed in full view of the public.

The return to a metallic currency was delayed

for another year because of the demoralized financial status of the government. In March, 1796, an issue of notes to the amount of 2400 million francs was authorized. The new paper currency was called land notes (*mandats territoriaux*, although it is more accurate to speak of *promesses de mandats*, since for technical reasons the actual *mandats* were never issued) and to emphasize its connection with the underlying land security the prices of public land available for sale were fixed at a definite multiple of their yield in 1790. This failed of its purpose, and although the open trade in bullion was once more prohibited the population refused to accept paper money of any kind. The depreciation of the new currency was from the outset accelerated by the fact that the treasury was enforcing the redemption of 30 livres of assignats for one franc in land notes. When in the early part of April the issue of the new notes was just beginning they were worth no more than 20 percent of their face value and by the end of the year 100 francs of land notes brought only 2.49 in gold coin. In the meantime an absurd situation had arisen from the fact that the land notes were tied so definitely to land: having been bound to accept them at a definite value in payment for land, the government was selling a piece of wooded ground for the price of a few trees on it. The demonetization of the land notes was therefore inevitable. The law of February 4, 1797, authorized the exchange of 100 francs in land notes or, by implication, 3000 livres in assignats for 1 gold franc. Debts contracted during the inflation period were revalorized on the basis of local tables which were compiled in the various *départements* and which in addition to the bullion quotations made an attempt to take account of commodity prices prevalent in the corresponding locality. No further issues of paper money were made by the government until the Restoration.

G. Salvemini

See: French Revolution; Paper Money; Inflation and Deflation; Land Bank Schemes.

Consult: *Tableaux de dépréciation du papier-monnaie*, ed. by P. Caron (Paris 1909); Falkner, S. A., *Bumazhnie dengi frantsuzskoy revolutsii, 1789–1797* (Moscow 1919), adapted by F. Schlömer as "Das Papiergeld der französischen Revolution 1789–1797" in *Schriften des Vereins für Sozialpolitik*, vol. clxv, pt. iii (1924); Marion, Marcel, *Histoire financière de la France depuis 1715*, vols. i–v (Paris 1914–28) vols. ii and iii; Hawtrey, R. G., *Currency and Credit* (3rd ed. London 1928) ch. xvii; Harris, S. E., *The Assignats* (Cambridge, Mass. 1930).

ASSIMILATION, SOCIAL, as popularly used, is a political rather than a cultural concept. It is the name given to the process or processes by which peoples of diverse racial origins and different cultural heritages, occupying a common territory, achieve a cultural solidarity sufficient at least to sustain a national existence. An alien may, as in the case of the Chinese in America or the European in China, accommodate himself to the conditions of life in a foreign country without learning the native language and without adopting, except to a very slight degree, the native customs. In that case the relation of the alien to the native may be described as symbiotic rather than social.

Assimilation in any case takes place gradually and by degrees so slight that they are not open to observation or measurement. In the United States an immigrant is ordinarily considered assimilated as soon as he has acquired the language and the social ritual of the native community and can participate, without encountering prejudice, in the common life, economic and political. The common sense view of the matter is that an immigrant is assimilated as soon as he has shown that he can "get on in the country." This implies among other things that in all the ordinary affairs of life he is able to find a place in the community on the basis of his individual merits without invidious or qualifying reference to his racial origin or to his cultural inheritance. Assimilation may in some senses and to a certain degree be described as a function of visibility. As soon as an immigrant no longer exhibits the marks which identify him as a member of an alien group, he acquires by that fact the actual if not the legal status of a native. It is no doubt recognition of this fact that led James Bryce to suggest that the solidarity of modern states depends less upon the homogeneity of their populations than upon the thoroughgoing mixture of their heterogeneous elements.

Among the conditions which determine and limit the progress of assimilation it is necessary to reckon with the fact of self-consciousness, which in the case of the immigrant assumes the form of racial or national consciousness. This self-consciousness arises inevitably as soon as an alien, seeking residence in a foreign country, finds himself for any reason set apart and segregated geographically, so that intercourse is measurably confined to members of his own national or racial group. It arises quite as inevitably if he is segregated categorically, that

is, if his race or nationality is made to constitute a class or a caste. Anything which tends to break up this segregation and classification of a population, whether based upon racial characteristics like color or upon a cultural heritage like language, tends to facilitate assimilation.

In a vast, varied and cosmopolitan society such as exists in America, the chief obstacle to assimilation seems to be not cultural differences but physical traits. It is notorious that Japanese, Chinese and any other immigrant peoples who bear a distinctive racial mark do not easily mix with the native populations. The Negro, during his three hundred years in this country, has not been assimilated. This is not because he has preserved in America a foreign culture and an alien tradition, for with the exceptions of the Indian and the Appalachian mountaineer no man in America is so entirely native to the soil. The Negro on the plantation is the only peasant class America has produced, and his is the only native folk culture that America possesses. To say that the Negro is not assimilated means no more than to say that he is still regarded as in some sense a stranger, a representative of an alien race. This distinction which sets him apart from the rest of the population is real, but it is based not upon cultural traits but upon physical and racial characteristics.

So far as concerns Europeans the movement of populations in recent times has broken up the ancient racial stock and undermined or destroyed the more primitive folk cultures. The growth of modern states has been effected by the progressive merging of smaller and mutually exclusive tribal organizations into larger and more inclusive national ones. Language, manners, social ritual and all the outward forms of life which were originally provincial and local have become cosmopolitan and national. In America it is proverbial that a Pole, a Lithuanian or a Norwegian cannot be distinguished in the second generation from the older American stock. Interaction and imitation, intimate association and participation in the common life, have achieved definite uniformities in language, manners and formal behavior. The ease and rapidity with which aliens have been able to take over American customs and manners have enabled the United States to digest every sort of normal human difference, with the exception of the purely external ones like that of the color of the skin.

It cannot, however, be assumed that the associations which have erased the external signs of race and nationality have modified to any great extent fundamental cultural and racial characteristics. W. H. R. Rivers' studies in Melanesia convinced him that, with the increasing contacts which the expansion of commerce and peoples has enforced, the whole material culture of a people, including its language and its religious practises, may be swept away without touching what he calls "the essential social structure" of that people's cultural life. Considerations of this kind have raised the question whether the assimilation that is measured in external uniformities of manners, dress and speech may safely be taken as an index of fundamental national solidarity, or whether it may not in fact represent a more superficial "like-mindedness," a mere veneer covering profound and more or less irreconcilable moral and cultural differences. It is evident that there are grades and degrees of assimilation whether or not we are able to measure them. Furthermore the conflicts which, not only in political but also in personal and family life, have their origin in these divergent cultures lend a special importance to questions raised in regard to the fusion and assimilation that take place on the profounder levels of cultural life.

Recent anthropological discussions of cultural diffusion have emphasized the fact that the cultural traits of one group are not transmitted to another by the mere fact of exchange and use. The inventions and cultural forms of one people may be said to become a part of the culture of another only when, as Malinowski puts it, the adopting culture "has re-evolved the idea, custom, or institution which it has adopted." The Melanesian, to use his illustration, imports and uses matches, but the match has never become a part of Melanesian culture. Similarly an alien may be said to be assimilated not when he has learned to use the language, customs and institutions of his adopted country, but when he has been able to make them his own in some more thoroughgoing way than mere use implies.

In a complex modern society, where division of labor has proceeded so far and the tasks of life have become so completely individualized, it is a question whether culture, in the sense in which the anthropologists have conceived it, any longer exists. Every trade, every profession, every religious sect, has a language and a body of ideas and practises not always and not wholly intelligible to the rest of the world. These various groups, so far as concerns most of the

interests of life, dwell together in a sort of symbiosis, where each may be said to have its own cultural complex. In such circumstances, assimilation comes to be limited in its application to those ideas, practises and aspirations which are national, and which presumably form the basis of national solidarity. Assimilation becomes thus merely the more generic and abstract concept for which Americanization and the verbs Americanize, Anglicize and Germanize are more specific terms. All these words are intended to describe the process by which the generally accepted social customs and political ideas and loyalties of a community or country are transmitted to an adopted citizen.

Men must live and work and fight together in order to create that community of interest and sentiment which will enable them to meet the common crises of life with a common will. At the very least there must be such a consciousness of common interest that differences can be discussed, and out of the conflict of interests a genuine public opinion may be formed. Where racial, religious or other cultural differences are so great that they provoke a racial, caste or class consciousness which makes full and free discussion impossible, assimilation does not take place.

ROBERT E. PARK

See: ALIEN; ADAPTATION; AMALGAMATION; IMMIGRATION; AMERICANIZATION; NATIONALISM; MIGRATION; MOBILITY, SOCIAL; CLASS; CASTE; SEGREGATION; INTOLERANCE; ANTIRADICALISM; ANTISEMITISM; SOCIAL PROCESS; CULTURE.

Consult: Boas, Franz, *The Mind of Primitive Man* (New York 1927) chs. vi–vii; Smith, G. E., and others, *Culture: The Diffusion Controversy*, New Science series (New York 1927); Rivers, W. H. R., "The Ethnological Analysis of Culture" in British Association for the Advancement of Science, *Report*, 81st meeting (1911) 490–99; Park, R. E., "Racial Assimilation in Secondary Groups with Particular Reference to the Negro" in *American Journal of Sociology*, vol. xix (1913) 606–23; Simons, S. E., "Social Assimilation" in *American Journal of Sociology*, vol. vi (1900) 790–822, vol. vii (1901) 53–79, 234–48, 386–404, 539–56; Kallen, H. M., *Culture and Democracy in the United States* (New York 1924); Park, R. E., and Miller, H. A., *Old World Traits Transplanted* (New York 1921); Thomas, W. I., and Znaniecki, Florian, *The Polish Peasant in Europe and America*, 2 vols. (2nd ed. New York 1927); Drachsler, Julius, *Democracy and Assimilation* (New York 1920); Dushkin, A. M., *Jewish Education in New York City* (New York 1918).

ASSIZES. About the middle of the twelfth century, assize, which had been a word indicating a sitting or session, began to be used for the edicts issued by kings and their advisory courts. These edicts were not formal legislative acts, but some of those issued by Henry II of England had a profound effect upon the whole history of the law. The texts of the Assize of Clarendon, which established the grand jury as a regular procedure in the king's courts; the Assize of Northampton, a revision of the preceding; the Assize of Arms, reorganizing the militia; the Assize of the Forest; and (from the next reign) the Assize of Measures, have come down to us. Upon the Assize of Measures was based the article of Magna Carta which dealt with measures and weights. About the same time began the long series of so-called assizes of bread and ale and the like, which to some extent maintained national standards in the price, quality, weight and dimensions of leading commodities until the industrial revolution.

As early as Henry II's time the term assize was also applied to certain actions at law instituted by royal decrees, and finally to the jury procedure which was their distinguishing feature. These actions were concerned mainly with the possession and tenure of land. There were the grand assize, the three possessory assizes and, less important, the assize of utrum. By the grand assize the man having free tenure of land or a patronage right in a church was no longer forced in litigation to accept trial by battle with the demandant's champion, but could have the question of better right determined by the verdict of twelve knights. Of the possessory assizes, *novel disseisin* met the case of the tenant who had been dispossessed of his land, usually by the demandant's anticipation of a pending court judgment, and provided for a jury verdict as to whether such disseisin had been made within a period arbitrarily fixed within easy memory, thus making it a novel, or recent, disseisin. *Mort d'ancestor* supposed an heir prevented by someone from entering into his inheritance on the ground that the dead ancestor had not had a right to the land; here the jury merely stated whether the ancestor had died in possession and whether the claimant was his heir; the heir was given possession upon an affirmative verdict. The chief purpose of the *darrein presentment* was to prevent parish churches from lying vacant while claimants to the right of presenting the priest were litigating. The jury in this case stated who presented last, i.e. who possessed the advowson, with the result that his presentee held while the longer question of right was being determined. The assize of utrum entrusted to a jury the question as to whether a

piece of land under dispute was held by lay tenure or frankalmoin.

The grand assize and the possessory assizes had a marked political influence. Aimed at disregard of law they provided a practical way to strengthen the position of the possessor and to build respect for law courts. They became immensely popular. The sale of the writs which began the legal process and the amercements imposed at its end swelled the king's revenue. Assizes were further notable in popularizing the jury method of ascertaining facts. The jury itself in these actions was called an assize; in fact the term assize later became, and remains, the general name for jury in Scottish criminal trials. From the assizes, where the jury was obligatory, it passed rapidly by free choice of litigants into other actions. In the field of substantive law the possessory assizes are largely responsible for that characteristically English "beatitude of seisin": not only are the interests of the possessor magnified, but no proprietary right can be so absolute and abstract that somewhere in its history it has not been rooted in physical possession.

The assizes were held in the localities by the itinerant justices under commissions issued by the king as well as in the king's central court, and in Magna Carta the barons themselves provided for the holding of the possessory assizes in each county four times a year; the time was changed to once a year in the revision of 1217. In 1285 this commission of assize was reorganized: the assizes, which by that time included all actions touching real property, were to be held three times a year (later changed to twice, in the northern counties once) and the *nisi prius* principle was made regular. This principle allowed business to go on in the central courts and in the counties at the same time, and made provision that the verdicts of juries be taken locally, thus saving many juries the laborious trip to Westminster. By Edward III's time the commission had expanded so that the justices of assize on their circuits could entertain almost any action, criminal as well as civil. These circuit courts came to be called courts of assize, or the assizes; and in this sense the word is still used, while its other meanings are obsolete.

In the fifteenth century the old assizes were becoming unpopular actions, probably because of the vast technicality they had accumulated. In that and the next century they were largely superseded by use of the Statutes of Forcible Entry, and these in turn by the action of Ejectment. In 1833 the Real Property Limitation Act abolished almost all of the old actions to recover land, the assizes among them.

ALBERT B. WHITE

See: PROCEDURE, LEGAL; LAND TENURE; PROPERTY; POSSESSION; COURTS; JURY; CRIMINAL LAW; WEIGHTS AND MEASURES; FOOD AND DRUG REGULATION.

Consult: FOR TEXTS OF THE MORE IMPORTANT ASSIZES: *Select Charters*, ed. by W. Stubbs (9th ed. London 1913) p. 167–73, 178–88; *Select Documents of English Constitutional History*, ed. by G. B. Adams and H. M. Stephens (New York 1901) p. 14–18, 20–27, 36–38; *English Economic History, Select Documents*, ed. by A. E. Bland, P. A. Brown and R. H. Tawney (London 1914) p. 154–57.

FOR LEGAL AND POLITICAL IMPORTANCE: Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. i, p. 47–51, 275–83, 327–31; Pollock, F., and Maitland, F. W., *The History of English Law before the Time of Edward I*, 2 vols. (2nd ed. Cambridge, Eng. 1899) vol. i, p. 137–38, 144–50, 200–02, 581–82, and vol. ii, p. 569–72, 668–69.

FOR ECONOMIC ASSIZES: Lipson, E., *An Introduction to the Economic History of England* (4th ed. London 1926) p. 266–70.

ASSOCIATION. An association may be defined as a group of individuals united for a specific purpose or purposes and held together by recognized or sanctioned modes of procedure and behavior.

The association must be distinguished from the institution, a term now usually referring not to individuals in union but to forms or modes of social relationship. Thus "property" is an institution since it is a recognized social relationship in respect to external objects; war is an institution as a method of settling disputes between states. A trade union is an association since it consists of individuals grouped for certain purposes. Sometimes the same term is used to refer both to institution and association, but even then the distinction should be sufficiently clear. For example the state is spoken of as an institution or rather as a complex of institutions when the reference is to a body of rules or mechanisms defining and maintaining the relation between individuals under a common territorial rule; but a state is also an association since it consists of individuals united for certain very general and pervasive purposes. In other cases no ambiguity arises. Thus marriage is an institution, a recognized mode of procedure designed to define the relation between the sexes; but a family, or rather a married couple, may be regarded as an association.

In psychology the term association is some-

times contrasted with organization, the former implying mere casual juxtaposition of units and the latter control by a general scheme. This distinction has been applied by Bosanquet to human aggregates, but it appears to be one of degree rather than of kind. Both in the case of mental elements and in that of individuals associations may be shown to vary in the degree of organic character they possess with the comprehensiveness and depth of the factors upon which they rest. Nevertheless all association implies some degree of organization, however rudimentary or transient.

The term purpose used in the description of associations must be understood to cover a wide range of conation and must not be limited to cases of clearly formulated and articulate volition. It should be remembered that even where the chief or dominant purpose of an association is grasped by its constituent members, there are often present other purposes of varying importance which may not be understood by all the members. It is also clear that the purposes of associations are not unitary and that people may join them from quite different and even conflicting motives. Moreover, as is clearly illustrated in the history of bodies like trade unions, the purposes of an association, like those of individuals, undergo change in the process of realization, and the manner in which this change takes place is hardly open to the inspection of the most perspicacious. As Bosanquet insists, associations and institutions have such character that they appear *as though* instituted to fulfil some purpose. Although they can be understood only teleologically, however, we must not regard them as the embodiment of a unitary mind but rather as trial and error experiments which have grown up through groping and which only gradually attain clarity and coherence.

Associations serve specific purposes and therefore embody only partial interests of the individual and consequently of the community. Some associations no doubt are very comprehensive and represent interests affecting large numbers or even, as in the case of the state, all the members of a society. But no single association and not even the whole associational structure of a people can adequately express the infinitely varied, complex and subtle relations which constitute the total integral life of a community, and some of the most valuable elements in the lives of individuals are outside the scope of effective organization.

In the study of primitive peoples the term association is used to include units other than those of the kindred and the local group. Recently a tendency has become apparent to lay stress on associations as agencies which lead to unification independently of the ties of kinship and which thus have political significance. But Lowie, who in his earlier work was inclined to sympathize with this attitude, has recently shown that even among primitive peoples associations may constitute disruptive as well as unifying forces, and that there is no clear correlation between territorial integration and the presence of associations.

In the historical period the relations between associations and the state have been extremely varied and complex and hardly lend themselves to summary discussion. The mediaeval guilds, the fraternities for the enforcement of the Truce of God and the communes played an important role in molding political structure. There are occasions, as for example in imperial Rome, when corporations which begin as extra-political bodies come to have political significance. Instances also abound where the state looks upon associations with suspicion and even endeavors to suppress them, as at some periods in French history.

The multiplication of associations is one of the most striking features of modern social life. No adequate classification of them has yet been devised, and reliable statistical data are extremely difficult to obtain. Roughly they may be grouped according to their functions into occupational, religious, cultural and recreational bodies. Interests are often combined, however, and there is endless overlapping and duplication. Of their growing importance in the life of society there can be no doubt, and accordingly it is not surprising that there has been much discussion as to their nature and status, especially in relation to the state.

There have been many attempts at functional demarcation of associations, and the claim has been advanced that each association should be "sovereign" within its own domain (guild socialism and kindred movements). But it is now widely recognized that these demarcations were too clear cut, that interests touch and functions overlap, that in some sense the state penetrates into all associational life, and that there is need of a coordinating body suspiciously akin to the unitary state which has been so vigorously attacked. The problem of the authority attaching to associations has been much obscured by the confusions inherent in the wider problem

of sovereignty. It is important to distinguish between the question of the actual localization of coercive authority and the question of the moral basis of such authority. De facto, a given association, such as a powerful trade union or an association of employers, may on occasion force the hand of the government of a state, while the whole machinery of society may be powerless against a determined individual. Again, from the point of view of the individual, the coercion exercised against him by an association may be as intense as any exercised by the state. Quite different is the problem of the moral basis of authority and of the principles in accordance with which power should be distributed and exercised. In this connection appeal has been made, but not very profitably, to the conception of the "personality" of associations and each of them has been endowed with a "will" of its own capable of determining the conditions of its development. But authority cannot rest upon the fiat of any will, individual or corporate, and must ultimately be grounded upon the moral law which is above any human organization. The problem of conflicting loyalties, again, cannot be resolved merely by pitting one will against another or by an appeal from one will to many wills, but, as in other cases of perplexity of conscience, by a consideration of all the relevant elements in terms of the ultimate good involved. Loyalty to all associations including the state is derivative and secondary and is based ultimately upon allegiance to the ends which they exist to promote. Accordingly the root of the difficulty in cases of conflict lies not so much in the problem of plurality of wills as in that of the correct evaluation of ends and the calculation of consequences in complex situations.

The whole problem may also be attacked by a consideration of the functions of the state. Broadly these may be said to be twofold, to promote the common good by such means as are available to the state and to define and maintain a system of rights. From the point of view of these functions, the rights of associations like those of individuals are ultimately based upon their capacity to contribute to the good of the community. While associations may involve certain coercive powers in relation to their members, the common authority must reserve the right to protect non-members and even members against the abuse of power in which large associations may indulge. But this is not to say that the state must define the rights of associations in the sense of controlling their inner development. There are necessary limitations to state control. These are not to be determined by theoretical demarcations of function but rather by a consideration of the means and methods available in state action. The complexities of human life and the nature of the ends to which we ascribe value make it impossible for the state to intervene effectively except to secure the barest and crudest conditions of general welfare. Voluntary associations are more effective in matters which require plasticity and delicacy of adjustment and must be given relative autonomy. The problem throughout is as to the right use of coercion by the state and by other powerful associations. The amount and degree of compulsion employed by associations should be determined by the efficiency of compulsion relative to the ends involved in each case. Generally the use of force may be justified if it is necessary to the maintenance of rights and if it does not tend to defeat the real ends of the association, which are to secure the conditions for the fulfilment of some aspects of the good. It is not possible to mark out once and forever the sphere of each association any more than it is possible to work out an eternal system of individual rights; but it is suggested that a bona fide consideration of the ends involved and the nature of the mechanisms available for their realization in the various associations will afford valuable guidance in each case, especially in regard to the problem of the relation of the state to industrial organizations on the one hand and to religious and cultural organizations on the other.

MORRIS GINSBERG

See: GROUP; INSTITUTION; COMMUNITY; AUTHORITY; AUTONOMY; SOVEREIGNTY; PLURALISM; GUILD SOCIALISM; SYNDICALISM; STATE; ORGANISM, SOCIAL; CORPORATION; VOLUNTARY ASSOCIATIONS; FREEDOM OF ASSOCIATION.

Consult: MacIver, R. M., *Community, A Sociological Study* (2nd ed. London 1920), and *The Modern State* (Oxford 1926); Hobhouse, L. T., *Social Development* (London 1924), and *Elements of Social Justice* (London 1922); Bosanquet, Bernard, *Philosophical Theory of the State* (3rd ed. New York 1920); Cole, G. D. H., *Social Theory* (New York 1922); Laski, H. J., *Grammar of Politics* (London 1925); Lowie, R. H., *Primitive Society* (New York 1920), and *The Origin of the State* (New York 1927); Carr-Saunders, A. M., and Caradoc Jones, D., *A Survey of the Social Structure of England and Wales as Illustrated by Statistics* (London 1927).

ASSOCIATION, RIGHT OF.

See FREEDOM OF ASSOCIATION.

ASSOCIATIONISM. *See* PSYCHOLOGY; FOURIER AND FOURIERISM.

ASSOCIATIONS. For discussion of the activities of scientific, propagandistic or reform societies, *see* final section of the appropriate abstract article; e.g. for AMERICAN ECONOMIC ASSOCIATION, *see* ECONOMICS; for AMERICAN CIVIL LIBERTIES UNION, *see* CIVIL LIBERTIES, etc.

ASSOCIATIONS FOR THE ADVANCEMENT OF SCIENCE. *See* LEARNED SOCIETIES.

ASTOR, JOHN JACOB (1763–1848), New York merchant, fur trader and financier. He was born in Germany and came to the United States in 1784 virtually penniless. From a small shop in New York he extended his fur business to the frontier and to the Montreal depot of the then predominant British Northwest Company. In 1800 he began to participate in the Canton trade, which became an increasingly important outlet for American furs, and in 1808 he founded the American Fur Company. Through this organization he gradually wrested from the Northwest Company the dominant position in the fur trade of the upper Great Lakes and Louisiana Purchase regions, although in 1813 Astor felt compelled to sell to the Northwest Company the Astoria, Oregon, post at the mouth of the Columbia River, which he had established in 1811. The expansion of his company's operations up the Missouri valley involved repeated conflicts with independent traders, but appears to have had a measure of support from the federal government. Astor had previously established close ties with federal officials and had aided in financing the War of 1812.

Astor early began to supplement his fur and other mercantile activities with investments in Manhattan Island real estate, most of which he retained and leased. In 1834 he sold out the control of his fur trading concerns and gave his entire attention to the extension of his real estate holdings with the result that at his death his estate was valued at the then unparalleled amount of $20,000,000. While the bulk of this went to his direct heirs, his bequests included $400,000 for the establishment of the Astor Library, which subsequently became a part of the New York Public Library.

PAUL WEBBINK

Consult: Smith, Arthur D., *John Jacob Astor, Landlord of New York* (Philadelphia 1929); Myers, Gustavus, *History of the Great American Fortunes*, 3 vols. (Chicago 1910) vol. i, chs. ii–vii; Irving, Washington, *Astoria*, 2 vols. (rev. ed. New York 1902); Chittenden, H. M., *American Fur Trade of the Far West*, 3 vols. (New York 1902) vol. i, chs. viii–xiv.

ASTROLOGY, now an idle "superstition," represents, like many other superstitions, an important phase of bygone thought. So long as men believed the earth to be the center of the universe, around which the stars and planets were ever circling, it was natural that they should regard the happenings on the earth as influenced by the movements of the heavenly bodies. Moreover, at an early date, observations of the Mesopotamian temple astronomers demonstrated the general relation of the movements of the stars, the planets and the moon to the solar year and to its seasons. These relations of time came to be regarded as relationships of causation. Thus movements of the heavenly bodies were held to control and to cause the variations in meteorological conditions corresponding to the seasons and astrology as a science was born.

Once the courses of the stars were thought to affect earthly objects man readily came to associate them with that object in which he was most interested, namely himself. So arose judicial astrology, which claims to read a man's fate in the stars and especially in those stars which saw his birth.

From Mesopotamia astrology passed to the Greeks. It is encountered, for instance, in the works of Hesiod and in certain of the books of the so-called *Hippocratic Collection* (e.g. *Airs, Waters and Places*) of the fifth century B.C. The astrological point of view gained exactness from the mathematical developments of Greek astronomy. The final summator of the Greek astronomical system, Ptolemy of Alexandria, who flourished in the second half of the second century of the Christian era, was himself no mean astrologer.

It was, however, under the Empire that astrology reached its most important development in antiquity. The doctrines of judicial astrology became part of the creed of the stoics, who formed the most able and influential philosophico-religious sect of later antiquity. The stoics held the physical life of man to be bound and determined by external events. His soul alone was free. The point of view is set forth with exquisite beauty by Cicero in his *Dream of Scipio* and by Marcus Aurelius in his *Medita-*

tions. An extensive technical literature on the subject arose in Greek and, derivatively, in Latin. Of the works on astrology that have come down to us from antiquity the *Astronomicon* of Manilius (edited by A. E. Housman, London 1903) is from a literary point of view the most important.

To the early Christian writers astrology was abhorrent since it seemed the negation of that doctrine of free will which was so dear to them. Tertullian, Lactantius and St. Augustine all inveigh against astrology. By the sixth century, however, the church had come to terms with it. St. Isidore of Seville regards it as, in part at least, a legitimate science. He advises its study, especially for medical purposes, and is followed by the other Dark Age writers on natural knowledge like Bede and Rabanus Maurus. Nevertheless the astronomical and mathematical knowledge of the time was so decayed that astrology could in fact be little practised. Thus till the twelfth century astrology in Latin Christian Europe remained of a very elementary type.

In the meantime the Byzantine astrological tradition had been passed on to the Arabic speaking world. The Arabian culture had produced many mathematicians and some astronomers of high ability. Their observations and talents were made to subserve the astrological cause. In the twelfth, thirteenth and fourteenth centuries astrology returned from the Orient to the West in the form of Latin translations of Arabic works. These proved to be the first carriers of any trace of scientific method and the first revivers of scientific curiosity among the peoples of the West. With this Arabian revival and with the advent of the scholastic period astrology became the chief object of scientific interest in Europe. Its determinism made possible something in the nature of a scientific philosophy, important exponents of which were Kindī of Basra (died *c.* 873) and Albategnius (*c.* 850–929), both of whose works were translated into Latin. The most scientific product of the Middle Ages in Europe was prepared on the instruction of Alfonso the Wise of Castile between 1262 and 1272. These "Alfonsine Tables" were mainly the work of Jewish astronomers. They are found in numerous Latin manuscripts, were consulted by Copernicus in the sixteenth century and were still being used by Galileo and Kepler in the seventeenth century.

The more extreme astrological position still remained abhorrent to the church. Those thought to be greatly addicted to the study were often regarded as exponents of the Black Art. Thus arose legends concerning such characters as the wizard Michael Scot (*c.* 1175–1234) and Friar Roger Bacon. More historical are the ecclesiastical bans against such astrological enthusiasts as Peter of Abano (*c.* 1250–1318), a very able professor at Padua, and the physician Cecco of Ascoli (*c.* 1257–1327). The former died in his bed, but his body was disinterred and consigned to the flames, while the latter was burned alive.

With the rise of the universities in the thirteenth, fourteenth and fifteenth centuries, astrology became a subject of special study and even a part of the curriculum. This was notably the case at the ancient universities of northern Italy, Bologna and Padua. The learned revival of Greek is extremely important historically, but it obscures a corresponding revival of Arabic, the knowledge of which lent further interest to astrology. By the sixteenth century, after theology and law astrology was the main intellectual interest of the learned class. Its conclusions were accepted by every class.

With the advent of free philosophizing during the Renaissance, the findings of astrology became a matter of controversy. Its ablest defender was the philosopher Pietro Pomponazzi (1462–1525) and its most attractive critic the charming mystic Giovanni Pico della Mirandola (1463–94). It was at this period especially that astrology became linked with the teachings of the Jewish Kabbala. It is remarkable that the writings of Copernicus injured astrological doctrine little if at all, and that such writers as Giordano Bruno, Johannes Kepler and even Galileo himself were not always hostile to it. Nor was it until the general acceptance by the educated class, late in the seventeenth century, of the views of Galileo and Kepler as to the structure of the universe that astrology began to lose its hold.

The abandonment of the astrological hypothesis as an explanation of earthly events may be ascribed to two main causes. First, the exploration of the heavens showed that the earth was but a speck in a universe of worlds and these in no sense surrounded it as had been held of old. Second, as anatomy became more exact the alleged existence of a close relation between various planets and constellations and the intricate constitution of man's body was perforce abandoned. But a belief of 2500 years dies hard. Forsaken by the more enlightened, it was and is still held by the most ignorant in the West and by almost all classes in the East. It would

not be difficult to trace back some of the superstitions of many an ignorant European or American in a continuous chain to their Mesopotamian astrological origin.

CHARLES SINGER

See: MAGIC; SUPERSTITION; PRIESTHOOD; DIVINATION; CALENDAR; SCIENCE.

Consult: Boll, Franz, *Sternglaube und Sterndeutung, die Geschichte und das Wesen der Astrologie* (Leipsic 1926); Kugler, F. X., *Sternkunde und Sterndienst in Babel*, 3 vols. (Münster 1907–24); Bouche-Leclercq, Auguste F., *L'astrologie grecque* (Paris 1899); Singer, Charles, *From Magic to Science* (New York 1928) p. 50–58, 71–85; Warburg, A., *Heidnisch-antike Weissagung in Wort und Bild zu Luthers Zeiten* (Heidelberg 1920); Bosanquet, E. F., *English Printed Almanacks and Prognostications, a Bibliographical History to the Year 1600* (London 1917); Saxl, Fritz, *Verzeichnis astrologischer und mythologischer illustrierter Handschriften des lateinischen Mittelalters in romischen Bibliotheken*, 2 vols. (Heidelberg 1915–27); Gundel, Wilhelm, *De stellarum appellatione et religione romana* (Giessen 1907).

ASYLUM. Political asylum is granted when the government of a state or one of its representatives abroad receives and protects a fugitive from the justice of a foreign jurisdiction or from some imminent danger of mob violence. Asylum is granted within a state's territory, in embassies, legations or consulates, or upon warships. The so-called right of asylum, a right of individuals to claim protection, has no existence in international law. Asylum is granted by a state within its territory, if policy and expediency permit, as an incident of sovereignty and outside its territory either in accordance with treaty provisions or under the general principle of humanity. Extradition treaties, now in general use, are self-imposed limitations which exhibit the confidence now reposed by states in each other's administration of justice. A state is limited also by its obligation, as a member of the international community, to prevent refugees from using its territory to endanger other states. Thus the government of the Netherlands after the World War admitted Kaiser Wilhelm II as a refugee and refused to surrender him to the Allies. It conditioned the privilege by requiring the Kaiser to live privately, under guard, within an assigned residence and to refrain from political activities.

The practise of asylum has prototypes in the cities of refuge for homicides recognized by Mosaic law, in the designation of certain temples as sanctuaries for criminals and other refugees by the Greeks, in the similar use of statues of emperors and eagles by the Romans and in the recognition of churches and their immediate environs as places of asylum during the early centuries of the Christian era and well into the Middle Ages. The right of asylum permitted individuals, either subjects or foreigners, to seek safety from private vengeance. The practise declined with the development of effective public administration of justice. A transitional period followed in which the courts lacked strength and public order frequently was disturbed. The tradition of asylum found a new expression in the extension of protection by foreign governments or their representatives within other jurisdictions.

Asylum in the residences of diplomatic representatives was formerly based upon the fiction that these were exterritorial, subject only to the authority of the government by which the envoy was accredited. Grotius refused to recognize the right of asylum in embassies, however; Bynkershoek called it preposterous and Vattel protested that the practise of asylum was an abuse of diplomatic immunities. But immemorial practise created a well recognized usage in European states which extended to Latin America, where it still persists to some extent.

As ambassadors successfully asserted claims of exclusive jurisdiction over their diplomatic residences and, in certain capitals where the central power was weak, over the quarters of the city in which they were located, thither fled malefactors of all types and degrees, to be protected by the ambassador, often with large profit to himself. A latter day revival of the *franchise du quartier* is the diplomatic quarter in Peking, recognized by the Boxer Protocol (1901), which placed it under the authority of the diplomatic body. As in the earlier centuries, the existence of a quarter immune from local jurisdiction resulted in grave abuses through the unwarranted grant of asylum.

With the waning of the theory of exterritoriality the grant of asylum in embassies and legations has been greatly curtailed. Today it is limited to exceptional situations arising in countries not endowed with consistently strong governments and only as a temporary privilege. In 1889 Argentina, Bolivia, Paraguay, Peru and Uruguay entered into a convention recognizing and regulating the asylum of political offenders.

Diplomatic asylum formerly covered both persons accused of crime and political offenders. The rise of the theory of territorial sovereignty originally resulted in a general acceptance of the principle that political refugees should not

be shielded, although ordinary law breakers continued to enjoy asylum. Present day practise follows the opposite rule and political offenders only are accorded protection. The change is ascribed on the one hand to the improved understanding of state sovereignty and on the other to the rise of democratic nationalism with its assertion of a right of revolution. Political refugees may not abuse the privilege of diplomatic asylum by conducting themselves in a manner hostile to the government to which the embassy granting protection is accredited, but the employment of forcible methods to apprehend a refugee is not permissible unless the accrediting government declines to order his surrender.

Although consulates do not possess the immunities of embassies and legations, they grant temporary asylum on occasion. It is noteworthy that treaties of the United States which specify inviolability for consular offices and dwellings in every instance forbid their use as places of asylum. In countries where exterritoriality is recognized consuls exercise judicial functions and consulates are regarded as exempt from the local jurisdiction. This exemption makes possible, although it does not make legal, the grant of asylum in consulates. The protection of citizens who enjoy rights of exterritoriality by their own country's representatives may hardly be termed asylum. But the existence in oriental countries of residential settlements and concessions under foreign jurisdiction, a development incidental to exterritoriality, has entailed the projection of a state's power to grant asylum within its own territory to such areas.

The fiction of exterritoriality is still widely applied to warships, and political refugees are as a rule admitted to asylum upon them if in circumstances of apparently imminent danger. The practise is not, however, held to be founded in international law but is justified as a usage of long standing. Isolated instances of asylum upon merchant ships have not established a usage.

Finally, asylum may be granted by a neutral state to the troops, prisoners, wounded or sick persons, or to the naval vessels of belligerents, provided they are interned.

HAROLD S. QUIGLEY

See: SANCTUARY; IMMUNITY, POLITICAL; EXTRADITION; POLITICAL OFFENDERS; REFUGEES, POLITICAL; EXTERRITORIALITY; PRISONERS OF WAR.

Consult: Fuld, Ludwig, "Das Asylrecht im Alterthum und Mittelalter" in *Zeitschrift für vergleichende Rechtswissenschaft*, vol. vii (1887) 102–57, 285–96; Moore, J. B., *Digest of International Law*, 8 vols. (Washington 1906) vol. ii, p. 755–883; Lammasch, Heinrich, *Auslieferungspflicht und Asylrecht* (Leipsic 1887); Scelle, Georges, "Chronique des faits internationaux . . . asile interne" in *Revue générale de droit international public*, vol. xix (1912) 623–34; Kohler, M. J., "The Right of Asylum" in *American Law Review*, vol. li (1917) 381–406; Tobar y Borgono, C. M., *L'asile interne devant le droit international* (Barcelona 1911); Lindenblatt, Kurt, *Das Asylrecht der politischen Verbrecher nach Volkerrecht unter besonderer Berucksichtigung des deutschen Auslieferungswesens* (Potsdam 1910); Satow, Ernest M., *A Guide to Diplomatic Practice*, 2 vols. (2nd ed. London 1922) vol. i, 293–325; Moore, J. B., "Asylum in Legations and Consulates, and in Vessels" in *Political Science Quarterly*, vol. vii (1892) 1–37, 197–231, 397–418; Gilbert, Barry, "The Practice of Asylum in Legations and Consulates of the United States" in *American Journal of International Law*, vol. iii (1909) 562–95; Pergament, M. J., *The Diplomatic Quarter in Peking* (Peking 1927) p. 77–100.

ATAVISM is the term used to designate reversion to type, or the reappearance in offspring of ancestral traits not shown by parents. Darwin noted that the crossing of different strains of domestic rabbits or pigeons frequently gave rise to certain traits of their wild forebears, and it was long believed that at least part of the inheritance from remote ancestors lay dormant in the germinal stream only to be aroused to manifestation by the crossing of strains or by some environmental condition. The matter thus remained unclear until the development of Mendelian principles.

Meanwhile much use was made of the idea in criminology. In his *L'uomo delinquente* Lombroso set forth the theory of the "born" criminal, namely that criminals are identifiable by various stigmata which represent the outcropping of atavistic traits. In short the theory was that the criminal is a savage born into a civilized society. Lombroso and others even found evidence of reversion to pre-human traits. Among the physical stigmata were prognathic jaws, strong canine teeth, very long arms, scanty beard, prehensile feet, odd shaped nose and ears and malformations of the skull; among psychic traits were cruelty, deceitfulness, lack of sympathy, laziness and revengefulness.

The atavistic doctrine was variously stated by Lombroso, Benedikt, Orchansky, Ferri, Garofalo, Ferrero and other members of the positive or anthropological school. They sought to strengthen their case by utilizing the "recapitulation doctrine," that children in their development repeat the biological and psycho-social evolution of the race. They sought to show that the criminal is like the child as regards lying,

laziness, cruelty and vanity, a view finally disposed of by the growth of anthropology and genetic psychology. Using the term atavism loosely they even explained such socially induced habits as tatooing as due to an atavistic reversion to savage vanity.

As it refined and modified its doctrines, largely under the criticisms of the French school, the positive school tended to distinguish degeneracy, or a weakening of the psycho-physical organism, from atavism. Lombroso declared degenerates to be epileptic or at least epileptoid, but he fell into the inconsistency of then identifying the born criminal, the moral imbecile and the epileptic. Nordau (*Entartung*) identified atavism and degeneracy. Critics were not slow to point out that the epileptic and born criminal doctrines were directly contradictory to the atavistic doctrine. Abundant evidence was brought forth that the most primitive savages were not vicious, imbecile or epileptic; such traits would indeed have made impossible all social evolution. Effort was made to save the atavism theory by the idea that there is a gradation from the born criminal through various types of "criminaloids" to the normal, or that the "criminal type" is highly variable, depending on the degree of reversion; also by the contention that degeneracy in any case produces atavistic behavior. Colajanni (*La sociologia criminale*) rejected the doctrine of physical atavism only to set up a theory of mental and moral atavism.

Anthropologists occasionally made use of the doctrine, as when von Luschan, noting that Beethoven was short, very brunet, prognathous, low browed and ugly, suggested that he might be a reversion to the Neandertal type and that his musical genius might be atavistic. There is moreover a suggestion of the atavistic theory in the current use of the term "cave man." Strictly speaking, however, the doctrine of atavism as an explanation of human abnormalities has been abandoned. Even where degenerative abnormalities are found, they are to be explained not as atavistic reversions but as a result of direct inheritance, anomalies of embryological development, birth traumas, childhood injuries or the irregular functioning of internal glands effecting an arrested development or an overdevelopment of certain traits. The Mendelian theory substantiates the earlier belief that traits may be carried in the germ plasm for many generations. Such traits are "recessive" and crop out in the crossing of strains carrying similar recessive factors. They are, however, neither inferior nor abnormal, any more than the gray coat of a wild rabbit is inferior to the red or black coat of its domestic relatives.

FRANK H. HANKINS

See: ABNORMAL PSYCHOLOGY; CRIMINOLOGY; HEREDITY; ENVIRONMENT.

Consult: Bernaldo de Quirós, Constantino, *Las nuevas teorías de la criminalidad* (Madrid 1898), tr. by Alfonso de Salvio as *Modern Theories of Criminality* (Boston 1911); Lombroso, Cesare, *L'uomo delinquente*, 3 vols. (5th ed. Turin 1896–97); Garofalo, Raffaele, *Criminologia* (2nd ed. Turin 1891), tr. from French ed. of 1905 by Robert W. Millar as *Criminology* (Boston 1914); Castle, W. E., *Genetics and Eugenics* (3rd ed. Cambridge, Mass. 1926) p. 151–60; Nordau, M. S., *Entartung*, 2 vols. (3rd ed. Berlin 1896), 2nd ed. tr. into English (4th ed. New York 1895); Colajanni, Napoleone, *La sociologia criminale*, 2 vols. (Catania 1889); Glueck, S. S., *Mental Disorder and the Criminal Law* (Boston 1925); Parmelee, M. F., *Principles of Anthropology and Sociology in Their Relations to Criminal Procedure* (New York 1908).

ATELIERS NATIONAUX is the official title of the system of unemployment relief adopted by the provisional government of France in March, 1848, under pressure of the followers of Louis Blanc. A decade earlier Blanc had outlined a scheme of *ateliers sociaux* based on the doctrine of *le droit au travail*, with its implication that the state must provide work. He envisaged the formation of cooperative groups of workmen, financed in the first instance by public subscription and thereafter self-supporting.

When the government undertook on February 25 "to guarantee work to every citizen," Blanc was made president of the Luxembourg Labor Commission. This he promptly turned into a colossal debating society by the admission of several hundred workers' delegates, and the Luxembourg Palace, where the commission was located, became a propagandist center for the Left. Several cooperative workshops were started on Blanc's lines, the most important of which was that of the Clichy tailors. Economic conditions, however, doomed most of these workshops to an early end. Meanwhile the government guaranty was attracting hordes of unemployed and unemployables to Paris, and on March 5 Pierre Émile Thomas was appointed director of National Workshops and instructed to organize them under the direct control of the Ministry of Public Works.

Thomas' reorganization was on strictly military lines; such work as the government provided was mostly common labor on roads, embankments and open spaces, employing at

the most fewer than 10,000 men. Blanc asserted later with some justification that the real object of this reorganization was to provide a political army to counteract the Luxembourg and denounced the statement that the National Workshops were in line with his theories. "In the social workshops, such as I had proposed them, the workmen would form a sort of joint-stock company with the government, but would work for their own common profits. . . . In the national workshops the state acted merely as employer, and the workmen as hired servants. Now, as the labor was quite useless, a mere pretense, and in most respects quite new to the workmen, the government was consequently only squandering its finances by giving a premium to idleness" (*Pages de l'histoire*, p. 63). Men were attracted by the money relief given to those who found no work, and by the end of May the unemployed army had risen to 120,000. The final crisis came when the government, having reassembled its military forces, decided to disperse the horde of pensioners. Task work was substituted for time work on May 23; and a series of decrees, finally published on June 20 over Thomas' protest, refused relief to those who declined offers of employment, ordered the unmarried between eighteen and twenty-five into the army and the provincials back to their districts. The disastrous recognition of the *droit au travail* ended on the barricades of June 23–26, 1848; the National Workshops were officially dissolved on July 3 by decree of General Cavaignac.

Apart from its perversion by the politicians Blanc's scheme represents a temporary fusion of ideas—that of voluntary cooperative production and that of public guaranty of work. Societies for cooperative production developed in England with the support of the Christian socialists and in Germany under the leadership of Schulze-Delitzsch; but these societies differed from Blanc's *ateliers sociaux* in their reliance on private or semi-philanthropic sources of capital and in their eschewal of revolutionary or political activity. They did not accept his maxim "from each according to his ability, to each according to his needs," nor his plans for socialization of the basic services. The productive associations of Lassalle more nearly resembled those of Blanc and met with a somewhat similar fate. Both Lassalle and Blanc relied upon a democratic franchise to produce a state willing to cooperate with the artisans in fostering noncompetitive production; on this point they were consistently opposed by the Marxian socialists, who regarded such plans as favoring mainly the petty bourgeoisie and who held that nothing less than the capture of the state by the proletariat would suffice. It may be pointed out that the sphere of applicability of Blanc's projects was bound to diminish with the increasing importance of large capital investments, because there is little reason to suppose that under the regime of private property the state would finance cooperative production to the point where it became a serious challenge to profit making enterprise.

WILLIAM ORTON

See: SOCIALISM; PRODUCERS' COOPERATION; UNEMPLOYMENT.

Consult: Blanc, Louis, *Organisation du travail* (Paris 1839, 9th ed. Paris 1850); Thomas, Émile, *Histoire des ateliers nationaux* (Paris 1848); Blanc, Louis, *Pages de l'histoire de la révolution de février 1848* (Paris 1850); Marriott, J. A. R., *The French Revolution of 1848 in its Economic Aspects*, 2 vols. (Oxford 1913), containing reprints of Blanc's *Organisation du travail* and of Thomas' account; Isambert, Gaston, *Les idées socialistes en France de 1815 à 1848* (Paris 1905); Bourguin, Maurice, *Les systèmes socialistes et l'évolution économique* (3rd ed. Paris 1921).

ATHEISM.

HISTORY AND DOCTRINE. In its narrowest sense the term atheist applies to one who categorically denies the existence of any gods. But in its wider sense it properly applies also to skeptics, materialists, positivists and all others who do not accept the claims of theism—that the world was created or is governed by a person or persons having the human traits of intelligence and will in more or less magnified form. Moreover, as people generally do not discriminate between belief and conduct, the term atheist has also been applied to those who refuse to participate in the customary forms of public worship. Thus the Romans called the Jews and early Christians atheists because they did not pay the customary honors to the *sacra* of the established imperial cult.

Because morality is usually associated with religious sanctions the term atheist or godless is also used opprobriously to denote the immoral. Thus when the Hebrew psalms speak of "the fool who saith in his heart there is no God," they refer not to any theoretical assertion but to the wickedness that is not deterred by the fear of divine punishment. Among the Hebrews and other peoples who came into contact with Hellenism atheists were generally called Epicureans, because the latter denied that the gods

interfered in human affairs. Plato applied the term atheists to those who supposed that the gods could be influenced by sacrifice or flattery; and the Talmudic sages referred to Adam as the first atheist because he denied God's omnipresence by trying to hide from Him (*Sanhedrin*: 38 b). The common association between atheism and ethical materialism or the pursuit of worldly goods has made philosophers like Spinoza deny the imputation of atheism, although vehemently rejecting ordinary theism as anthropomorphic.

Owing to the vagueness of popular ideas of deity and the bias of different observers it has proved difficult to decide conclusively as to whether there have been any peoples devoid of all belief in gods and hence completely atheistic in attitude. The Cimmerians, Tasmanians and ancient Peruvians have sometimes been so regarded. While popular thought tends to be animistic, philosophers and great religious thinkers have often felt moral and intellectual difficulties in attributing human traits to deity. Whatever may be the meaning of the *Rigveda's* reference to the deniers of the existence of the gods (x, 82: 121) the pantheistic *Upanishads* clearly banished the popular gods to the realm of illusion. Brahma and "the true self" of Hindu thought is not personal but rather being in general. This becomes the explicit atheism of the Charvakas and of the more orthodox Sankhya philosophy. Buddhism and Jainism in their original form are essentially atheistic religions. Among the intellectual Chinese, morality is usually associated with naturalistic or social rather than theistic sanctions. Taoism offers no room for personal gods; and while Mencius rebuked Yang Chu, whose materialism was explicitly antitheistic, belief in gods is not essential to Confucianism.

The early Greek philosophers were naturalists and tried to explain the world without invoking the popular gods. In this they aroused popular hostility. Anaxagoras was thus accused of atheism because he thought of the sun as a material body. Protagoras was banished from Athens because of his assertion that about the existence of the gods he did not know—the subject was difficult and life was short. Atheism was one of the charges that led to the condemnation of Socrates. Aristotle was similarly accused. Plato felt some revulsion at thoroughgoing naturalism; but Aristotle and the neo-Platonists are at one in rejecting as blasphemous the popular idea that the gods take any part in the creation of the world or intervene in any way in human affairs. Theodorus of Cyrene seems to have been one of the few ancient Greeks to have explicitly denied the existence of any gods.

The persistent denial of anthropomorphic theism in Christian, Hebrew and Mohammedan communities is evidenced by the almost continuous stream of polemics against atheists and by the various decrees of the church against pantheistic mystics. Outright atheism, also, was not unknown in the later Middle Ages, e.g. among the physicians at Padua. The Renaissance, although it revived interest in magic, made in the main for naturalism; and the European commercial and industrial revolution in opening the way for wider intellectual contacts between different peoples led to increased freedom of thought and toleration and to a recrudescence of semi-popular atheistic attitudes. Early in the seventeenth century Father Mersenne estimated that there were 50,000 atheists in Paris in his day. In the eighteenth century atheism became aggressive in the materialistic writings of La Mettrie, Holbach and their followers, so that Laplace could boldly refer to God as an unnecessary hypothesis. Comte, however, whose positivism leaves no room for theism, considered it bad form to call one's self an atheist.

In Germany atheism became popular and aggressive in the middle of the nineteenth century through the materialistic philosophy of Feuerbach, Buchner, Voght, Dühring, Czolbe and others. In England the general antitheistic attitude of the philosophic radicals was followed by the active atheism of Charles Bradlaugh and by the subsequent rationalist movement in England and the freethinkers in America. The agnosticism of Huxley and Spencer made the term atheist somewhat unpopular but it allowed no room for genuine theism. The same is true of certain forms of pantheistic idealism.

Unwillingness to accept the designation of atheist has undoubtedly been affected by the usually unfavorable social position of the atheist. The influence of Greek thought and the voluntary character of the early Christian churches made belief in dogma itself an element of religion. Heresy and schism thus became grave social and political offenses. The punishment of atheistic expression, however, is also due to the more ancient fear of danger to the community from the failure of the gods to discriminate between the individual offender and innocent bystanders.

It was only in the seventeenth century that

there arose in the western world the doctrine that the community might tolerate the existence of atheists. Plato advocated five years of imprisonment for atheists, who, if they did not recant at the end of that time, were then to be put to death. When Hobbes and Spinoza advocated toleration they were opposed by such otherwise enlightened men as Pufendorf, who argued that atheism is due not to mere ignorance or inability to appreciate the force of the various proofs of the existence of God but rather to a treasonable rebellion on the part of God's subjects. Even Locke in arguing for toleration drew the line at atheists. The soft, sentimental Rousseau believed firmly in putting atheists to death, while in our own day Unamuno justifies the burning of heretics.

With the growing distinction between church and state modern laws no longer pretend to punish atheism as such; but blasphemy is still a crime in states like Massachusetts. Although such discriminations as religious tests for holding property or public office or for service on juries are contrary to the spirit of the American state constitutions, the atheist complains that he is taxed to support all kinds of churches, since the latter are tax exempt. The common law did not allow atheists to serve as witnesses, for the judges held that only the believer in a personal god who avenges falsehood will tell the truth. Most of our states have changed the common law rule requiring an oath terminating in "so help me God," to allow the substitution of a simple affirmative; but in some states a witness' credibility may be impeached on the ground of his atheism. An atheist's dying declaration can often be impeached on the ground that such a person is not impressed with the necessity of speaking the truth. From the time when Fichte was dismissed from the University of Jena, apparently with the consent of Goethe, ostensibly because of the atheistic implications of his idealism, academic and professional positions have been endangered by avowal of atheism.

The purely social status of the atheist naturally varies in different societies and social levels. In smaller communities where the church plays a central part in social life the presence of an active nonconforming atheist is an irritation and an obstacle to the smooth functioning of the traditional routine of life. The atheist is there apt to become the object of active resentment. In larger cosmopolitan communities where people can more freely choose their associations the disapproval of atheism, as of other unorthodox doctrines, is less active. Leuba's studies show that atheism is more frequent among the educated classes.

MORRIS R. COHEN

MODERN ATHEISM. Atheism has assumed a new importance in the nineteenth and twentieth centuries through its connections with various revolutionary social movements. Ideologically, modern atheist mass movements are based on the popularization of materialistic philosophy and psychology. The sensationalist and associationist psychology of Thomas Hobbes and John Locke, transformed into a militant atheism by such writers as La Mettrie and Baron d'Holbach, gained many adherents as a result of the French Revolution, certain currents of which were clearly animated by atheistic thought. A broader and more systematic conception of atheistic materialism was developed in Germany during the middle of the nineteenth century by the "Hegelian left wing"; while Ludwig Feuerbach's brilliant, though simplified, attack on religion aroused widespread enthusiasm. The next step was taken by Max Stirner, who proclaimed the absolute right of the ego to form its own values. The philosophy of the German materialists has continued until the present to influence the so-called freethinker movement (*see* FREETHINKERS); it had a far more vehement echo in Russia, where Bakunin's anarchistic ideas, propagated by his emissary Nechayev, led to a vast middle class revolutionary movement called "nihilism," which openly advocated the most violent measures against all kinds of religion.

All of these movements, however, remained more or less on the surface and failed to stir the masses. The decisive and far reaching welding of atheism and revolutionary proletarianism was the work of Karl Marx. By now it is generally agreed that the key to Marx's whole system is in the combination of socialism with an entirely materialistic and atheistic philosophy. Whereas earlier manifestations of socialistic thought were infused with religious elements or at least supported by a profound feeling of intuitive morality, the Marxian movement led inevitably to what Werner Sombart calls "die Entgottung der Welt." Marx himself stated that "the English version of the French materialism leads directly to socialism and communism." He thought that traditional religion, which had been entirely defeated by Feuerbach, would, as an inevitable result of the inherent movement of economic forces, be replaced by a system of communism.

To Marx the God of the bourgeois society was simply a reflection of the capitalistic order, of what he called the "fetish character of the wares," a concept which the new economic system based on socialist principles would automatically eliminate as childish. The millennium of communism would come, Marx believed, inevitably, unassisted by either religion or morality. Thus communism assumed the character of a "chiliastic materialism" (Gerlich).

This materialistic socialism, called by its admirers in a period of triumphant Darwinism "scientific Socialism," has become the most emotional and one of the strongest political forces of the twentieth century. The fundamental place of the idea of the class struggle gave Marxism the character of a new atheist religion. Although according to the system the elimination of the religious "superstructure" would automatically follow the elimination of the capitalistic order, the propagandists of the movement regarded a struggle against God and all kinds of churches as a fundamental part of the work of liberation. This attitude is easily explained in view of the historical situation of the proletariat. In most European countries in which Protestantism did not create a freer and more popular religious atmosphere, religion appeared to the masses as a bulwark of feudal and later of capitalistic exploitation, while the latifundia and the opulent luxury of the state churches aroused the resentment of the wretched proletarian masses. Adding to this hostility, Marxian propaganda described religion as a conscious falsification of facts in order to maintain the workers in subservience. The dictum of Marx, "religion is an opiate for the masses," was generally accepted. Furthermore the ascetic trend of the Christian religion and its spirit of humility were repudiated by the energetic exponents of "proletarian pragmatism" as slave morality. Thus Marxian socialism came to assume an increasingly definite atheistic character, as can be seen most clearly in the synthesis made by the "proletarian philosopher," Joseph Dietzgen.

Although this philosophy was practically never challenged in the Marxian ranks, as the socialist movement worked itself out in practical politics the force of the philosophy became markedly different in different situations. In Anglo-Saxon proletarian movements, where the influence of Marxian socialism has been weakest, socialism not only does not oppose religion but may even favor it. In the western type of European socialism, although it is exclusively or preponderantly Marxian, the atheistic implications of the doctrine have been somewhat hidden. As Marxism became democratic and parliamentarian the socialist parties needed the support of the strictly religious peasants and the petty bourgeois sympathizers. As a result several socialist congresses in Germany, in former Austria and in Hungary adopted the slogan, "religion is a private affair."

It is in the Bolshevik form of socialism, in a country where other classes than the proletariat have been rendered powerless and where consequently there is no necessity for a compromise, that all the antireligious tendencies inherent in socialism have developed unchecked. Not only in Russian communism but in all the parties dominated by the Third International atheism and a tendency toward the suppression of religion are manifest. Lenin had given a materialistic stamp to Bolshevism before the revolution; largely as a result of his influence militant atheism was developed as an important tool of communist propaganda. In Russia antireligious propaganda received added impetus from the fact that the persistence of orthodox religious beliefs and in some cases an increase in their intensity among those adversely affected by the revolution are recognized as a disguised and oftentimes subconscious repudiation of the new social order. No less important is the fact that the appeal of religious traditionalism can be conveniently used to instigate and strengthen passive resistance to the economic and political measures of the new regime. Nevertheless it still remains true that the "godless" movement supported by the state as an official religion is a direct logical outcome of Marxian socialism. Outside of Russia the proletarian atheist movements remain sporadic and unorganized by the Marxian parties.

OSCAR JÁSZI

See: MATERIALISM; IDEALISM; RATIONALISM; FREETHINKERS; SOCIALISM; COMMUNIST PARTIES; ANARCHISM; RELIGION; APOSTASY AND HERESY; BLASPHEMY; CIVIL LIBERTIES; INTOLERANCE; SOCIAL DISCRIMINATION; RUSSIAN REVOLUTION; PROLETARIANISM.

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ATHLETICS. Wherever it has been possible to study the life of early man some indications of games or athletic contests have been found. In the Orient as in the Occident a variety of athletic activities have flourished. Early Egyptians are known to have engaged in running, wrestling, swimming, dancing, acrobatics and some forms of ball games; the Persians held competitions in riding and in the use of weapons such as the bow and arrow or the javelin.

Among the Greeks not only were all such games popular but gymnastic exercises formed a part of the training of the young men. In some of the cities women also were given training in gymnastics and dancing. The body was looked upon as the home of the soul and a beautiful form was extolled by artist and poet. Games and gymnastics along with music and poetry were valued for their contribution to the development of beauty and a sense of rhythm. During the period of the Olympic games, from about 750 B.C. to 400 A.D., competitions culminating in the great games were held all over Greece. Among the most popular contests were running races, both short and long, wrestling, jumping, both high and broad, throwing of the javelin and discus, and chariot races. As at present the victors were the popular heroes. Crowned with olive wreaths and celebrated in numerous poems and songs, they received gifts of oxen, fair slaves and the keys to the cities.

The Romans enjoyed many of the same types of contest; and the state encouraged the development of athletics, for a strong, well formed body was considered a national asset in time of war. Gymnasia and baths flourished in most of the cities and towns of Italy and of the Roman Empire. It was in the latter days of the republic that the great clashes of professionals in gladiatorial combats came into prominence. Vast sums of money were spent and much blood was shed in the boxing, wrestling and fighting games of the arena. Successful fighters often won large purses and the betting was widespread. But, as has so often occurred, professionalism brought with it a cessation of athletic activities by the majority of the people.

Interest in athletics decreased still further following the decline of the Roman Empire, and for several hundred years little attention was paid to the care of the body. The flesh was denied for the good of the spirit. In the age of chivalry which followed, nobles went through a strenuous period of training for the knighthood, which included practise in running, jumping, riding, swimming, boxing and fencing, or exercises with swords and lances, and long periods of severe discipline to enable them to endure hardships. Contests centered chiefly in mock fights which in the tournament became very spectacular and bloody affairs. But such training was limited to the upper classes.

With the Renaissance the body was restored to its place beside the mind as an object worthy of attention. Rabelais tells of the practise of such games as wrestling, running, jumping, swimming or putting the stone and javelin. Montaigne, Locke and Rousseau expounded the value of free play for children and the importance of all forms of exercise in the development of strength, grace and alertness. Dancing again came into favor and various ball games and other sports were included in the more advanced schools as a part of the education of youth for a varied life. Rousseau even advocated that girls should be given the opportunity to participate in dancing and games of all sorts.

After the Napoleonic wars the strain of fighting and the struggle of nations for existence led to an emphasis on physical training as preparation for the defense of the fatherland. Thus athletics came into a new prominence. In Germany Jahn started the Turnplatz, a playground for the practise of exercises, games and national songs. It was from this that the popular Turnverein developed. About this time gymnastics were carefully graded and given a place in the school program in Germany, Sweden and Denmark. In Sweden games and exercises were studied and practised in the light of the growing knowledge of anatomy and physiology. In England the games and sports popular since the sixteenth century served as the basis of physical training.

A similar interest in athletics and games had developed in the colonies of America. This was heightened and varied early in the nineteenth century by the influence of Europe. About 1830 many of the leaders of the Turnverein in Germany, suspected of too liberal activities, fled to

the United States carrying with them their methods of teaching gymnastics. At the same time there developed an interest in the medical gymnastics of Sweden and a renewed borrowing of games from England. Although it was not until nearly 1900 that the playground movement started in the United States, physical activities were rapidly taken over as a part of the school program. Within recent years interest in athletics has largely replaced the earlier emphasis on gymnastics and physical education. Indeed athletics have become world wide in scope.

In the United States athletic activities have become an important part of the life of every city and town, not only within the schools and colleges but through playgrounds, social centers, Y. M. C. A.'s, athletic clubs and churches. In 1927 there were in operation in the United States 10,770 play areas supervised by 19,800 paid leaders and providing recreation for an average of 1,220,600 children daily. In addition 843 swimming pools and 263 municipal golf courses were recorded as having a respective seasonal or yearly attendance of 8,000,000 and 5,000,000.

Gymnastics and athletics form a part of the program of practically every educational institution from kindergarten to college. Gymnastics appear quite universally in the program, due to the ease with which large groups can be given definite and systematic exercise in a limited space with little or no equipment. There are at present 35 states with laws requiring the practise of physical education from one to four hours per week by all children in schools. More recently there has grown up a very highly organized system of interschool athletics, which allows vigorous competition for the physically stronger individuals in such games as football, basketball and track. In many schools attempts are being made to give all the boys and girls the benefit of competition by organizing many teams according to weight, height, age or ability. As a result of such intelligent handling many school boards have included athletics in the school curriculum, allowing a definite credit toward graduation.

In the colleges athletics have grown to prominence with terrific suddenness. In contrast with the European system, where athletics in universities have been carried on almost entirely by the students themselves, almost all colleges in the United States have departments of physical education and directors of athletics responsible to the college authorities, who conduct athletic activities which are not only required but for which definite credit is given toward the degree. This is true of both men's and women's colleges. At the present time such departments handle more than 150,000 men and women students, about 25,000 of whom participate in intercollegiate contests. Approximately 80 percent of the colleges require some regular physical activity for from 1 to 4 years while 75 percent give definite credit for such courses in physical education. In addition there are 125 institutions which develop 2500 teachers of physical education annually.

While the growth of athletics in Europe since 1900 has also been great, its organization has remained more apart from the school life. Games and sports, particularly in the universities, have been in general stimulated and controlled by clubs of students, or in the communities by athletic clubs. The war emphasized the importance of universal physical education, and since 1918 many of the European nations have established national regulations governing participation in athletic activities. Individual cities and school systems have established requirements very similar to those in effect in the United States.

There has also been in Europe since the war a remarkable increase in the participation by the masses in sports and athletics. In Germany at the present time there are about 62,000 sporting clubs with a membership of over 7,000,000. France has established eight district centers for the training of physical education directors and the stimulation of sport. Training schools and extensive programs have been developed in Russia, Austria, Rumania, Italy, Bulgaria and Turkey. The Sokol Societies of Czechoslovakia, similar in scope to the Turners of Germany, have included large numbers of all classes of people. Italy and Hungary have universal physical education for their youths. International games are similar in scope and interest to the intercollegiate contests of the United States. In addition there have grown up in each of the European countries special schools or systems of physical education, gymnastics or dancing. Each such group has its devotees and attempts to carry its system to the homes by means of a widespread distribution of literature and phonograph records or by radio gymnastic programs. In many places schools of physical education have been established, some of which have attained almost world wide influence.

It is only natural that athletic and gymnastic activities should have been practised from earliest time and that they should survive. Among the early animals the growth of the muscular system stimulated the growth of the vital organs and the development of the nervous system. Increasing activity resulted in a development of the brain itself. In surviving forms we find patterns which tend to follow the motor experience of the race. The impulse to motor activity is found in the spinal cord of the child, although the form that such activity takes depends largely on the environment. For the earliest man the environment and for later groups social pressure emphasized the importance of the development of a strong, alert and well trained body for the preservation of the individual or for the defense of clan or nation. The development of the impulse to activity is no less necessary in the preparation of the individual for the complex life of today. It is the more vital that the early environment of the modern child should be planned to satisfy these impulses, since the city child lacks many of the former opportunities of outdoor life. Every well organized playground recognizes this fact and plans its program accordingly. Our modern educational system, too, tries in a general way to utilize this knowledge of the fundamental nature of man and the development of the impulses to activity in the child. In the schools and colleges athletics are intended to fulfil this necessary function.

Indeed one of the chief reasons for the absorption of physical activities into the curricula of the colleges was the recognition of the value of regular systematic exercise for all students. In colleges where the physical education work and the athletic program are well planned, the ideals of training are the development first of the organic system, then of the neuromuscular mechanism for fundamental skills and finally the development of character through competition and team games. The learning of games to be used as recreation after graduation is also considered. Both high schools and colleges with good programs are attempting to realize such aims. To this end incoming students are examined by a medical officer and given tests of physical ability. This allows the assignment of the men to classes according to their ability to participate. The subnormal are given special treatment, while the strongest are encouraged, where encouragement is necessary, to participate in a variety of vigorous games. Such ideals and the methods for obtaining them have been studied and popularized in the United States by the American Physical Education Association, the Society of Directors of Physical Education in Colleges and the Athletic Research Society, while the National Collegiate Athletic Association has attempted to develop and regulate the quality of intercollegiate competition.

Largely due to the lateness of the attempt to utilize the values to be obtained from athletics, educational institutions are struggling with boards of control and conferences to regulate games. Within the colleges decisions are made by the director of athletics, the faculty committee on athletics, the alumni committee and numerous managers. Not only has each college its eligibility standards and rules regarding student participation and the length of schedule of games; but numerous groups of colleges have joined in conferences to establish uniform eligibility and to regulate schedules, amateur standing, officials and the conduct of games. On the other side the football coaches are organized and the officials are combining to demand fair wages for handling games.

In the women's colleges, with a limited amount of intercollegiate athletics, the athletic program is well directed. Because of the lessening of the pressure for well coached teams more energy and intelligence are available for the teaching of dancing, field hockey, basketball, swimming or track athletics to large groups of girls, and the program can be adjusted to their abilities and needs.

The results of such widespread participation in exercise are sometimes difficult to measure. It is well established that strength, physical ability and health are improved by the judicious practise of athletics. When there is medical examination before participation serious consequences are very unlikely. However, as has been pointed out in *Bulletin 23* of the Carnegie Foundation, in a strenuous game such as football there is liability to serious injury. In 1926 at twenty-two representative colleges an average of 17 percent of the football players received serious injury. Only 3 percent of the participants in all sports received such injuries. It is important, moreover, that athletes who have accustomed themselves to a vigorous program of exercise should be provided with recreational activity after college. Otherwise the transition to sedentary occupation results in the deterioration of muscular tissue and the accumulation of fatty tissue. A study of 38,000 college graduates was made by the Metropolitan Life Insurance

Company in 1928 (Dublin, L. I., "Longevity of College Athletes" in *Harper's Magazine*, vol. clvii, 1928, p. 229–38). The investigation indicated a somewhat higher mortality than the average for the varsity athlete and a failure of general athletes to live longer than non-athletes.

Within recent years athletics in the colleges have developed far beyond the stage of physical education and recreation. In the early days in the United States, as in Europe, students organized their own gymnastic societies and ball clubs. Soon, encouraged and aided by willing alumni, they began to build up teams, schedules and a system which made winning teams a necessity even if the players had to be paid and high salaried coaches hired to achieve them. This task was too big for students to handle, and college authorities took over the direction of athletics. Good promotion and extensive publicity have since made college athletics a big business. In many colleges the athletic investment is several million dollars. The annual budget is approximately a half million dollars, and football, the best paying sport, may bring in three quarters of a million dollars to the treasury in a single season. Several colleges have stadia seating from 50,000 to 80,000 persons, while numerous educational institutions send their teams to compete in far off cities with accommodations for 100,000 spectators. Some college teams travel from one end of the country to the other, carrying with them teachers, examinations and study books. Many colleges use their athletic equipment and their athletic teams as a means of advertising for students. In order to provide the necessary costly equipment and play space the alumni are urged to contribute heavily, and their resulting sense of investment in the teams gives them a strong desire to participate in the management and personnel. Many colleges solicit, and alumni are zealous in finding, promising athletes in the high schools, for whom they make it financially easy, if not profitable, to attend their colleges. Such students often need special tutoring while in college and it may be the duty of the director of athletics to supply such assistance. In many places it has been necessary to employ a high grade business man and several assistants to care for the equipment, make up schedules, handle the gate receipts, purchase supplies and accommodate the crowds resulting from the athletic program. In order to keep the stand full and to satisfy the students, alumni and general public it is necessary for a college to have a successful team. To this end players and a coach with a reputation and a system must be found. For such a coach some colleges will pay $25,000 for a season of less than twelve weeks. If he is successful the bidding for his services is great, if unsuccessful the pressure to resign is just as insistent. This pressure is usually transferred to the players, who are drilled early and late until the monotony of practise and the nervous strain of the big games have taken away all spirit of play. While many students in many sports benefit somewhat from this organization and consequent income, yet most of the money, time and attention go to the few students who are least in need of them.

Along with the successful team it is necessary to have the proper publicity for such contests. This is a simple matter, as the newspapers have found that sports are their best steady news. All papers treat important football games as front page news, assigning from one to six columns for headlines, and give especial publicity to a team which has traveled across the continent or abroad. A recent study of 125 newspapers reported by the Carnegie Foundation in *Bulletin 23* showed that in this group an average of ten columns of news space was devoted to sport daily and from two to three times that amount on Sundays. Seven of the papers gave 20 percent and five more than 25 percent of their space to sport news.

The sports page of the modern newspaper relies for its interest not only on college athletics. For professional athletics have grown with equal rapidity and have also assumed the proportions of a big business. Baseball was one of the earliest sports to develop a hierarchy of ownership and organization. It still remains one of the most popular of all sports; in the United States daily crowds at a game range from one to forty thousand and the big games draw about 70,000 spectators. Salaries for baseball players may run as high as $70,000 for a season of seven to eight months. A single boxing contest in 1927 drew a crowd of 110,000 persons, who paid a million and a half dollars for admission, of which the contestants received about a million dollars. Hockey has established itself financially and football is growing in interest. Promoters are now at work on the track and tennis stars. Even industrial concerns find work for athletes who will advertise them on the field of play. This development has been most pronounced in the United States, but it is being duplicated throughout the world.

In order to control the vast and growing number of amateur athletes and contests, there have developed in each country Amateur Athletic Unions, groups of ex-athletes and business men, who approve the amateur standing of athletes, keep records and regulate where and when these athletes shall perform. In the United States this organization has become very powerful and the amateur athlete must observe all its edicts or suffer suspension which eliminates him from all competition. In spite of this athletic clubs vie with each other to obtain stars who will build up the prestige of the club. The most important events in amateur competition for most of the sports are those of the Olympic Games. These were revived in 1896 and have been held subsequently every four years with the exception of 1916. At the Olympic Games at Amsterdam in 1928, about 45 nations were represented by over 4,000 athletes, both men and women. Almost all forms of sport were included, and women participated, not only as hitherto in swimming and gymnastics, but for the first time in the track events.

The growing popularity of athletics and the prominence given to athletes has increased the problem of separating the amateur from the professional. In the early days sport was the activity chiefly of nobles and gentlemen. When the masses began to participate, a serious situation arose particularly in England, where some of the working men gave promise of beating the records. The early rules forbade those who earned their livelihood by the work of their hands from competing with gentlemen. From this developed the now generally understood definition of an amateur as one who engages in sport solely for the pleasure and the physical, mental or social benefits he derives therefrom. The inclusion in the professional ranks of directors of physical education who may possess and develop in others the highest ideals of sport has raised doubts as to whether the strict application of this principle does what is intended. Moreover, so great has been the demand of the public for exhibitions and so profitable have promoters found the business that large financial inducements are offered to prominent amateurs to join the professionals, while for those who do not openly become professionals numerous ways of appearing to remain amateurs have been devised. It is in the attempt to regulate amateur athletics that great sport controlling bodies have been formed in most countries and that an international organization has developed. Consistency in the making of rules or the punishment of offenders is difficult and criticism of the edicts of such organizations is widespread. In spite of the difficulties, attempts are being made to separate those who compete in an eager and fair minded spirit from those who make a business of evading rules and using tricks and unfair tactics to win. When this has been accomplished, games and athletics will have found their real place in the life of the people.

A. W. MARSH

See: PHYSICAL EDUCATION; SPORTS; PLAY; RECREATION; GAMES; PLAYGROUNDS; AMUSEMENTS, PUBLIC; COMMERCIALISM; AMATEUR; PROFESSIONALISM.

Consult: Groos, Karl, *Die Spiele der Menschen* (Jena 1899), tr. by E. L. Baldwin (New York 1901) pt. iii; Leonard, F. E., *A Guide to the History of Physical Education* (Philadelphia 1923; rev. ed. by R. T. McKenzie, 1927); Gardiner, E. N., *Greek Athletic Sports and Festivals* (London 1910); Schröder, B., *Der Sport im Altertum* (Berlin 1927); Lowe, D. G. A., and Porritt, A. E., *Athletics* (London 1929) chs. i–iii; *Geschichte des Sports aller Völker und Zeiten*, ed. by G. A. E. Bogeng, 2 vols. (Leipsic 1926); May, Herbert L., and Petgen, Dorothy, *Leisure and Its Use; Some International Observations* (New York 1928) p. 58–64, 80–107, 153–65; Schroeder, Louis C., "Physical Education and Sports in Europe" in *American Physical Education Review*, vol. xxxiv, (1929) 516–21; Hoh, Gunsen, *Physical Education in China* (Shanghai 1926) chs. i, iv, vi and vii; Savage, H. J., "Games and Sports in British Schools and Universities," Carnegie Foundation for the Advancement of Teaching, *Bulletin no. 18* (New York 1927), and "American College Athletics," Carnegie Foundation for the Advancement of Teaching, *Bulletin no. 23* (New York 1929), and "College Athletics and Scholarship" in Carnegie Foundation for the Advancement of Teaching, *22nd Annual Report* (New York 1927) p. 49–65; "Intercollegiate Football" in American Association of University Professors, *Bulletin*, vol. xii (1926) 218–34; Hanmer, Lee F., *Athletics in the Public Schools*, Russell Sage Foundation, Department of Child Hygiene, Publication no. 72 (New York 1910); Wagenhorst, L. H., *The Administration and Cost of High School Interscholastic Athletics* (New York 1926); *Interscholastic Athletics*, compiled by Julia E. Johnson, Reference Shelf, vol. vi, no. 2 (New York 1929); Rogers, F. R., *The Amateur Spirit in Scholastic Games and Sports* (Albany 1929); Sandilands, G. S., *Atalanta, or The Future of Sport* (London 1928).

ATKINSON, EDWARD (1827–1905), American economist, statistician and underwriter. A native of Massachusetts, he engaged in business in Boston and became treasurer of several textile mills. He was especially interested in establishing and administering mutual fire insurance companies for manufacturers. Atkinson's efforts to secure proper construction, inspection and installation of sprinkler equipment greatly re-

duced losses by fire. From 1878 until his death he was president of the Boston Manufacturers Mutual Insurance Company. Abhorring economic waste Atkinson devoted much time and energy to reform in cooking; he invented the Aladdin lamp, or Atkinson Cooker, whereby foods could be prepared at a reduced cost in fuel, in less time and with a gain in nutritive qualities. In the hope of securing a wider acceptance of his invention he refused to take out a patent.

Atkinson's interests extended into every field of economic life; he published pamphlets on taxation, finance, wages, tariff, sound money, railroad problems and other subjects. He was a pioneer in advocating the diversification of agriculture and the development of industry in the south. In 1887 he served as special commissioner to report upon bimetallism in Europe. Atkinson was opposed to taking the Philippines, and several of his anti-imperialist pamphlets were withdrawn from the mails as seditious. An advocate of free trade and an opponent of socialism, he looked to class cooperation and the improvement of industrial technique to bring about general prosperity and social progress.

DAVIS R. DEWEY

Important works: *Cheap Cotton by Free Labor* (Boston 1861); *Our National Domain* (Boston 1879); *Railroads of the U. S.* (Boston 1880); *Cotton Manufactures of the U. S.* (Boston 1880); *Distribution of Products* (New York 1885); *Bimetallism in Europe* (Washington 1887); *The Science of Nutrition* (Springfield, Mass. 1892); *Taxation and Work* (New York 1892); *Prevention of Loss by Fire* (Boston 1900); *Facts and Figures as the Basis of Economic Science* (Boston 1904).

ATKINSON, HARRY ALBERT (1831–92), New Zealand pioneer settler (1855), soldier and statesman. He was born and educated in England and became interested in colonization through the influence of his brother and through the propaganda carried on by Wakefield. His energy and unconventional methods in the Taranaki Maori wars (1860–64) revealed by contrast the unadaptability of the British regulars to colonial warfare. As minister of defense (1864–65) Atkinson instituted the "self-reliant" policy, moving for the withdrawal of the imperial troops, the transfer of control of native policy from the British to the New Zealand Parliament and the organization of colonial defense forces. In 1875 he moved for the abolition of the provinces, thus destroying the quasi-federal character of the New Zealand constitution of 1852. The local governments he substituted, however, had only qualified success. From 1874 to 1891 he was occupied with his duties as colonial treasurer and as premier. The latter office he held four times. He pursued a policy of conservatism or moderate reform and because of the severe economic depression adhered to courageous economy. Atkinson introduced the first protective tariff (1879), substituted a property tax on the "American model" for the land tax, helped to establish manhood suffrage, but opposed triennial as against quinquennial parliaments. He supported the institution of national compulsory education but objected to state monopoly. Regarding imperial federation as impracticable he nevertheless advocated the federal union of New Zealand with the Australian colonies. Atkinson's last years in office were marked by agitation for close settlement of the land, by labor disputes, ugly revelations of a commission on sweated labor (1888) and by a general maritime strike (1890). His resignation, which followed the elections of 1890, ushered in the era of liberal-labor governments and of notable social reforms. In the last two years of his life he acted as speaker of the legislative council. His defense and financial policies are generally praised by modern historians as suited to the peculiar circumstances of New Zealand in the seventies and eighties.

JAMES HIGHT

Consult: Toswill, E. E., *The Life of Sir Harry Albert Atkinson* (in ms., Library of Canterbury College, Christchurch, N. Z.); Reeves, W. P., *New Zealand* (3rd ed. Boston 1925); Rusden, G. W., *History of New Zealand*, 3 vols. (2nd ed. London 1885) vols. ii-iii; Saunders, Alfred, *History of New Zealand*, 2 vols. (Christchurch, N. Z. 1896–99) vol. ii.

ATKINSON, WILLIAM (dates of birth and death unknown), English writer on economic subjects. He was made an original fellow of the Royal Statistical Society upon its foundation in 1834. In 1839, when an investigation of the distress of the Spitalfields hand loom weavers was undertaken by a crown commission, he obtained a mandate to prepare their case. One result of Atkinson's activities on behalf of the weavers was the *Principles of Political Economy; or The Laws of the Formation of National Wealth: developed by means of the Christian Law of Government* (London 1840). In this book he attacked the classical economists for their failure to give due prominence to the dictates of Christian ethics and to reach an agreement on such vital questions as population and fiscal policy.

A second edition of this work appeared in New York in 1843 with a preface by Horace Greeley, who was attracted both by its stout advocacy of protectionism and by its "moral and religious aspect." Atkinson also published the first volume of *Principles of Social and Political Economy, or the Laws of the Creation and Diffusion of Wealth Investigated and Explained* (London 1858).

W. H. DAWSON

ATKINSON, WILMER (1840–1920), American rural journalist. He was born in Pennsylvania of liberal Quaker parents whose decided opinions on social problems influenced him through life. After a period of country school teaching and farming, interrupted by service in the Civil War, he turned to journalism. With Howard Jenkins he founded the Wilmington *Daily Commercial* (1866), the first daily newspaper in Delaware, and almost immediately began a campaign for the abolition of the whipping post. Atkinson was an early advocate of woman's suffrage and prohibition. In 1877 he founded in Philadelphia the monthly *Farm Journal*, which he edited and published for forty years. The success and influence of this publication, the circulation of which exceeded one million on Atkinson's retirement, was largely due to his deliberate cultivation of a personal relationship with his readers. All articles dealt with practical farm problems and were characterized by an intimacy of style and a simple, appealing humor. Atkinson constantly championed the farmers' cause in public matters. He urged them to improve the conditions of their private life by his creation of the famous Peter Tumbledown, a symbol of rural slovenliness. His "Fair Play Notice" of October, 1880, was the first instance of a publisher's guaranty of advertisements with a promise of refund to aggrieved subscribers. He always rejected advertisements of patent medicines and other questionable products and thus helped to raise publishing standards.

MALCOLM M. WILLEY

Consult: Atkinson, Wilmer, *An Autobiography* (Philadelphia 1920); *The Farm Journal*, vol. xliv (1919–20) no. 10.

ATKYNS, ROBERT (1621–1709), English barrister and judge. He was of some importance in connection with the opposition to James II, the fight for parliamentary privilege and the history of parliamentary reform. Atkyns was born of an old family of exchequer barons and barristers, which had been prominent in Gloucestershire and Bristol for two hundred years. After 1661 he was a bencher in Lincoln's Inn; he served as judge of Common Pleas (1672–78) and as recorder of Bristol (1659–78). About 1676 he declared openly against pensions and places for members of Parliament, spoke against the sale of offices, refused to accept "presents" himself and on the hustings at elections denounced such practises. Had his family and his own position been less important, his statements might have roused less resentment; as it was he probably resigned from the bench under pressure, being one of the last judges forced out on political grounds, and was also ousted from his position as recorder of Bristol. Atkyns next drew up a defense for Lord Russell during the latter's impeachment and published a vigorous denunciation of procedure in trials for treason. In 1684, when the speaker of the House was indicted for publishing, at the order of the House, Dangerfield's narrative of the popish plot, Atkyns argued in his defense—perhaps as counsel—and published an elaborate defense of the privilege of Parliament. He also printed tracts denying the antiquity or legality of the dispensing power and attacking the legality of James II's High Commission. He was made chief baron in 1689 and speaker of the House of Lords (1689–93). Immediately after retiring from the bench in 1694 Atkyns revived Coke's old attack upon the equitable jurisdiction and published a tract declaring the jurisdiction of the Lords a usurpation.

His tracts were collected in *Parliamentary and Political Tracts* (London 1734, 2nd ed. 1741). They were widely read in the seventeenth and eighteenth centuries, are not yet wholly forgotten and deserve place in the history of political science.

ROLAND G. USHER

ATROCITIES. An atrocity may be defined as a conspicuous act of cruelty, associated with some political operation, for which a government may be represented as directly or indirectly responsible. Some dramatic element is involved. Slow measures of oppression may entail severer suffering, but they rarely arouse the same indignation. Thus the Allied blockade of the Central Powers caused suffering immeasurably greater than did the misdeeds of German submarine or airship commanders, yet few called it an atrocity. Burke thundered against the execution of

Marie Antoinette, but ignored the massive oppressions of the feudal system—as Tom Paine put it, he "pitied the plumage, and forgot the dying bird." Atrocities may be morbid and sadistic phenomena, but they may also proceed from calculation and may even be the outcome of a judicial process, as was the execution of Joan of Arc or of Nurse Cavell. The defense for atrocities is commonly military or political necessity, and this argument is apt to carry weight in proportion as one approves the purpose of the political operation to which they are incidental. A plausible military case could be made out for the systematic burning of farms by the British in the Boer War, whereas neutral opinion disapproving of the war followed Sir Henry Campbell-Bannerman in condemning these "methods of barbarism."

The worst atrocities occur when a deep gulf of race, color or culture divides the combatants, or when fear or religious hatred interferes with the dictates of humanity and prudence. Civilized and uncivilized armies alike are most often guilty of atrocities under these conditions. One thinks of the time during the Mutiny when Indians were fired from British guns. Commanders excuse themselves on the plea that "natives" interpret moderation and humanity as weakness. Tribes in the food gathering phase of evolution have sometimes been exterminated like vermin by white settlers, as were the Tasmanians and the Bushmen. Backward races in a sense avenge themselves when they are employed by whites against other whites. The use of colored troops by the French to garrison the Rhineland was justly condemned because it involved the humiliation of the inhabitants and led to sexual assaults. A small ruling caste, repressing a numerous subject class, will often in fear lapse into gross barbarity. Cromwell's brutalities against the Irish Catholics illustrate all these predisposing causes. Religious passion can condone wholesale atrocities. Louis Napoleon with difficulty prevented the city of Toulouse from celebrating the tercentenary of a local massacre of Huguenots.

The attempt has been made in modern times to define in a code an absolute standard of humanity in warfare. But while civilized opinion grows more exacting, the technique of warfare becomes more murderous. Bayard, the model of knightly conduct in the sixteenth century, regarded the use of gunpowder as an atrocity. The contemporary sentiment against poison gas may come to seem as futile.

It is a modern requirement that war should be so conducted as to inflict upon the enemy the minimum of suffering consistent with a nation's political purpose. This would have seemed nonsensical to a self-sufficing national state. It imposes itself with the growing economic and cultural interdependence of peoples: with the enemy of today one may trade tomorrow. The struggles of the first organized states of antiquity were wars of extermination in which the adult males were slaughtered and the women enslaved. Religious rites made for systematic atrocities. Amid the elegant culture of the eighteenth dynasty in Egypt seven rebel kings were carried head downwards from the prow of the royal barge of Amenhotep II and sacrificed to Amon. The Roman maxim, *parcere subjectis, et debellare superbos*, illustrates the influence on warfare of the motive of permanent conquest. One must be relatively merciful where one intends to settle.

Warlike castes tend to build up a code of mutual restraint which lessens the risks of fighting. Such was mediaeval chivalry. The professional *condottieri* in the Italian wars all but eliminated bloodshed from their battles. Military experience slowly discovered the principle of reciprocity. If one refuses quarter or indulges in atrocities the enemy will resort to reprisals. The average soldier when the odds are against him is less liable to panic if he expects quarter and anticipates humane treatment for the prisoners and the wounded.

The evidence of an unorganized conscience opposing atrocities ranges from Euripides to Voltaire. Grotius had the daring idea of subjecting war to law, but only in the nineteenth century does one encounter an international conscience organized against atrocities. The first concerted attempt to humanize warfare was embodied in the Geneva Convention (1864 and 1906), which with subsequent legislation emanating from The Hague established a code of civilized usage in regular warfare for the protection of prisoners, wounded and non-combatants.

One realizes, with Gladstone's use of the Bulgarian atrocities in 1875, that a world wide standard of humanity had grown up in the more advanced democracies. The Turkish misdeeds roused popular passions, discredited Disraeli's Turcophile policy and supported the Liberal case for evicting the Turks from Europe. The same thing happened after the Armenian massacres. The concern displayed for the Christians

of Turkey was not wholly disinterested: it assisted imperialism to break up the Turkish dominions. The effect of the efforts of the European Concert to impose humanity on the Turks was worse than negative, for the latter now saw in their Christian subjects the advance guard of European imperialism. The Concert's intervention in Macedonia, again, between 1903 and 1912, went to the length of creating an international *gendarmerie*. Little improvement resulted, and the revolutionary organizations actually provoked atrocities in order to stimulate Europe to more effective action. No less significant was the success of the agitation organized by E. D. Morel against King Leopold's misrule in the Congo. The proved cruelty in the forced collection of rubber drove the British Foreign Office to remonstrate. Here the legitimate interests of Liverpool merchants reenforced the argument from humanity. The Belgian parliamentary opposition joined in the attack and the system of monopoly was ended.

The chief role of atrocities in history, however, has been the stimulation of warlike passions. The cutting off of the ears of a certain Captain Jenkins drove Walpole into the last of the British wars against Spain; the atrocities of the Terror excused the monarchical combination against revolutionary France; the ill usage of the natives by Dutch farmers helped to bring about the Boer War. Allied propaganda made an unprecedented use of "Hun" atrocities to create a militant temper at home, to stimulate recruiting and to influence neutrals. Much of this propaganda was grossly dishonest, like the lie of the British official propagandist agency (based on a mistranslation of the word *Kadaver*, which means the body of a dead animal) that the Germans were extracting fat from human corpses to make munitions. Such incidents measure the intellectual degradation of war. A like one-sided use was made of the atrocities in the Russian revolutionary struggle to discredit radicals in other countries.

Experience inculcates the utmost caution in the use of charges of atrocity. They divert attention from the real political issue, engender an atmosphere fatal to pacific diplomacy and are in the absence of a neutral court of investigation very difficult to verify. The inquiry of the Carnegie Commission in 1913 into the conduct of the Balkan wars disproved many charges which had been generally believed and which had done their work. A wise commander will not encourage his men to believe in the cruelty of the enemy. Such a belief may sap their morale and tempt them to practise atrocities. Further progress in banishing atrocities from the modern world will follow the more effective organization of civilized opinion and the creation of tribunals which can investigate and penalize acts of inhumanity.

H. N. BRAILSFORD

See: WAR; WARFARE; PRISONERS OF WAR; MASSACRE; MORALE; PROPAGANDA; HUMANITARIANISM.

Consult: Lasswell, Harold D., *Propaganda Technique in the World War* (London 1927) p. 81–89; Angell, Norman, *The Public Mind* (New York 1927) ch. v; Ponsonby, Arthur, *Falsehood in War Time* (London 1928); Demartial, G., *La guerre de 1914: Comment on mobilisa les consciences* (Paris 1922) p. 15–30.

ATTAINDER. The words attainder and attaint are derived from the Latin *attingere*, to touch, strike or attack, through the old French *ataindre*, or *ateindre*, and in their early judicial use both in mediaeval France and England this meaning of prosecution persisted. But the fact that conviction for serious crimes actually involved subsequent forfeiture of the right to hold property offices or dignities and thus affected not only the man convicted but also his heirs led in time to the erroneous but practically universal derivation of the words from the Latin *tingere* (French *taindre*, *teindre*), to taint, to become corrupt in blood. The effect was taken for the cause, and attaint thus came to mean corruption of blood, a person attainted (*attinctus*) one so affected and attainder any procedure by which this effect was produced.

The earlier and original meaning of the word probably persisted in the attainting jury of twenty-four employed in England in the later Middle Ages and afterwards to impeach the verdict of a jury. If the original verdict was thus found to be false, the jurors became guilty of perjury and "their meddowes shall be eyred, their houses broken down, their woods turned up, and all their lands and tenements forfeited to the King" (Rastell, John, *Les termes de la ley*, published originally in Latin in 1527; English translation by his son first published London 1567). But this procedure fell into disuse, and with the decision in Bushell's Case (1670) that jurors may not be held liable for their verdicts the whole principle upon which it was based disappeared from English law.

The phase of attaint and attainder which is most important for legal history is that connected with conviction for offenses entailing corruption of blood. This result followed con-

viction for treason and felony, and the term "attainder" was applied to all forms of procedure by which it was effected. Staunforde in the sixteenth century recognized two principal kinds, the attainder "on appearance" and that "on default." Attainders "on appearance" were by confession, battle or verdict of a jury; those "on default" were "by process," resulting in the outlawry of the accused who failed to appear (*Les plees del coron*, London 1560, cap. 49). "Aptly is a man said to be attainted, *attinctus*, for that by his attainder of treason or felonie his bloud is so stained and corrupted as, first, his children cannot be heires to him, nor to any other ancestor. . . . Secondly, if he were noble or gentle before, he and all his children and posteritie are by this attainder made base and ignoble, in respect of any nobilitie or gentrie which they had by their birth. Thirdly, this corruption of bloud is so high, that regularly it cannot be absolutely solved but by authoritie of parliament" (*Coke upon Littleton*, 391 B).

In addition to this corruption of blood and death by hanging, drawing and quartering, treason further involved the forfeiture to the king of all the traitor's lands and goods. The goods of felons also were forfeited, but the king could retain their lands for a year and a day only. For felony the penalties were so severe that after the middle of the sixteenth century the statutes creating new felonies always included a proviso that a conviction under them should not effect "corruption of blood." The statute 54 George III, c. 145 (1814) restricted all corruption of blood to cases of treason and murder. The act of 33 and 34 Victoria, c. 23 (1870) swept away the whole system of attainders with their attendant forfeitures, corruption of blood and escheat with the insignificant exception of forfeiture consequent on outlawry.

In the fourteenth and fifteenth centuries attainders for treason are occasionally to be found on the *Rolls of Parliament*, but in the case of the earlier ones it is very hard to say whether the procedure under them should be termed judicial or legislative, since "awards" of Parliament and private "acts" were for a long time almost if not entirely indistinguishable. For this reason it would seem impossible to point with certainty, as some have tried to do, to any case as the first "bill of attainder." For a considerable time also it is difficult clearly to distinguish these in all cases from impeachments. The practise was long fluid and uncertain, but in times of violence, especially in the reign of Richard II and during the Wars of the Roses, a number of dangerous precedents were created, which were employed and improved on in later centuries. In the time of Henry VIII bills of attainder were used with dangerous frequency and under the Stuarts the practise was continued until after the Revolution of 1688, while bills of pains and penalties, similar in character although less severe in penalty, occur rarely for about another century.

Bills of attainder are now obsolete in all countries with truly constitutional governments. In England of course there is no legal obstacle to their revival by Parliament at any time, but the feeling that they are unjust in principle renders such an event improbable. In the past, however, they have furnished many of the worst cases of the miscarriage of justice by which the history of criminal procedure is only too well marked. The memory of such cases was still fresh enough in 1787 to warrant the express prohibitions of attainder contained in the Constitution of the United States in Article 1, Section 9, and Article 3, Section 3.

C. H. McIlwain

See: Criminal Law; Punishment; Jury; Confiscation; Treason; Political Offenders.

Consult: Hatsell, John, *Precedents of Proceedings in the House of Commons*, 4 vols. (London 1796) vol. iv; Coke, Edward, *The Third Part of the Institutes of the Laws of England*; Hale, Matthew, *The History of the Pleas of the Crown*, 2 vols.; Blackstone, William, *Commentaries on the Laws of England*, bk. ii, ch. xv, § 7, and bk. iv, ch. xxix; Reeves, John, *History of English Law*, 5 vols. (new American ed. Philadelphia 1880) vol. ii, p. 161–66, vol. iv, p. 399–406; Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. i, p. 337–40, vol. iv, p. 185, 515–17; Cooley, Thomas M., *Constitutional Limitations* (6th ed. Boston 1890) p. 314–18.

ATTITUDES, SOCIAL. Social attitudes are individual attitudes directed toward social objects. Collective attitudes are individual attitudes so strongly interconditioned by collective contacts that they become highly standardized and uniform within the group. While most social attitudes are thus collectively interconditioned and standardized, others such as those of antisocial and maladjusted individuals and of persons living in advance of their time are also important.

The attitude is originally a trial response, i.e. interrupted, preparatory or substitute behavior arising within an incompleted adjustment response, but it may become the permanent set of the organism. It ranges from concrete overt

muscular response to that which is abstract, inner or neural, and has three control functions. First, it enables the adjusting organism to take a sensory and perceptual inventory of its technique and thus to control subsequent adjustment behavior. This control becomes intellectual when the attitudes are abstract and symbolical. Secondly, a competing, contending or cooperating organism, perceiving the attitudes of another, may so direct its own responses as to protect or further its interests. Thirdly, the attitude is used to indicate one's own intentions to others, thus preventing aggression and inducing fear or cooperation. This function often operates on an automatic basis, and in man it reaches a very high development through the use of abstract thought (verbalized attitudes) communicated through spoken or written language. The overt attitudes are easily perceived, but the inner or neuro-psychic attitudes are difficult to detect, although it is more important to respond to them than to the overt attitudes. Consequently the inner attitudes have developed substitute overt expressions, largely through vocalization, gesture and handwriting movements, to take the place of the older overt partial and preparatory movements which were dropped as trial and error became increasingly neural and decreasingly muscular. These last two functions of attitudes are specifically social and are closely correlated with social consciousness. The first function is primarily personal and is most closely correlated with self-consciousness.

Social attitudes are as numerous as relationships between people, but they may be classified according to several general criteria, the most significant of which are: the collective relationships which standardize and stereotype attitudes through interconditioning (urban, rural, sectarian, racial, nationalistic, political, occupational, etc.); the objective or aim of the behaving person (humanitarian, exploiting, protective, etc.); the valuation placed upon the objective or the technique utilized (approving, discouraging, etc.); the object calling forth the attitudinal response (attitudes toward money, radicals, sex, etc.); and the time reference of the attitude (traditional, progressive, temporary, permanent, etc.). Attitudes of the first type are perhaps the most significant. They are most studied by the collective behaviorists, while the social psychologists are interested in all types of attitudes.

Attitudes form the basis of all language and communication. In them is implicit all finished social behavior and through them practically all social adjustment is consummated. It has always been important to respond to behavior while it is still attitudinal, that is, recognizable as tendency or as intention. Language, which is essentially symbolic and substitute behavior, has made such anticipatory responses possible even to the most hidden or abstract inner attitudes. Modern social behavior is organized primarily on the basis of such anticipatory response.

Public opinion is the highest form of collective attitudes. Its function in the collective control process is analogous to that of the intellectual (verbalized) attitudes in the individual adjustment process. In the latter the higher and more abstract types of attitude are a part of the process of criticism and reorganization of unsatisfactory experiences on the overt plane. In the collective adjustment situation it is public opinion which serves to criticize and reorganize, or sometimes to rationalize and justify, the existing collective attitudes.

Many attempts have recently been made to classify and measure collective attitudes, especially urban, rural, occupational, political, buying, recreational, moral, antisocial and religious attitudes, in order to bring about their more successful control through public opinion or through governmental, educational, business and religious organizations. A frequent source of error here has been the substitution of the measurement of verbalized attitudes for the measurement of the total set of attitudes, including the overt and emotional. Such a procedure frequently emphasizes one's critical attitudes, or what one thinks one should do, rather than what one will or can do. Likewise students of public opinion often reveal collective ideals and rationalizations rather than fundamental social attitudes or tendencies, which are rooted in the organic sets, traditions and customs of the people. The latter are ordinarily more difficult to measure.

L. L. BERNARD

See: SOCIAL PROCESS; TRADITION; LANGUAGE; COMMUNICATION; PUBLIC OPINION; PROPAGANDA; CONDUCT; COLLECTIVE REPRESENTATION; SOCIAL PSYCHOLOGY.

Consult: Faris, Elsworth, "The Concept of Social Attitudes" in *Journal of Applied Sociology*, vol. ix (1924) 404–09; Thomas, W. I., and Znaniecki, Florian, *The Polish Peasant in Europe and America*, 2 vols. (2nd ed. New York 1927) vol. i, p. 22–30; Bernard, L. L., *Introduction to Social Psychology* (New York 1926) ch. xvi; Cooley, C. H., *Social Organization* (New York 1909) chs. iv–v; Dewey, John, *Human Nature and Conduct* (New York 1922); Mead, G. H., "Social Consciousness and the Consciousness of Meaning" in *Psychological Bulletin*, vol.

vii (1910) 397–405; Thurstone, L. L., "Attitudes Can Be Measured" in *American Journal of Sociology*, vol. xxxiii (1928) 529–54; Bernard, L. L., "A Theory of Rural Attitudes" in *American Journal of Sociology*, vol. xxii (1916) 630–49; Mead, G. H., "The Psychology of Primitive Justice" in *American Journal of Sociology*, vol. xxiii (1917) 577–602.

ATTWOOD, THOMAS (1783–1856), English advocate of currency reform and Chartist. Member of a family of Birmingham bankers he first became prominent in 1812 as leader of an agitation against the Orders of Council, which gravely threatened the trade of his native city. In 1819, as the most conspicuous member of the Birmingham currency school, he opposed Peel's policy of resuming specie payments. Holding that the extent of the market is determined by the amount of money in circulation he advocated that currency be freed from restriction. Inconvertible paper money, he urged, should be issued as credit against future production and a system should be adopted for altering the standard of value with the fluctuation of prices. In 1830 Attwood founded the Political Union, which did much to insure the success of the Reform Bill of 1832. From 1832 to 1839 he was a member of Parliament, where he usually voted with Cobbett and was popular as a sincere radical. To correct poor law abuses he proposed the abolition of relief to persons able to work and the creation of a legal right to work; "depots of industry" in every county were to provide employment at two thirds the normal rate of wages. Attwood was the leader of Midlands Chartists and together with Fielden introduced the Chartist National Petition in Parliament. However, he was not trusted by working class leaders, who felt that his participation in the movement was due to his interest in pushing the currency scheme rather than to a belief in genuinely democratic principles.

W. H. DAWSON

Consult: Wakefield, C. M., *Life of Thomas Attwood* (p. p. London 1885); Beer, Max, *A History of British Socialism*, 2 vols. (London 1921) vol. ii, p. 33–42, 77–81.

ATWATER, WILBUR OLIN (1844–1907), pioneer in American agricultural research and in the study of human nutrition. He was an early advocate of public support of experimentation in agriculture. He directed the first state agricultural experiment station (Middletown, Conn.) from its establishment in 1875 until 1877; from 1887 to 1902 he was the first director of the Storrs (Conn.) station. During part of this period (1888–91) he was also the first chief of the Office of Experiment Stations, representing the federal Department of Agriculture in its relations with the state stations. In these capacities he formulated policies and lines of work, selected and inspired later leaders and otherwise contributed materially to the effective development and operation of the experiment station system.

As chief of the nutrition investigations of the federal Department of Agriculture from 1894 to 1905, Atwater organized in about twenty states hundreds of carefully planned cooperative studies of foods and diets. With his associates he developed elaborate apparatus including the Atwater-Rosa-Benedict respiration calorimeters, demonstrated that the law of the conservation of energy holds good in the utilization of food in the human body, and carried on many other important investigations of food and metabolism. The results of his work were embodied in well over one hundred papers, some of which were translated into foreign languages. His writings were of great importance in stimulating both scientific and popular interest in what was then practically a virgin field in the United States.

HOWARD LAWTON KNIGHT

Consult: "Prof. W. O. Atwater" in United States, Department of Agriculture, *Experiment Station Record*, vol. xix (1907) 101–06; "Wilbur Olin Atwater" in *Science*, n.s., vol. xxvi (1907) 523–24.

AUBAINE, RIGHT OF, was the right according to which, under the feudal regime, a lord inherited the property of a foreigner (in old French *aubain*) who had died on his fief without leaving children to succeed him. In early feudal times the right of aubaine existed throughout most of Europe, but its later development was largely restricted to France, where it became a royal right exercised by the treasury It originated in the old rights of "strayed goods" (*droit d'épave*) and of "escheat" (*droit de déshérence*), which gave to the lord goods without an owner and the property of a man who died without known heirs. At first exercised only with regard to unknown wanderers, who were not able to place themselves under the protection of a lord by commendation and who had no personal status, the right was extended by the lords, in search of revenue, to all foreigners. It is found in this form, with varying modifications, in the majority of the feudal customs books of the thirteenth

century. The kings at first exercised it only in their own domain, in their capacity of direct feudal lords; but as their royal power developed at the expense of their vassals they progressively extended the right to the entire kingdom as a means of satisfying their constant need for money. This had been accomplished by the fifteenth century, and the lawyers then developed the theory of the *droit d'aubaine*. According to this theory, since the foreigner under Roman law has neither the capacity to make a valid will nor the right to inherit, all his successions, where there were no naturalized children to succeed him, must revert to the king to the exclusion of any other lord.

Obviously, as the number of foreigners in France increased with the development of international intercourse, such a right could become, on the one hand, an important source of revenue for the treasury and, on the other, a great obstacle in the way of trade with neighboring countries. For this reason the kings soon learned to exercise their right with moderation. Exemptions were accorded to various groups: to the merchants who frequented the fairs of Lyons and Champagne; to the first German printers called to Paris by Louis XI; to the tapestry weavers brought from Flanders by Henry IV, etc. The exercise of the right was renounced in certain localities (Aigues Mortes, Nîmes, Dunkirk, Marseille) and even in certain provinces (Languedoc, 1484) or in favor of certain classes of persons (ambassadors, Scotch and Swiss soldiers enrolled in the French army). The king also authorized foreigners to purchase freedom from this burden by securing "naturalization letters" (*lettres de naturalité*), which gave them the status of Frenchmen for financial purposes; this, it may be noted, was the origin of naturalization. In spite of these exemptions the right exercised a profound influence upon the social and economic condition of France.

The philosophers of the eighteenth century declared the right of aubaine to be contrary to natural law and demanded its abolition. Under pressure of public opinion the government negotiated treaties with other powers for reciprocity in abolition of this right (Spain, 1762; Holy Roman Empire, 1766; Holland, 1773; etc.). A decree of the Constituent Assembly of April 6, 1790, abolished it unconditionally, with the statement that it is "contraire aux principes de fraternité qui doivent lier tous les hommes . . . et que la France libre doit ouvrir son sein à tous les peuples de la terre." The law of July 14, 1819, in abrogating the article of the Code Napoléon which still limited the right of inheritance by foreigners, definitely introduced this new principle into French legislation.

ED. ESMONIN

See: ALIEN; NATURALIZATION; INHERITANCE TAXATION; INHERITANCE.

Consult: Bacquet, Jehan, *Trois premiers traictez des droits du domaine de la Couronne de France avec l'etablissement et jurisdiction de la Chambre du Trésor* (Paris 1580); Gaschon, J. B., *Code diplomatique des aubains* (Paris 1818); Demangeat, Charles, *Histoire de la condition civile des étrangers en France* (Paris 1844); Mathorez, J., *Les étrangers en France sous l'ancien régime*, 2 vols. (Paris 1919–21) vol. i, p. 138–51; Bernheim, A. C., *The History of the Law of Aliens* (New York 1885).

AUBURN SYSTEM. *See* PRISON DISCIPLINE.

AUCLERT, HUBERTINE (1851–1914), French feminist. Madame Auclert's first pamphlet, *Le droit politique des femmes* (Paris 1878), was a protest against the timidity of the first International Feminist Congress, held that year in Paris, which refused to commit itself to suffrage for women. To further this cause she founded a society called at first Droit des Femmes and later Suffrage des Femmes. In an address before the French Socialist Congress in Marseille, 1879, she introduced a motion advocating woman's equality with man in both social and political rights. The congress supported her motion and the principle involved has been retained as a doctrine of the party. In 1880 her refusal to pay taxes on contention that the denial by the state of political rights to women precluded the state's imposing fiscal obligations upon them attracted widespread attention. A decree of the Conseil d'État forced her to make payment. Madame Auclert founded in 1881 *La citoyenne*, a feminist periodical, which was published during the next ten years. Throughout her life she insisted on the importance of agitation for woman suffrage as an essential part of the feminist movement.

SUZANNE GRINBERG

Consult: Grinberg, Suzanne, *Historique du mouvement suffragiste* (Paris 1926) p. 71–79.

AUCOC, JEAN LÉON (1828–1910), French jurist and public servant. He was connected for the greater part of his life with the Council of State and was the only councilor retained on the commission which temporarily replaced the council after the Revolution of 1870. In this commission he was president of the section for reorganizing public education in law, and in the

reestablished council he was in charge of the section on public works. For many years Aucoc taught administrative law at the École des Ponts et Chaussées; he was also a member of the Académie des Sciences Morales et Politiques and president of the Société de Législation Comparée. Of his works the most important is the *Conférences*, representing his mature views on public administration and administrative law. Both as a practical administrator and as a writer Aucoc endeavored to build up a definite system of administrative law, with a jurisdiction distinct from ordinary civil and criminal jurisdiction and affording adequate recourse against any abuse of administrative power. Although there had been marked progress in this direction before his time, Aucoc's influence was considerable.

FREDERICK F. BLACHLY

Important works: *Des sections de commune* (Paris 1858, enlarged 2nd ed. 1864); *Voirie urbaine* (Paris 1862); *Conférences sur l'administration et le droit administratif*, 3 vols. (Paris 1869–76; vols. i–ii 3rd ed., vol. iii 2nd ed., Paris 1882–86); *Le Conseil d'État avant et depuis 1789* (Paris 1876); *De l'usage et de l'abus en matière de législation comparée* (Paris 1892); *Le code d'organisation judiciaire de l'empire de Russie* (Paris 1893); *Les controverses sur la décentralisation administrative* (Paris 1895).

Consult: Delpech, Joseph, in *Revue critique de législation et de jurisprudence*, n. s., vol. xl (1911) 65–69.

AUCTIONS. The auction is one of the oldest forms of merchandise sale. Although simple and effective as a marketing device the auction was long regarded by the "regular" channels of merchandise distribution with a deep seated disfavor. The "vendue masters" were bracketed with itinerant merchants or peddlers by the merchant aristocracy of the eighteenth century and were subjected to restrictions as severe as the merchant legislators dared impose. In the United States during the two decades following the War of 1812, auctions were unpopular because they facilitated the dumping of cheap foreign manufactures, hurt vested merchant interests and involved the use of questionable selling methods. Their opponents fought them through publicity, boycotting and strict state and federal legislation. In the main, however, the various hampering laws have disappeared and auctions now are conducted freely and with only such regulations as are necessary to insure fair competition, to avoid misrepresentation, to achieve satisfactory transfer of the goods when sold and sometimes to limit auctioneers' commissions and fees.

The essential feature of the auction is the open public bidding for specific items. Under a few simple rules mutually agreed upon, items are put up for bidding one at a time by the auctioneer, who receives successively higher offers. Especially when the bidders consist of a non-business group, as in auctions of personal effects, the auctioneer endeavors to keep attention focused on the item for sale and to keep himself alert to recognize the bidders in their proper order. The skilful auctioneer succeeds generally in arousing excitement on the part of the bidders and takes full advantage of crowd psychology to raise bids as high as possible. When all the bids which seem likely to come from the buyers have been made, the auctioneer with a stroke of a gavel declares the bidding stopped and the item sold to the indicated highest bidder.

The actual bidding usually is preceded by a detailed inspection of the goods to be sold; frequently this inspection is aided by a descriptive catalogue or even by sampling and physical examination of the offerings. After the bidding the transaction is closed as promptly as possible by payment for the goods and by their removal from the auctioneer's premises. All of this is done under simple rules plainly laid down and made known to bidders in advance. Legal and regulative safeguards are set up protecting sellers against collusion on the part of buyers to hold prices down and protecting the buyers against unfair efforts on the part of the seller to send the price abnormally high.

Under ordinary circumstances the auctioneer is the agent of the vendor. In most instances he not only is operating under official license but may also be bonded. Bonding insures his even handed efforts to guarantee the free play of all pertinent forces making for a fair price. The auctioneers in the United States have their associations to further their interests and to protect them against misrepresentations as to the ownership of goods and against other forms of imposition to which the craft is subject. Some of the most important auctions are not carried on by individual auctioneers but by large auction companies which perform a variety of services. In the case of perishable fruit auctions, for example, the auction company may even supply the building to which goods are taken and in which samples can be displayed, unless they are sold directly at the pier or railroad freight shed; it arranges brands for inspection and collects and remits proceeds from sales.

The company pays the seller promptly but gives the buyer a few days in which to make his payments. Auction companies generally are owned by men in the trade and are run for profit. They depend for their income chiefly on commissions paid by the sellers and sometimes on "terminal" fees charged to the buyers. To insure a constant supply of goods, an auction company handling goods periodically produced like vegetables or fruit usually has connections or agreements with leading producers and shippers.

Auctions have long been a conspicuous feature of the world's wool trade. Regular auctions for colonial wools began in London in 1835. With the development of wool growing in Australia it was found practicable to entrust the shipping and the insuring of wool in transit to mercantile firms or banking houses which advanced the owner 70 to 80 percent of its probable value. This led to careful and supervised baling and the drawing of samples, with which auction sale was easy. According to the arrangements followed in recent years the wool is shipped to London warehouses where prospective buyers examine samples, after which it is sold at auction by catalogue in the Wool Exchange Building. This practise is prescribed by law which compels the sale at auction of any Australian wool which has been made security for a loan. The London auction has become a popular market place for wools from other countries as well. Other less important wool auctions in England and on the continent follow in the main the methods and sales conditions of London. However, most of the wools produced in England are sold at local auctions, where growers come in direct contact with merchants and manufacturers. At the close of the war wool auctioneers from London came to Boston and other cities in the United States and conducted the sales at which the army surplus of wools and tops was disposed of. Otherwise auctions are not used regularly in the wool trade of this country, mainly because of the inadequate grading of American wools.

Most of the citrus fruit shipments coming into a dozen or more of the larger cities of the United States are sold at auction. In a few large cities bananas and even some deciduous fruits also are sold by this method; in fact the greater part of the banana crop coming into the country is disposed of at dock auctions. Fruit auctions have been conducted continuously in New York for over a century; in Philadelphia and Chicago since 1885; and in Baltimore, Minneapolis and St. Paul for over thirty years. Sales of Malaga grapes, raisins, currants, sweet potatoes, oranges and lemons were regularly reported as early as 1827. In recent years auctions also have been used for selling vegetables. In most of the cases the auction has furnished a rapid method of disposing of perishable products coming from long distances.

Sales of imported and domestic wool textiles were a regular feature of the dry goods business in New York until about the time of the Civil War. Of recent years they have been employed at rare intervals to rid this market of large surplus accumulations. Carpet and rug sales still are conducted in New York, where they often form an important feature of the market, relieving the ordinary channels of threatening surplus stocks. Auctions have been a feature of the fur trade in St. Louis ever since it was a frontier fur trading post. The auction system for moving large quantities of furs and skins has proved so satisfactory from the standpoint of convenience and economy that similar sales now are held in other fur centers including London, New York and Seattle.

Other important auctions at the present time include the tobacco sales in southeastern United States, which dispose of the majority of the American crop, and the sale of livestock in stockyards. Auctions have also been found the quickest way of selling small parcels of real estate in a new "development." The sale at auction of art works, antiques, household effects and similar objects for which there is no regular market is a well established tradition. Finally auctions are used frequently for disposing of surplus army or navy supplies or equipment and similar government property which the law requires to be sold to the highest bidder in an open market; also for public sales on court orders.

PAUL T. CHERINGTON

See: MARKETING; WAREHOUSING; AGRICULTURAL MARKETING; COMMODITY EXCHANGES; WOOL; TOBACCO; FRUIT INDUSTRY; FUR TRADE; REAL ESTATE.

Consult: Kröhne, Marie, *Die Grosshandelsversteigerungen*, Ergänzungsheft xxxii of the *Zeitschrift für die gesamte Staatswissenschaft* (Tübingen 1909); Westerfield, R. B., "Early History of American Auctions—a Chapter in Commercial History" in Connecticut Academy of Arts and Sciences, *Transactions*, vol. xxiii (1920) 159–210; Converse, P. D., *Marketing Methods and Policies* (2nd ed. New York 1924) ch. x; Weld, L. D. H., *The Marketing of Farm Products* (New York 1920) ch. vii; Clark, F. E., *Readings in Marketing* (New York 1925) p. 83–86, 151–60; Clapham, J. H., *The Woolen and Worsted Industries* (London 1907)

p. 90–102; Cherington, Paul T., *The Wool Industry* (Chicago 1916) p. 23–30, 65–70; Miller, A. D., and Hauck, C. W., "American Fruit and Produce Auctions," United States, Department of Agriculture, *Department Bulletin no. 1362* (Washington 1925).

AUDIENCIA. A royal court of appeals in Spain and the Spanish possessions in America. Its historical origins can be traced to the legislation of Alfonso X of Castile (1274), although the name audiencia or *chancillería* was not applied to it until a century later. Its judges were drawn from the clergy and *letrados* (men learned in the law), but its powers, composition, place of abode and effectiveness varied greatly until the accession of the Catholic kings. It not only had appellate jurisdiction but also tried cases of which the king claimed cognizance in the first instance, except those reserved to the Royal Council. From its verdicts there was, generally speaking, no appeal. By the fifteenth century the court was divided into two principal chambers, or *salas*, for civil and criminal suits. The judges of the former were called *oidores*, of the latter, *alcaldes*. An officer of increasing importance was the *procurador fiscal*, or royal prosecuting attorney.

The audiencia was definitely established at Valladolid by Ferdinand and Isabella in 1480, its independence of aristocratic influences assured and its personnel increased with the increase of business. In 1494 a second court was set up for the territory south of the Tagus and ultimately fixed at Granada (1505). These two came to be known specifically as the *Chancillerías*. A subsidiary audiencia was created for Galicia in 1486, others followed in subsequent reigns and by the eighteenth century there were eleven in all, including Majorca and the Canary Islands. Today, under the modern judicial organization of the kingdom, there are fifteen *audiencias territoriales*.

It was natural that similar tribunals should soon appear in the extensive Spanish possessions overseas. As early as 1508 Ferdinand had been requested to appoint a judge of appeals by the colonists of Española, and three years later he established at Santo Domingo the first American audiencia, consisting of three justices. Soon after, this court was instructed to meet regularly with the viceroy, Diego Columbus, and with officials of the royal exchequer to open the king's letters, to draw up replies and, in general, to discuss and decide all matters of policy. The practise was originally intended to curb the extended powers and pretensions of the viceroy. It was the occasion of continuous conflict during his lifetime, but it became firmly established and was the origin of the audiencia's important role in America as an advisory council of government. In 1520 a president was added by law, and a fourth judge, and after Viceroy Diego returned to Spain in 1523 the political government of the Indies was vested temporarily in this court. Finally, by decree of September 14, 1526, it was raised to the status of a *chancillería* of Spain and with its presidency was united the office of governor.

The authority of the audiencia extended also over the mainland until the creation in 1527 of another tribunal for New Spain. This latter, before the coming of the first Mexican viceroy in 1535, served likewise as an executive commission of government. Other audiencias were established: at Panama (1535–42 and after 1563), Lima (1542), Guatemala (1543–63 and after 1570), New Galicia (1548), Santa Fé de Bogotá (1549), La Plata (1559), Quito (1563), Chile (1565–75 and after 1609), Manila (1583), Buenos Aires (1661–71 and after 1778), Caracas (1786), Cuzco (1787) and Cuba (transferred from Santo Domingo, 1797).

The audiencia in America, unlike its prototype in Spain, came to possess both judicial and political functions. It was the highest court of law within its district and also a council of state for the governor or viceroy, who was usually its president. The tribunal in a viceregal capital, like Lima or Mexico, was larger than the rest and of higher rank. Next in importance was that of a captaincy general, a region within the viceroyalty but under an independent governor and captain general. Others in districts more immediately under viceregal control were called subordinate. Appeals lay to the Council in Spain; there was only one temporary exception to the rule that no appeal would be from one tribunal to another. The members of the court, appointed by the crown, increased in number with the colony's growth. Mexico, beginning with four judges and a president, had eight *oidores*, four *alcaldes del crimen* and two *fiscales* in the seventeenth century, as well as many subordinate officials. In minor tribunals the justices were by law usually four, serving in both civil and criminal suits, but the number actually in residence was frequently less.

As a court of law the audiencia exercised the same functions as a *chancillería* of Spain. The protection of the interests of the Indians was peculiarly its care. Because of the distance from

Spain and consequent delays, however, its jurisdiction included many matters normally reserved to the Royal Council, as, for example, local *residencias*, *visitas* and *pesquisas* (terms denoting various types of investigations of the administration of public office) and ecclesiastical cases touching the Patronato Real. It might also upon complaint sit in judgment on acts of the president and governor when the latter was excluded from the session.

As an advisory council the audiencia was associated with the governor or viceroy, who generally acted as its president, in the exercise of all his functions. Through administrative sessions, called *real acuerdos*, legislative and administrative powers were developed analogous to those exercised by the Council of the Indies for the whole empire. If a vacancy occurred in the executive, direction of political affairs was assumed *ad interim* by the bench of judges entire. In political matters the viceroy or governor usually held the whip hand. The judges "may advise, they may remonstrate; but, in the event of a direct collision . . . what he determines must be carried into execution." The audiencia's resort was to the Council of the Indies.

The audiencia was the most important and interesting institution in the government of the Spanish Indies. It was the center, the core, of the administrative system and constituted the principal check upon the exercise of arbitrary power by the executive. As viceroys came and went, the audiencia acquired a long line of corporate tradition. Even though it was Spanish policy to keep the office of *oidor* a monopoly of peninsular Spaniards, the institution took root in the colonies and became closely identified with colonial life. The audiencia districts in most cases foreshadowed the territorial limits of the present Spanish-American republics.

CLARENCE H. HARING

See: COLONIES; COLONIAL ADMINISTRATION; ASIENTO; COURTS, ADMINISTRATIVE.

Consult: Solórzano Pereira, Juan de, *Política indiana*, 2 vols. (last ed. Madrid 1776, with notes by F. Ramiro de Valenzuala); Ruíz Guiñazú, Enrique, *La magistratura indiana* (Buenos Aires 1916); Antequera, J. M., *Historia de la legislación española* (4th ed. Madrid 1895) chs. xix, xxvi, xxviii; Mendizábal, Francisco, "Investigaciones, acerca del origen, historia y organización de la Real Chancillería de Valladolid" in *Revista de archivos, bibliotecas, y museos*, 3rd ser., vol. xxx (1914) 61–72, 243–64, 437–52, and vol. xxxi (1914) 95–112, 459–67; Haring, C. H., "The Genesis of Royal Government in the Spanish Indies" in *Hispanic American Historical Review*, vol. vii (1927) 141–91; Cunningham, C. H., *The Audiencia in the Spanish Colonies as Illustrated by the Audiencia of Manila 1583–1800* (Berkeley 1919).

AUDITING may be defined as the examination or investigation of accounting books and records by one who has had no part in their preparation. The origins of auditing are somewhat obscure. It is known, however, that systems of check and countercheck existed from early times primarily in connection with public accounts. In Italy during the fifteenth century when the growth of trade and commerce resulted in the evolution of a fairly complete system of accounts for mercantile transactions, the duties of the auditor were considerably increased. The audit of business accounts did not become common, however, until the nineteenth century. With the growth in size and complexity of the business unit the increasing number of groups concerned felt a distinct need for trustworthy checks upon the honesty of management. Also corporate charters were granted in most cases only on condition of annual audits by licensed experts.

The purpose of audits is to ascertain the actual financial condition and earnings of an enterprise for its proprietors (partners or stockholders); for its executives (managers, officers or directors); for investors who are considering the purchase of its securities or bankers who are considering the granting of loans; for receivers, trustees and other fiduciaries, and creditors' committees; for owners of patents and other recipients of royalties or profit shares; and for the public and governmental regulatory bodies. It is expected that the employment of independent experts in auditing will lead to the detection of fraud and of errors, particularly those of principle. Indirectly auditing tends to prevent the perpetration of frauds and errors and to keep the work of an office staff sharply up to date.

The questions settled in an audit can easily be divided into a few large classes. The auditor must ascertain that all the assets and liabilities as shown by the books are actual and that the assets are properly valued and the liabilities properly incurred. He must also determine whether all assets and all liabilities, including contingent liabilities, have been properly recorded. To this must be added a check on the surplus, income and capital stock accounts. The verification for the latter includes an examination of the authorization for stock issues and a

comparison of the amount issued with the authorized amount. The thoroughness of this program is varied to suit the circumstances of each case. When internal supervision and scrutiny are of a high order, the auditor contents himself with tests. When little independent supervision has been exercised, many of the details in the records must be verified.

Even as a mere mechanical "checking" of accounts, auditing is necessary as long as those charged with the responsibility for money or other property may be guilty of fraud or carelessness. But auditing does more than this. It brings independent testing to act as a check upon the common human frailty of overstating assets and understating liabilities. Although the supervision necessary for this purpose may be partly exercised by staff or internal auditors, the only satisfactory and efficient audits are made by professional or independent practitioners charged with a high measure of responsibility. Professional auditing has gone even farther; it has gradually developed into a comprehensive survey and analysis of the entire administration of the financial and accounting branches of an enterprise.

Thus auditing is more than a branch of accounting. While the auditor obviously must have a thorough knowledge of accounting, he requires in addition a broad and adequate understanding of business and finance. The accountant compiles and records the facts of business. His work is highly important because the success or failure of a business may rest upon the accuracy and intelligence with which its accounting is done. But after the facts are recorded the auditor must determine whether or not they are accurately and honestly recorded and then interpret these facts and render judgment upon them. His report generally contains important suggestions for the future conduct of the business.

Those who have mastered the fundamentals of accounting and who by experience and education have become qualified to act as independent auditors and who hold themselves out as public practitioners are now generally recognized as members of a profession. In most parts of the United States and in many other countries those who are found to be qualified by state universities, boards of regents or other agencies are given governmental recognition and in some cases are supervised by the government. It is a well established practise to demand a certificate of auditing by independent firms of licensed auditors from any concern required to present financial statements to government agencies, public institutions like stock exchanges or to banking houses and other credit grantors.

R. H. MONTGOMERY

See: ACCOUNTING; ACCOUNTS, PUBLIC; FINANCIAL ADMINISTRATION; MERCANTILE CREDIT; CORPORATION FINANCE; FRAUD.

Consult: Montgomery, R. H., *Auditing Theory and Practice* (4th ed. New York 1927); Spicer, E. E., and Pegler, E. C., *Practical Auditing* (3rd ed. London 1920); Ziegler, Julius, *Bucher- und Bilanzrevision* (Berlin 1929).

AUER, IGNAZ (1846–1907), German Social Democrat. During his travels as journeyman saddler throughout southern Germany and Austria he came in contact with many working men's societies then in process of organization. In the early seventies he became prominent in trade union activities and in the Eisenach group of Social Democrats led by Bebel and Wilhelm Liebknecht. After the Gotha Congress of 1875, which led to the union of this group with the Lassalleans, Auer was appointed party secretary and also coeditor with Johann Most of the *Freie Presse* of Berlin. In 1877 he was elected to the Reichstag and with two short interruptions (1881–84 and 1887–90) retained the mandate to the end of his life. The antisocialist law of 1878 forced him, along with many other radicals, to leave Berlin. The hardships experienced by this group in the following decade are described by Auer in *Nach zehn Jahren* (2 vols., published anonymously in London in 1889, reissued in Nuremberg 1913). While working to the best of his ability to achieve the repeal of the law he also vigorously opposed the revolutionary tactics of the extreme wing represented by Most. On his return to Berlin in 1890 he was again elected party secretary and remained in that position until his death. As a party and Reichstag leader Auer was distinguished for his moderation and for an uncanny sense of political tactics.

EDUARD BERNSTEIN

Consult: Bernstein, E., *Ignaz Auer* (Berlin 1907).

AUGUSTINE, SAINT (Aurelius Augustinus) (354–430), church father. He was born at Tagaste in Numidia and educated in Carthage and Rome. With his conversion at Cassisiacum he turned from Manichaeism and neo-Platonism to Catholicism and became the most redoubtable controversialist, the most authoritative theologian and the most distinguished philosopher

of the rising church. He returned to Africa after his baptism and the death of his mother, Monica. The *Confessiones*, the first great autobiographical confession of the Christian era, throws an enduring light upon this episode as upon his whole spiritual development. The shock to Christendom caused by Alaric's capture of Rome in 410 led him to write his main work, *De civitate Dei*; its twenty-two books were written and published in the period 413–26. Augustine was bishop of Hippo from 396 to his death, which occurred during the siege of Hippo by the Vandals.

Augustine represented the conflicting forces of antiquity (Cicero, Plotinus) and Christianity (Bible, church fathers) and combined in himself the pagan and Christian currents and undercurrents of the first four centuries of Christianity. His work on the *City of God* marks the transition of Christianity from adolescence to maturity. It influenced radically the theology and philosophy, the political doctrines and economic precepts of the Middle Ages.

In contrast to the parallelism between the reality and the idea of the *polis* of antiquity, Augustine's Christian conception of the world is characterized by a dualism between *Civitas Dei* and *Civitas terrena*, the City of God and the mundane city. To the City of God belong the angels, the blessed and the people who live in the true faith according to God's will. Historically the latter manifests itself in a variety of forms, and its most recent embodiment is the church. To the mundane city, on the other hand, belong those who live according to man or who, like the mangy sheep of the church, follow now God, now man. In this way Augustine avoids any direct opposition between church and state. It is not merely membership in the church, but the God-fearing life, that constitutes citizenship in the City of God. Nor is the state necessarily evil: the nearer it approaches true justice, the more closely it approximates the City of God. This also is the purport of Cicero's dictum adapted by Augustine: "Remota itaque justitia quid sunt regna nisi magna latrocinia?" (What are kingdoms without justice but large robber bands?) (*De civitate Dei*, IV, 4). The answer here is implicit in the question: only to the extent to which mundane states practise justice can they be distinguished from robber bands. Justice is that virtue "which renders to each his due." This means above all rendering to God His due—all that man is.

Although Augustine carefully guarded against direct opposition by setting up an ethical hierarchy of fine gradations between the extreme of injustice and perfect justice, the mediaeval struggle between emperor and pope was waged with spiritual weapons borrowed from *Civitas Dei*. Not only did each side employ as a basis for its claims different interpretations of *justitia*, but the interpretations were varied to fit the changing balance of power. In times of weakness (Charles the Bald) the emperor humbly acknowledged in Augustinian phraseology the claims of the church, which in the succession of Peter represented the succession of the Lord and the City of God. In times of strength (Charlemagne) the emperor, again proceeding in the spirit of Augustine, set definite limits to papal power and claimed for himself the protection of the church at home and abroad.

Just as in the doctrine of Augustine there are different degrees of justice, so the doctrine distinguishes different degrees of peace. Augustine's threefold division of *pax* into a peace of God, a peace of the just and a peace of the unjust was also important in the following centuries. This division, however, is subject to two contradictory interpretations. On the one hand it makes it possible to consider eternal peace as the ultimate good, like the *summum bonum* of ancient philosophy and Christian theology. On the other hand it allows one to proceed from the conception of the peace of the unjust, which, like all virtues of the impious, is fundamentally blasphemous and no true peace. This leads to the equivocal concept of *bellum justum*, the just war, which is the war waged by the pious against evil and evildoers, designed to establish the true peace of God.

Another of Augustine's political doctrines worthy of mention is his ideal *imperator felix*, or just ruler. Augustine's characterization of the virtues of the model ruler (fairness, piety, humility) and the vices of his opposite, the tyrant, or in later terminology the Antichrist (impiety, haughtiness, craving for glory), decisively influenced the *Fürstenspiegel* of the Renaissance.

Augustine contributed much less to an elucidation of economic problems; like the ancient philosophers and Christian theologians he refused to recognize that economic activity constituted an autonomous department of life. However, some of his economic precepts have retained considerable influence down to modern times.

Like Clement of Alexandria and others before

him Augustine opposed the notion that the Gospels deprived the rich of eternal bliss, although he strongly emphasized the duty of the rich to support the poor. The same *humanitas* led him to prohibit the charging of interest. Labor was held by Augustine in very high esteem: it was a means toward moral perfection, from which even residents of monasteries were not exempt, although he did not believe one should be so engrossed in work as to have no time for the contemplation of God. To gain a livelihood one might engage in agriculture, industry and even trade, provided the buying and selling were done honorably (*honeste*), that is, if one charged and paid a just price. In *De Trinitate* (XIII, 3) he tells of a man to whom a manuscript was offered for sale; although the seller did not know its value, the buyer paid the just price. Thus Augustine narrowed the sphere of operation of the trade maxim, which he described in the well known phrase, "to buy cheap and to sell dear," and asserted *justitia* as the cardinal virtue even in the field of exchange. This served as a model for mediaeval price regulation and was the starting point of all scholastic investigations of the just price.

EDGAR SALIN

Works: *Opera omnia* in J. P. Migne's *Patrologia latina*, 221 vols. (Paris 1844–80) vols. xxii–xlvii; and in *Corpus scriptorum ecclesiasticorum latinorum*, vol. xii, xxv, xxviii, xxxiii, xxxiv, xxxvi, xl–xliv, li–liii, lvii–lviii, lx, lxiii (Vienna 1887–1923). For English translation of complete works of St. Augustine: *The Works of Aurelius Augustine*, a new translation edited by Marcus Dods, 14 vols. (Edinburgh 1872–76); and vols. i–viii of *A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church*, 14 vols. (New York 1886–90).

Consult: For the more recent treatments of St. Augustine: Montgomery, William, *Saint Augustine* (London 1914); Alfaric, Prosper, *L'évolution intellectuelle de Saint Augustin du Manichéisme au Néoplatonisme* (Paris 1918); Salin, Edgar, *Civitas Dei* (Tübingen 1926); Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–28) vol. i, pt. iii; Bernheim, Ernst, *Mittelalterliche Zeitanschauungen* (Tübingen 1918).

AUGUSTINIS, MATTEO DE (1779–1845), Neapolitan economist. As a man of liberal sentiments he was persecuted by the Bourbon police and was forced to deliver his lectures on economics in a private study. He wrote several memoranda on problems of southern Italy and developed his ideas more systematically in *Della condizione economica del regno di Napoli* (Naples 1833), which is notable for its statistical comparison of the southern and northern provinces and for its stress on climatic conditions unfavorable to southern agriculture. His theoretical works are the *Istituzioni di economia sociale* (Naples 1837), the *Elementi di economia sociale* (Naples 1843) and the most illuminating monograph, *Studi critici sopra il corso di economia politica di Pellegrino Rossi* (Naples 1844).

Augustinis is one of the first writers to adopt the term social economy, to insist on the social character of economic phenomena and to recall attention to consumption, which had been generally neglected by the classical authors. He expounded their doctrine, often with his own comments. Even if he did not clearly understand the relation between utility and cost of production he established the existence of certain reciprocal relations between demand and supply. He also accurately distinguished profits based on superior ability from gains due to the market situation.

AUGUSTO GRAZIANI

Consult: Moreno, Vicenzo, "Elogio di Matteo de Augustinis" in Accademia Pontaniana, *Atti*, vol. iv (1839–51) 14–15, reprinted Naples 1846; Cesare, Carlo de, *La vita, i tempi e le opere di Antonio Scialoja* (Rome 1879) p. 12–13, 265–66.

AUGUSTUS (63 B.C.–14 A.D.), the founder of the Roman Empire. Gaius Octavius, the favorite grandnephew of Julius Caesar, was at Apollonia across the Adriatic when the news of Caesar's assassination on March 15, 44 B.C., reached him. Returning to Italy as a private citizen he became through sheer political genius master of the Roman world by 31 B.C. (Battle of Actium). Although he was the adopted son of Caesar the "tyrant," whose name he took, he had posed during the latter part of this period as the champion of the constitution against the un-Roman despotism represented by Antony and Cleopatra. Maintaining this pose, he reinstated the Republic in 27 B.C. From that time on, particularly after his surrender of the consulship in 23 B.C., he was from the legal point of view simply *princeps civitatis*, Caesar, the Republic's most distinguished citizen. True, in 27 B.C. he was hailed by the senate as *Augustus*, the "heaven sent" savior of society from turmoil. But this appellation connoted no prerogatives; it was only a recognition of his greatness. Nevertheless a real return to self-government was desired by none, save perhaps by a few nobles. The citizen body welcomed and even demanded Augustus' direction of public affairs; and the authorities referred all important decisions to him. He was

loaded with responsibilities despite his real or affected unwillingness to assume them. In particular he was appointed in 27 B.C. governor of those provinces in which important military operations were anticipated. These provincial commands were temporary in theory, but they were never surrendered; and by virtue of them he remained commander-in-chief of the bulk of the army. Again, from 23 B.C. on he was granted annually a tribune's right to veto acts of magistrates and to initiate legislation. In 12 B.C. he was elected Pontifex Maximus, guardian of Roman religion. The advantages of undisturbed public order and of just and efficient government reconciled the Romans to absolutism. The provincials had regarded Augustus as an absolute monarch from the first, and his encouragement of provincial cults of "Rome and Augustus" indicates that he was willing that they should. Consequently, when Augustus died, another *princeps*, in the person of his stepson Tiberius, who had been acting as his assistant in his last years, peacefully took over what was virtually a throne.

DONALD MCFAYDEN

Consult: For the present view of the Augustan Settlement: Boak, A. E. R., *History of Rome to 565 A.D.* (rev. ed. New York 1929) p. 221–43; Frank, Tenney, *History of Rome* (New York 1923) ch. xxii; Dessau, Hermann, *Geschichte der romischen Kaiserzeit*, vol. i– (Berlin 1924–) vol. i, ch. iv. For the older view, which overemphasized the statutory basis of the principate: Mommsen, Theodor, *Romisches Staatsrecht*, 3 vols. (3rd ed. Leipsic 1887–88) vol. ii, pt. ii; Greenidge, A. H. J., *Roman Public Life* (London 1911) ch. x. For the details of Augustus' career: Gardthausen, Viktor, *Augustus und seine Zeit*, 2 vols. (Leipsic 1891–1904); Shuckburgh, E. S., *Augustus* (London 1905); Holmes, T. R. E., *The Architect of the Roman Empire* (Oxford 1928).

AULARD, FRANÇOIS VICTOR ALPHONSE (1849–1928), French historian. As the first occupant of the chair of history of the revolution at the Sorbonne he must be regarded as the pioneer professional historian of the French Revolution. He first applied to this field the scientific methods of the nineteenth century: careful examination of sources, especially parliamentary debates, administrative papers, private correspondence, minutes of political clubs and newspapers; monographic study of detailed problems; synthesis according to interpretative leads derived primarily from political science. With the aid of his pupils he edited several invaluable collections of documents, *Recueil des actes du comité de salut public* (26 vols., Paris 1889–1923), *La société des Jacobins* (6 vols., Paris 1889–97), *Paris pendant la réaction thermidorienne et sous le directoire* (5 vols., Paris 1898–1902), *Paris sous le consulat* (4 vols., Paris 1903–09). Many of his studies in *La révolution française*, which he founded in 1881 and edited until his death, were republished as *Études et leçons sur la révolution française* (9 vols., Paris 1893–1925).

Aulard consciously took as his life work the defense of the great revolution against the school of Taine, represented in particular by Augustin Cochin. To him Taine was a romanticist who handled sources carelessly and who misjudged the revolution after the manner of Burke or Maistre. Aulard sought to establish the essentially practical character of the great revolutionists and to prove their excesses accidental, not idealistic. His interpretation, best brought out in his chief work, *Histoire politique de la révolution française* (Paris 1901, 5th ed. Paris 1905; tr. by Bernard Miall from 3rd French ed., 4 vols., London 1910), centered about the thesis that the Terror can be explained by the unavoidable pressure of circumstances—military defeat, civil war, dearth of food—on administrators determined to preserve the earlier work of the revolution. But he was a republican of the old school, for whom the Rights of Man were a political catechism, and he interpreted the revolution in terms of an old fashioned republican ideology. He therefore quarreled violently with younger historians of the revolution—one of whom, Albert Mathiez, was his most promising pupil—because they had adopted the newer synthetic view which finds in economic and social history the clue to the abstractions of politics. The quarrel, taking a form which perhaps disguised its real depth, turned on the question of whether Danton or Robespierre was the hero of the revolution. Much of Aulard's work was a defense of Danton and an attack on Robespierre. Another source of embitterment lay in Aulard's disapproval of the collectivist and international sympathies of men like Mathiez. Aulard stopped well short of socialism and was attached to the Third Republic, in which he saw embodied the best heritage of the revolution. His political prejudices, as expressed in his frequent contributions to *Le quotidien* and other radical papers, were so obvious as to qualify his repeated claims to a monopoly of scientific detachment.

CRANE BRINTON

Consult: For conflicting views on Aulard, Cochin, A.,

La crise de l'histoire révolutionnaire (Paris 1909); *Révolution française*, vol. lxxxi (1928) 289–380, memorial number published after Aulard's death.

AURELIUS ANTONINUS, MARCUS (121–180 A.D.), stoic philosopher and Roman emperor, 161–80. He was born in Rome, the son of Annius Verus, and was adopted by the Emperor Antoninus Pius, whom he succeeded. As emperor, Marcus was chiefly occupied in maintaining the frontier. A war with the Parthians was won in 165, principally by Avidius Cassius, but the army brought back to Rome a frightful plague which was one of the great catastrophes of Roman history. The emperor's most serious wars took place on the Danube frontier, where the Germans and Sarmatians broke through in 166 and were conquered by Marcus in person in 172–75. Marcus brought about some legal reforms on behalf of slaves and freedmen, but his reign saw no important changes in imperial policy or administration. The burden of war created serious fiscal and economic difficulties.

Marcus' *Meditations* is the noblest expression of the popular ethical philosophy—stoic in tone—which was common after the first century A.D. His thought is similar to Seneca's but is closest to that of Epictetus. The logic, physics, metaphysics and even the ethical theory of systematic stoicism have nearly disappeared from his philosophy; his sole purpose is practical, to learn to spend worthily the brief span of life with its pettiness and monotony. His thought is unified not by logic but by a spirit of religious devotion. It hinges upon two ideas: that of the overmastering providence of divine reason, to which evil itself must minister, and the idea of the duty of rational beings to find happiness in voluntary cooperation with divine purpose. These conceptions imply the renunciation of selfish ends and the active pursuit of the good of others.

The latest edition of the *Meditations* is by H. Schenkl in the Teubner series (Leipsic 1913), with an introduction; the most exact English translation is by C. R. Haines in the Loeb Classical Library (London 1916). His decrees and rescripts are collected by G. F. Haenel, *Corpus legum ab imperatoribus romanis* (Leipsic 1857).

GEORGE H. SABINE

Consult: Jones, H. S., *The Roman Empire, B.C. 29–A.D. 476* (New York 1908) p. 204–28; Rostovtzeff, M. I., *The Social and Economic History of the Roman Empire* (Oxford 1926) chs. iv–viii; Dill, Samuel, *Roman Society from Nero to Marcus Aurelius* (2nd ed. London 1905); Arnold, E. V., *Roman Stoicism* (Cambridge, Eng. 1911); Zeller, Eduard, *Die Philosophie der Griechen*, 3 vols. (5th ed. Leipsic 1920–23) vol. iii, pt. ii, p. 254–61; Überweg, Friedrich, *Grundriss der Geschichte der Philosophie*, 5 vols. (12th ed. Berlin 1924–28) vol. i, p. 500–03.

AUSPITZ, RUDOLF (1837–1906), Austrian economist and politician. He came of a family prominent in industry and finance and was a leading sugar manufacturer. As a member of the Moravian diet from 1871 to 1900 he successfully advocated a number of measures for the development of that province. During the years of his membership in the Austrian lower chamber (1873–90 and 1892–1903) he had a prominent part in formulating some of the most important legislative enactments of that period. Foremost among them was the great financial reform of 1896 which culminated in the introduction of a modern income tax. A man of great public spirit and energy, he remained throughout his life an unflinching advocate of classical economic liberalism, strongly opposing the sugar cartel and various protectionist measures.

His fame as an economic theorist rests upon the *Untersuchungen über die Theorie des Preises* (Leipsic 1889, French translation Paris 1914), which he wrote in collaboration with Richard Lieben. Hardly noticed in Germany at the time, this book, one of the outstanding contributions to mathematical economics and especially to the geometrical treatment of economic problems, achieved prominence through the references to it of F. Y. Edgeworth and Irving Fisher. Even now it offers to the student a wealth of ideas and suggestions as yet but partially utilized. In judging the originality of its contributions—the fundamental concept of the symmetry between cost and utility, the apparatus of curves, as well as a number of details—account must be taken of the fact that the book appeared before Marshall's *Principles*.

JOSEPH A. SCHUMPETER

AUSTIN, JOHN (1790–1859), the chief figure in English analytical jurisprudence. His devotion to serious studies in history, ethics, politics and the classics led him to resign his commission in the army in order to study law. He was not satisfied with his career at the bar as an equity draftsman and retired in 1825. The next year he was appointed professor of jurisprudence at

the newly founded University College of London, and in order to prepare himself more thoroughly for this office he went to Germany to study modern Roman law. He established intellectual contacts with Thibaut, Savigny, Mittermaier, Mackeldey and other leaders of German legal thought, and thus brought to a knowledge of the English common law and to the utilitarian philosophic temper of the school of Bentham and James Mill the logical technique of the German writers of Institutes in the field of ancient and modern Roman law.

He began his lectures in 1828. Although his classes were always small they included an extraordinary proportion of the most distinguished men of the following decades, for example, J. S. Mill, George Cornewall Lewis, Samuel Romilly, William Erle and Whiteside, the chief judge of Ireland. The substance of the first eleven of these lectures was published as *The Province of Jurisprudence Determined* (London 1832). England, however, cared little for theoretic study of the law, and Austin, too easily discouraged, abandoned the whole enterprise.

During the years 1833–34 he served on a commission to draw up a digest of criminal law and procedure, but the work was too limited in scope to give him any satisfaction. He was more effective on a commission to inquire into the grievances of the natives of the island of Malta, where he seems to have helped to liberalize the law and administration. Ill health, poverty and a certain benumbing scrupulousness which renders his writing tedious made the rest of his life pathetically barren, despite high mental gifts and most brilliant conversational powers.

In the *Edinburgh Review* of 1842 he attacked List and the principle of protective tariffs. Five years later in the same review he made an important distinction between centralization and overgovernment. Austin, however, like Macaulay and various other middle class radicals of 1832, distrusted the growing claims of democracy and was frightened by Chartism and the revolutions of 1848. Shortly before his death he published *A Plea for the Constitution* (London 1859) in which he advocated government by property owners, contending that the rest of the people do not know their own interests.

When H. S. Maine revived general interest in the nature of law, Austin's widow republished *The Province of Jurisprudence* together with his more or less expanded notes covering the remainder of the course given in the University College and also of one planned for the Inner Temple. This book, *Lectures on Jurisprudence* (London 1869; 5th ed. London 1911, by R. C. Campbell with the aid of J. S. Mill's notes), constitutes the standard text; it was translated into French by G. Henry (Paris 1894). An abridged or student's edition by Campbell was issued in London in 1875.

Austin's is the first English attempt to deal systematically and critically with the fundamental ideas and forms involved in any developed legal system. The Roman and the English common law only serve as examples. The work of Amos, Clark, Markby, Holland and Salmond in England, of Terry, Gray, Kocourek and Hohfeld in America, and of Roguin and Somlò on the continent continue this effort.

Just as Machiavelli separated the science of politics from that of ethics and Grotius made the theory of law independent of theology, so Austin made jurisprudence a distinct science by sharply distinguishing between the legal and the moral. The older theories of natural law—like the popular thought of this day—confused laws as the inviolable uniformities of actual happenings with laws as violable demands on human conduct; and they also confused the dictates of conscience, honor or private morality with the legal imperatives enforceable by the state. Austin did not himself always clearly distinguish between the logical, the ethical and the existential or historical, as can be seen in his treatment of utility as a command of God (Lecture ii) and in his theory of sovereignty (*q.v.*). He failed indeed to distinguish between political and legal sovereignty, between the existential question: Who in fact *does* originate the law that is actually obeyed; and the logical question: Which of conflicting authorities *should* a court of law regard as supreme in adjudicating diverse claims?

MORRIS R. COHEN

Consult: For the life of Austin, preface by his widow to *Lectures on Jurisprudence*. Expositions of Austin are found in Mill, J. S., *Dissertations and Discussions*, 3 vols. (London 1859–75) vol. iii, no. 7; Maine, Henry S., *Lectures on the Early History of Institutions* (London 1875) no. 12; Roguin, Ernest, *La science juridique pure*, 3 vols. (Paris 1923) vol. i; Somlò, Felix, *Juristische Grundlehre* (Leipsic 1917) §11; Affalter, A., "Zur Normentheorie" in *Archiv fur öffentliches Recht*, vol. xxiii (1908) 361–418. Austin's lectures i, v and vi with essays by Jethro Brown were published as *The Austinian Theory of Law* (London 1906). A criticism of Austin's theory of sovereignty is given by John Dewey in *Political Science Quarterly*, vol. ix (1894) 31–52.

AUSTRALIAN BALLOT. *See* BALLOT.

AUTHORITY is the capacity, innate or acquired, for exercising ascendancy over a group. It is a manifestation of power and implies obedience on the part of those subject to it. One of the principal means of exercising authority is the dispensation of rewards and punishments.

The attitude of men toward authority may be positive or negative, as it may be rational or instinctive. It may be the instinctive, natural submission of the weak or conventional man who yields to any government, autocratic or democratic, national or alien, because he accepts without question the traditional values or the existing configurations of the rapidly shifting social forces. Often this veneration for authority is based upon an innate sense of inferiority, on what the psychoanalyst would call a need of prostration, frequently unconscious. In such a case rebellion against authority, as against any tabu, may be wholesome and indeed essential to civic progress. Opposed to this is the instinctive, negative attitude, the aversion to any kind of authority, represented by the anarchist who says with Stirner: "Away: you deprive me of sunshine."

Besides these two instinctive attitudes, which proceed directly from psychological predispositions, two rational attitudes may be distinguished. First, the negation of authority on the basis of its real or supposed incompatibility with a rational conception of society; second, the acceptance of authority for the very reason that it is essential for the preservation of liberty or at least is in harmony with the practical needs of society. For those who take the second attitude the problem of accepting a specific authority still remains; and if the latter is in their eyes unworthy their very respect for abstract authority leads them to oppose it. A still different attitude is that of the person who without any respect for abstract authority is naturally led to make an exception of the authority which destiny has placed in his own hands. Such a case illustrates the truth in Bakunin's warning to his friends not to assume any authoritative position, asserting that all who acquire power are fatally induced to abuse it.

Although always exercised by individuals authority may inhere in an objective entity like the state. A legitimate monarch derives his authority from a system of arrangements which necessarily and independently of his personality implies his appearance on the scene; an elected president even when raised to power because of his personal merits derives his authority from the state which he is legally called to represent. On the other hand charismatic leaders like Napoleon, Mussolini or Bismarck make themselves masters of the body politic independently of, or even contrary to, the traditional methods of conferring the authority of the state upon individuals. To their innate capacity to rule, political office merely adds conventional form and gives what amounts to a legal seal. Fundamentally their power rests on the worship which their personality inspires and is circumscribed by it. They are, in the phrase of Carlyle, "commanders over men."

In the field of politics the existence of authority always presumes faith in some power, present or future, or in a man who possesses or is believed to possess either power or special gifts of competence, wisdom or reasonableness. It is, however, equally true that faith may come as a result of established authority. Pareto's question as to whether authority is due to faith or faith to authority may be avoided by regarding authority and faith as interactive.

Whether authority is of personal or institutional origin it is created and maintained by public opinion, which in its turn is conditioned by sentiment, affection, reverence or fatalism. Even when authority rests on mere physical coercion it is accepted by those ruled, although the acceptance may be due to a fear of force. For submission to authority may result either from a deliberate recognition of it as a good or from an acquiescence in it as inevitable, to be endured permanently or temporarily with skepticism, indifference or scorn, with fists clenched but in the pockets.

The most ancient and enduring basis of authority is faith in its supernatural or heroic origin. Because the power of the king is derived from God—*Rex Dei gratia*—it is logically inalienable and eternal. The faith upon which authority is based attaches to different attributes depending upon the scale of values current among different groups or in different stages of development. Hence among traditional peoples authority is vested in certain families such as that of the king or a hereditary nobility; among peoples inclined to hero worship it is vested in the man of destiny, the dictator; among religious peoples, in the intermediaries between the divinity and man, the church hierarchy; among warlike peoples, in great warriors; in materialistic civilizations, in the money magnates; among democratic peoples, in the *vox populi*, in the sovereignty of the people who are thus collec-

tively apotheosized. Myths have grown up in support of the authority not only of dynasties or majorities but also of entire nations.

In the field of religion authority is by definition of divine origin. The Ten Commandments, being divinely ordained, are absolutely binding. Even the ethical doctrines which form part of philosophic systems may possess this quality of finality. The Kantian ethics admits only the law of the practical reason, derived from the categorical imperative, which itself exists unconditionally in the consciousness.

In certain instances scientific authority too is accepted as final. A man may possess so high a scientific reputation that his opinion will be taken as decisive in a burning controversy. In general a scientific school consists of two elements: the disinterested admirers of the master's theory and those ambitious to promote their own interests, who press the master's authority so far as to vitiate it ethically. The faith of the unsophisticated in the finality of scientific authority is illustrated by political movements which receive from the consciousness of conformity with a widely acknowledged scientific authority that strength and ardor which are always inspired by the illusion of final truth. Much of the political effectiveness of the labor movement, especially in Germany and Russia, is due to Marxism, which proclaims that capitalism will work its own destruction and thus explains "scientifically" to the proletariat the inevitability of its ultimate victory and appoints it testamentary executor of history.

Authority can neither arise nor be preserved without the establishment and the maintenance of distance between those who command and those who obey. The most typical illustration of this distance is found in the caste system, where closed social groups composed almost always of ethnically homogeneous elements preserve distance by special privileges like rigid endogamy among themselves. Such customs as that of refusing to dine with members of a different social class serve the same purpose: in the German phrase, *Am Tische scheiden sich die Klassen*. When different races are forced to live side by side in the same country the race which feels itself superior maintains *per fas et nefas* a color line, as do the whites in the United States. Hence arises biracialism or the coexistence within the same boundaries of two social pyramids, one of whites and the other of Negroes. Except where attempts are made to attenuate the color line these pyramids remain apart. Unlike caste and social class biracialism divides society by a vertical line, so that individuals may rise as high as their talents will take them but must remain on their side of the line. Whatever may be the wealth and intelligence of the individual Negro he is not allowed to rise to the dignity of equality with the white.

It is equally by preserving distance between themselves and their followers that the leaders of political parties are able to exercise authority. In this case the barrier may be official position or superiority in character or intellect. Leaders of labor parties and peasant movements are characteristically of aristocratic or bourgeois birth; or they may be officials born in the labor class who are distinguished by their intimate knowledge and competent manipulation of the political machine.

All social relations, whether they be those in the army and navy, in the civil service, in the schools or even in the family circle, show how necessary to authority is the maintenance of distance—if only by the assumption of an imposing bearing. In the case of ascetics and prophets their very freedom from indulgence and from personal needs keeps them aloof and renders them authoritative to the masses. When, however, they attempt to play a part in public life, where asceticism alone is inadequate to confer authority, they must be supported by the power to control others. When Savonarola lost his hold on the imagination of Florence his asceticism, devoid of power, was not even able to save his life and he became an object of mockery to Machiavelli.

Another means of preserving authority is the symbol, which forms a link between the masses and the distant personal or impersonal authority which it represents. Conventional meanings develop about such objects as banners, emblems, coats of arms, flags, images, which when displayed stimulate the faithful and thus serve to maintain the hold of the authority upon the minds of the masses.

It is futile to discuss the *raison d'être* of authority. Authority exists and will continue to exist as it has always existed in one form or another, because it has its basis in traits deeply rooted in the human mind and because it answers the practical needs of society. On the other hand the question of what concrete form authority should take must be treated historically and empirically; it cannot be answered definitively by abstract analysis. Perhaps history is nothing but the struggle between different

concepts of authority or between different groups personifying different kinds and degrees of authority. However, it may be said that authority is useful to society only when it possesses an ethical foundation, which alone distinguishes it from mere might. Of all theories that of Hobbes comes nearest to a sociological justification of authority. Hobbes taught that authority arises out of the social necessity of creating a body willing and able to mitigate the struggle of all against all, which presumably characterized all primitive societies. Thus may be justified the discretionary exercise of authority by some modern states, even when in order to alleviate class antagonism they constitute themselves final arbiters in matters of wages and provide, for example, compulsory arbitration in New Zealand or official regulation of labor questions in Fascist Italy.

ROBERTO MICHELS

See: OBEDIENCE, POLITICAL; ABSOLUTISM; STATE; SOVEREIGNTY; DIVINE RIGHT OF KINGS; PUBLIC OPINION; POWER, POLITICAL; PARTIES, POLITICAL; LEADERSHIP; PRIESTHOOD; EXPERT; SCIENCE; LAW; COERCION; PUNISHMENT; SOCIETY.

Consult: Simmel, Georg, *Soziologie* (3rd ed. Munich 1923) ch. iii, tr. by Albion W. Small as "Superiority and Subordination as Subject Matter of Sociology" in *American Journal of Sociology*, vol. ii (1896–97) 167–89, 392–415; Pareto, Vilfredo, *Trattato di sociologia generale*, 2 vols. (2nd ed. Florence 1923) vol. ii, p. 346–65 and vol. iii; Stein, Ludwig, "Autorität, ihre Ursprung, ihre Begründung und ihre Grenzen" in *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im deutschen Reich*, vol. xxvi (1902) 899–928; Mosca, Gaetano, *Elementi di scienza politica* (2nd ed. Turin 1923); Michels, Roberto, *Corso di sociologia politica* (Milan 1927); Bryce, James, *Studies in History and Jurisprudence*, 2 vols. (London 1901) vol. ii, ch. ix; Dickinson, John, "Social Order and Political Authority" in *American Political Science Review*, vol. xxiii (1929) 293–328, 593–632; Tocqueville, Alexis, *De la démocratie en Amérique*, 2 vols. (13th ed. Paris 1850), tr. by Henry Reeve, 2 vols. (New York 1912); Ostrogorsky, M. Y., *La démocratie et l'organisation des partis politiques*, 2 vols. (new ed. Paris 1901), tr. by F. Clarke, 2 vols. (New York 1902); Michels, Roberto, *Zur Soziologie des Parteiwesens in der modernen Demokratie* (Leipsic 1911), tr. by Eden and Cedar Paul as *Political Parties* (New York 1915); Schmitt-Dorotic, Carl, *Diktatur* (Munich 1921); Hubert, René, *Le principe d'autorité dans l'organisation démocratique* (Paris 1926).

AUTOCRACY. The fundamental characteristic of autocracy, as implied in the etymology of the word (*αὐτός*, self, and *κράτος*, strength), is that of inherent governmental power: governmental authority founded in itself, not dependent on any outside source. and embodied in a governmental machinery of such a type as to give the actual governor or ruler the supreme power in the state and to enable him to govern therefore without human control, politically speaking. In other words autocracy consists of the possession by the one who wields the legal sovereignty of the political or ultimate sovereignty in the state. As commonly used, the term indicates also a government in which this supreme power is in the hands of one person, the autocrat. Today this epithet usually carries with it a certain degree of opprobrium, inasmuch as the political conditions involved in autocracy are contrary to those now generally considered desirable in the political world.

The existence of autocracy is not conditioned upon the presence or the absence of a written constitution or of written laws, for although an autocrat may limit himself by promulgating a constitution, he may change or revoke it at will. Supreme though it is, this autocratic power residing in the individual is dependent, as is always the highest political power in the state, on the actual conditions, social, economic, moral, religious and intellectual, obtaining among the given social group. Autocracy finds its most appropriate social basis among a backward people, who through ignorance, superstition, economic dependence or the dead weight of tradition support the autocrat in enforcing obedience to his sovereign will. To their inferiority is opposed his superiority of personality, of intelligence or of economic or religious status, to win for him their unquestioning loyalty and their assistance in securing observance of his sovereign will. Except among very backward and politically undeveloped peoples, autocracy is in the nature of things a rare political phenomenon For however autocratic the legal position of a ruler or governor may appear to be, there will be few cases where in issuing commands he does not have to take into consideration the reaction of his people; and just in so far as he must do this he is not in reality an autocrat, but a sharer with his people in ultimate sovereignty and as governor only a representative. As a matter of fact the term autocracy has been most commonly applied to the older oriental governments and to the czarist regime in Russia.

Among more advanced peoples autocratic tendencies are often to be detected in political systems which are not on the surface autocratic. In some cases forms apparently constitutional and representative are purposely devised to obscure the autocracy beneath. In others, under

certain conditions such as those of great stress and strain and public danger, an individual may succeed in so manipulating both the letter and spirit of a constitution as to render the government functioning under it in reality autocratic, as witness the recent illustrations to be found in the post-war autocracies in many European countries. It is to be assumed that this last is a temporary phase of governmental development, since the expanding political consciousness of the age stands in direct contradiction to autocracy.

ELLEN DEBORAH ELLIS

See: STATE; ABSOLUTISM; AUTHORITY; SOVEREIGNTY; POWER, POLITICAL; MONARCHY; DICTATORSHIP.

Consult: Bluntschli, J. K., *Lehre vom modernen Staat*, 3 vols. (6th ed. Stuttgart 1885–86), vol. i tr. as *The Theory of the State* (Oxford 1892) bk. vi, chs. iv and vii; Bryce, James, *Studies in History and Jurisprudence*, 2 vols. (London 1901) vol. ii, ch. x, and *Modern Democracies*, 2 vols. (New York 1921) vol. ii, chs. lxvii, lxx, lxxi and lxxiv.

AUTOMOBILE ACCIDENTS.

See MOTOR VEHICLE ACCIDENTS.

AUTOMOBILE INDUSTRY.

THE UNITED STATES. *Manufacture and Sale.* Few mechanical contrivances in the history of manufacture have had so great and rapid a development as the automobile, and few have equaled it in social and economic importance. At the opening of the present century the motor vehicle had scarcely left the workshops of inventors; in 1929 more than 31,778,000 motor cars and motor trucks were in use throughout the world. In the United States, which far outranks all other countries in the production and use of automobiles, more than eight billion dollars are expended annually for the goods and services required for motor transportation; and in all countries the employment of motor vehicles is still rapidly expanding. The motor vehicle has risen so quickly to its present place of importance because it has provided a flexible and extraordinarily serviceable means of transportation. Motor transportation requires only common roads and is swift, convenient, easy to introduce and relatively low in capital cost. It is thus favorably contrasted with inland water transportation, which is of limited and uneven distribution, and with railroad transportation, which is restricted by its rigid routes and great capital costs.

Steam driven road vehicles were first produced in the eighteenth century, following the improvements of Watt and others in the stationary steam engine, but their great weight and bulky fuel requirements, among other factors, precluded their extensive use on the common roads of the time. The provision of iron and steel tracks, supported by special roadbeds, minimized these difficulties and brought the railroad into being. Shortly after the middle of the nineteenth century advances in distillation methods, following the discovery of extensive oil fields in the United States, made available large quantities of gasoline and kerosene, fuels of great energy per unit of weight. In 1863 a road vehicle employing ordinary coal gas ignited by an electric spark was produced by Lenoir in France; in 1865 Siegfried Markus in Austria produced a gasoline propelled carriage; in 1876 Otto in Germany invented an engine in which the gas was compressed before ignition, with the result that its propulsive power was vastly increased. Daimler made further improvements in the internal combustion engine; Levassor and others soon added marked improvements in the chassis of the vehicle; and in 1879 George B. Selden, of Rochester, New York, applied for the first American patent on the internal combustion hydrocarbon motor vehicle. The commercial production of the automobile became practicable only toward the close of the century after the efforts of scores of inventors had brought great advances in such diverse fields as metal working, spring suspension, lubricants, chassis design, electrical apparatus, pneumatic tire construction and the industrial arts generally. The subsequent growth in the practical importance of the automobile was made possible by thousands of additional improvements in design and manufacture. Except for recognition of its possible military uses, the automobile was at first regarded as little more than an expensive toy; and such indeed was its role in Europe for some years. Later it offered a new racing sport. Competition in speed, distance, endurance and power, conducted with great newspaper publicity, aroused widespread public interest and stimulated producers to make successive refinements in the vehicle.

Many factors conspired to bring about a very rapid development of the new industry in the United States. The income of the American people, both absolute and per capita, substantially exceeded that of any other nation. The country possessed an abundance of the required natural resources, inventive talent, manufacturing skill, capital goods and business initiative. Its large area and relative sparsity of population

accentuated the importance of all means of transportation. Then too the existence of a huge domestic market fostered the methods of large scale manufacture of standardized commodities which, produced in relatively few centers, obtained nation wide distribution. European countries, in contrast, possessed lower and less widely diffused incomes, smaller national areas kept economically distinct by tariffs, and traditions of local and less standardized manufacture. Of more immediate importance than these considerations, but intimately bound up with them, was the fact that there had grown up in the United States a technique of manufacture of complex mechanical goods that was peculiarly suited to the needs of the nascent automobile industry. This technique, almost unknown in Europe, was marked by three outstanding characteristics: first, diffusion of most of the manufacturing and capital burdens among a host of independent specialized enterprises, each of which contributed but a single one or a few of the component parts; second, rigid standardization of components and therefore interchangeability of parts regardless of the manufacturing source; and third, mass production of components and mass assembly of the final product, aided by great specialization in equipment and processes.

As a result of all these favorable conditions hundreds of substantial parts making enterprises had come into existence in the United States. With the advent of the automobile, the components of which were much akin to those of many other goods, these enterprises with their capital equipment, credit resources, technical skill and traditions of parts manufacture were readily marshaled for the new industry. Thus from the very beginning the American automobile industry was able to utilize the facilities and enjoy the economies of large scale manufacture. Moreover this type of industrial practise minimized the deterrent influence of risk, which commonly impedes the development of new industries. The automobile producers proper, who assumed the major risks, required surprisingly small resources; whilst the parts makers, who indirectly supplied the bulk of the required capital and credit, were not called upon to commit their large resources to the fortunes of automobile production proper. This diffusion of the capital and risk burdens was extended even to the sale of the completed vehicles. Advance deposits of 20 percent or more on all orders were exacted from wholesalers and retailers; cash payment was required upon delivery of the vehicles; and deliveries took place immediately upon production, according to prearranged schedules, regardless of current retail sales.

Little fettered by limitations of capital or by the risks commonly associated with new products, the rapid expansion of American automobile manufacture waited only upon demand. And demand grew with great rapidity. The "horseless carriage" was a conspicuous object on a city street, and its speed, ease and flexible response to the driver's desires aroused great interest everywhere. The producers were quick to adopt large and aggressive merchandising policies. Nation wide and indeed world wide organizations of wholesalers and retailers were established by each important manufacturer. All available means of publicity were utilized on a large scale. As the range of demand broadened, a number of producers, led by the Ford Motor Company in 1908, began to concentrate their efforts upon the potential market for low priced and medium priced passenger cars. The results were striking. By 1912 automobiles retailing at prices under $1000 formed 43.8 percent of the aggregate American output, and by 1915, 72.3 percent. The growth in demand was now accelerated by many influences. Each increase in production was accompanied by a multiplication of sales and service agencies. Government authorities undertook extensive programs of road construction. The Ford car selling at progressively lower prices obtained an enormous following and served to introduce the automobile to potential purchasers of higher priced cars. Both passenger cars and trucks found increasing employment in the ordinary conduct of business. Motives of emulation and display moved many to join the ranks of automobile owners. Each year saw a broadening of the market as the result of price reductions made possible by expanding output. Until the outbreak of the World War, when the facilities of the industry were largely diverted to military products, there was a sharp though varying annual increase in American automobile production.

Soon after the close of the war, when many thought that the market for automobiles had reached the "saturation point," a powerful new impetus to expansion was provided by the widespread adoption of the instalment payment plan in the retail sale of automobiles. Hundreds of thousands of wage earners now found it possible

to purchase motor cars. The marketing value of the new payment practise was reenforced by further substantial reductions in price and by important refinements in product. Sustaining and increasing the demand for new automobiles, also, were the frequent changes of models and the rapidly growing replacement demand. The development of an extensive market for "used" cars interfered but little with the demand for new cars; on the contrary it encouraged and facilitated the purchase of new cars by persons of higher income groups to replace two and three-year old models. Between 1918 and 1922 inclusive the output of American automobile factories exceeded the total of all the previous years; and again between 1922 and 1926 inclusive more motor vehicles were produced than had been manufactured previously in the entire history of the industry. It is estimated that by 1929 the replacement demand alone had reached 3,000,000 motor vehicles per annum in the United States.

The remarkable growth of the American automobile industry was made possible in large measure by the ability of producers to uncover successively lower layers of demand; this ability in turn must be explained in terms of the industry's manufacturing organization, technical processes and financial practises. The tradition of manufacture inherited by the industry was developed by it to an unprecedented degree and early resulted in the intensive specialization and the consequent economies of large scale production. The range of such economies was progressively increased first by cooperation among automobile producers through the agency of trade associations, which effected the pooling of patent rights and the standardization of many materials and parts, and later by the concentration of production into fewer hands. Constructed largely of metal and wood the automobile lent itself readily to the machine technique with its opportunities of progressively greater mechanization and simplification of manufacturing processes. The Ford Motor Company, concentrating its large resources upon a single type of vehicle, was able to introduce many radical innovations in factory practise. These innovations and numerous others originated by part makers and by students of "scientific management" were soon widely adopted. Materials came to enter the factories on their original freight cars, whence reloaded on belts, monorails, roller and factory trains they were carried mechanically from machine to machine to be cut, stamped and punched into finished components. The latter, still carried on moving apparatus, were passed down the assembling lines to be joined together in some major unit or in the completed vehicle. So accurate did this process become that the need for testing the finished vehicle disappeared. In order to reduce freight costs several of the larger producers established numerous branch assembling plants in this country and abroad. Labor tasks were progressively subdivided and redivided until hundreds of operations which previously required skilled mechanics were taken over by untrained workers, each of whom, aided by minutely specialized machine tools, performed but a single routine task. The rate of production was everywhere mechanically controlled and adjusted to experimentally determined standards. The clocklike distribution of materials and components, the studied arrangement of the sequence of operations and the mechanical enforcement of high standards of performance all combined to effect economies in manufacture that have been matched in no other industry.

The industry experienced surprisingly little difficulty in obtaining the large capital resources required for its growth. Capital and risk burdens were diffused among scores of independent parts making, assembling and sales enterprises, each of which possessed its own sources of capital and credit. As in most new industries, the profits of the successful, both among the automobile producers proper and the parts makers, were enormous; and as output expanded, these profits, directly reinvested by the various enterprises, provided the chief sources of the industry's growing capital. A recent study indicates that virtually four fifths of the present invested capital of the American automobile industry has been derived from the direct reinvestment of profits. Latterly, through further improvements in power machinery, tools, processes, organization and transportation, the efficiency of the industry's capital resources has been enormously increased, permitting great gains in output with relatively small additions to plant and equipment.

The American automobile industry is now showing many signs of approaching maturity. Huge as has been the growth of the home market, productive capacity has grown even faster and foreign outlets are now sought aggressively. In order to reduce tariff obstacles as well as to obtain the advantages of lower freight charges, lower labor costs and easier adaptation

of product to local preferences, the leading American producers have established assembling plants and partially integrated manufacturing units in nearly every large country throughout the world. Virtually all the motor vehicle factories of Canada are branches of American enterprises; the Ford Motor Company of England is one of the leading producers in the British Isles, and other subsidiaries of the parent American company are among the largest producers in Germany and France. The General Motors Corporation, in addition to operating numerous assembling plants abroad, has recently acquired a controlling interest in an important English automobile enterprise and in the leading German producing company, and it is reported to be negotiating to the same end with the largest manufacturers of France and Italy.

The decline in the rate of growth of domestic sales, coupled with still expanding productive resources, has also intensified competition at home; in consequence problems of marketing now dwarf those of production in the minds of the manufacturers. In the attempt to capture every passing fancy of purchasers in a market now dominated by the replacement demand, changes in models are being made with growing frequency and the standardized product is giving way in part to a multiplicity of models. In 1909 Henry Ford was able to say, "Any customer can have a car painted any color that he wants so long as it is black," but a belated recognition of the new importance of "style" in motor cars forced him in 1927 to close down his enormous plants for the better part of a year while his staff designed a new and larger series of cars.

The process of concentrating production in relatively few hands that early characterized the development of the American industry has steadily continued. As early as 1912 more than half the American output was produced by seven enterprises; by 1917 ten producers accounted for 75 percent of the total output; by 1923 these ten produced more than 90 percent of the total. Although a number of important mergers contributed to this result and present competitive conditions make further combinations likely, concentration has been achieved largely by the progressive expansion of a dozen preeminently successful enterprises. The demand for the more successful brands of motor vehicles grew cumulatively by force of reputation and example. Greater output brought economies in manufacture and an increase in the number and distribution of sales and service agencies. The manufacturing and marketing advantages of the successful producers were thus cumulatively augmented; and, since the bulk of the industry's capital came from reinvested profits, the successful producers likewise enjoyed an increasing advantage in financial strength. Combinations have played an important role, however, as a means of integrating and, more latterly, of diversifying the operations of the larger manufacturers. Scores of large parts making enterprises have been absorbed by the larger automobile producers. In order to continue the production of special products previously produced by such enterprises, to give fuller employment to their growing capital resources and to obtain the stability that may be expected to result from diversification of products, a number of automobile manufacturers have lately added such products as farm implements (chiefly automotive tractors), electric refrigerators, radios, airplanes and airplane and marine motors.

In recent years, in connection with the liquidation and distribution of the holdings of original owners, the securities of automobile companies have been widely marketed among investors and speculators, and banker representatives have become attached to the boards of directors of nearly all the important enterprises. Thus the professional financier and the organized capital markets—previously but little connected with the industry—have now become factors of some importance.

A few figures make apparent the present magnitude of the automobile industry in the United States. In 1928 motor vehicle manufacture outranked all other American manufacturing industries in wholesale value of product and in value of exports. Directly and indirectly it employed approximately 4,300,000 workers. The proportions of the total output of other industries consumed in automobile manufacture in 1928 were in part as follows: iron and steel, 18 percent; plate glass, 74; rubber, 85; upholstery leather, 60; nickel, 28; aluminum, 27.7; tin, 24.1; copper, 14.6; hardwood, 18.8. Of a total world production of 5,198,167 motor vehicles in 1928 the United States accounted for 4,358,748; England, for 208,400; France, for 210,000; Canada, for 242,382; Germany, for 89,950; Italy, for 55,010; Czechoslovakia, for 13,150; Austria, for 9160; Belgium, for 7000; Switzerland, for 1700; Sweden, for 1362. Direct

exports from the United States, exclusive of vehicles shipped as "parts for assembly," numbered 515,762, of which Europe took 152,094 and South America, 114,672; and the output of American owned factories located in other countries totaled 309,351 vehicles. It thus appears that American producers in 1928 accounted for more than 83 percent of the world's output of motor vehicles and that their exports alone were double the total production of any other country.

LAWRENCE H. SELTZER

Labor Conditions. The automobile industry of the United States, which in 1904 employed some 12,000 workers in 178 plants, now employs about 400,000 wage earners in 1400 plants. This figure includes more than 1200 establishments manufacturing bodies, parts and accessories as well as the scattered assembly plants of the car manufacturers; it does not include workers in repair shops and garage stations.

Because of the minute subdivision of work in automobile factories the labor is highly specialized and unskilled. The force in a typical plant may be divided into the tenders and assemblers who operate the machines and perform tasks as material flows by them on a conveyor line; the technical men who design, plan and cost the work; and the clerks, inspectors and foremen who record what is done, checking and watching the others. It has been estimated that 25 to 40 percent of the workers in a typical plant are tenders, 10 to 15 percent are assemblers, 5 to 10 percent are the traditionally "skilled workers" with a trade, 5 percent are inspectors and testers, 15 percent are helpers and 15 percent are laborers. The tendency is for tenders and assemblers to increase in number while "skilled workers" and common laborers because of improvements in machinery are decreasing. Roughly 85 to 90 percent of the workers at present are unskilled and can learn their tasks in a few days.

For this reason an increasing number of women are being employed especially in parts and accessories plants where lighter products are handled, but also on heavier jobs as in the foundries and metal pressing departments of larger plants. The increasing speed of the machinery as well as the low degree of skill required have led also to the employment of a larger number of young men to replace old men, or those reaching the age of 40 to 45, who are rejected by most companies. In 1920 it was estimated that from 9 to 12 percent of the total force were under 21 years of age.

The average hours of labor are between 50 and 51 a week. A considerable amount of overtime is common, however, chiefly because of the seasonal production of cars. Irregularity and unemployment are caused when models are changed, for plants may then be closed from three weeks to several months. Added insecurity of employment results from the frequent failure to reengage old workers when the plants are reopened. Part time work in the form of a three or four-day week program or on a part time schedule on given days is also common. The Bureau of Labor Statistics stated in 1929 that "the automobile industry shows the greatest instability of employment of any of the industries so far analyzed by the Bureau . . . not only does the industry as a whole make a very bad showing, but irregularity and uncertainty of employment conditions are the rule among practically all the establishments covered." The effects of this situation are reflected in lowering wages and standards of living for the workers.

The productivity of labor has increased faster in this than in any other industry in the United States with the exception of the rubber tire industry. In 1925 automobile labor was producing 2.72 times as much work per man-hour as in the period immediately preceding the war, and about 12 times as much as in 1900. This increased productivity has resulted from a number of causes, one of which is the speeding up of the workers. The speeding is achieved in various ways: by moving the production lines faster; by methods of wage payment designed to induce workers to hurry; by reduction in the number of operatives with an enforced maintenance of total production; by incentive systems used to focus the approval of the group on the fast worker, such as references to his production record in the plant bulletin or employee magazine; by the use of straw bosses and threats of discharge.

Wages have been higher here than in manufacturing as a whole, due largely to the high efficiency and productivity of the industry, but reductions have been increasingly frequent since 1925. Computations from the Census of Manufactures show that the yearly mean money wages of the workers rose from $594 in 1904 to a peak of $1675 in 1925, after which they fell back, according to computations made from figures of the Bureau of Labor Statistics, to $1603 in 1927. If these are the average earnings

for full time jobs they overstate the actual earnings of individual workers attached to the industry. Real wages show a less decided upward trend. They have increased from an index base of 100 in 1899 to 108.6 in 1927. The highest point reached was in 1925 when the index stood at 112.1. The average money wage even in 1923 for full time employment was over $350 below that required to maintain the minimum health and decency budget of the United States Bureau of Labor Statistics priced for the city of Detroit. As in other non-union industries, wages are fixed by the corporations; no collective bargaining is tolerated; consequently wages of automobile workers run well below the union wages paid in the majority of organized trades.

Automobile workers suffer from a high and increasing accident rate and an even higher and more rapidly increasing accident severity rate. In recent years, according to the American Engineering Council, the severity rate has increased even faster than the increase in the rate of production. The crowding of machinery, the mass of moving conveyors, belts and chains, the high speed at which machinery is operated, the efforts made to increase and cheapen production, combined with long hours and overtime work in certain plants, tend to increase the accident rate.

Health hazards are numerous especially in departments finishing bodies. Lead, wood alcohol and benzol are the most poisonous substances affecting the painters who use the spray gun, and anemia, hemorrhages, respiratory diseases, nose and throat infections, bronchitis and asthma are widespread in this group. The new chromium compounds, used in producing non-tarnishing headlights and other parts, have caused poisoning and ulcers of the skin. There are also many injurious fumes, vapors, smokes and dusts in certain departments. Skin eruptions are caused by oils used to cut down metals in some plants.

Methods to forestall labor unrest and prevent union agitation have been developed. Little use has been made of company unions and plans of employee representation. The corporations have, however, introduced a wide variety of mutual aid associations, recreational, social and athletic enterprises, group insurance, employee stock ownership, employee magazines, personnel and similar "welfare" schemes.

The difficulties of organizing the workers into labor unions are those found in most large scale American industries: the sheer size of the working force, its transient character, the existence of a large reserve army of surplus workers due to the irregularity of the industry and the low degree of skill required, to say nothing of the obstacles to be found in the racial and national composition of the labor force. It has been estimated that from 55 to 60 nationalities are represented in the automobile industry; in some plants Negro workers constitute 10 percent of the force. There is the antagonism between the Northerner and the Southerner, between white and Negro labor, to be overcome. There has been no tradition of successful unionism amongst the skilled workers, and the concept is new and alien to most of these national and racial groups, to the women workers and to the elements recruited from the rural sections. The craft unionism of the American Federation of Labor is diffuse and is weak when confronted with the concentrated strength of the few large companies in the industry. These companies have met any attempt at unionization with the deliberate and continuous policy of blacklisting through employers' associations, including the National Metal Trades Association and the Employers' Association of Detroit, through the use of labor spies and the discharge of "disloyal" workers.

The impossibility of organizing the industry through the separate efforts of the seventeen or more craft unions which have had jurisdiction over the workers was recognized by the American Federation of Labor in its 1926 Detroit convention. Conferences of these unions were called for the purpose of planning a general campaign, which has not, however, been initiated. Within the federation the union whose jurisdiction covers a larger proportion of the skilled workers than any other is the International Association of Machinists. During 1919 this union carried on a number of large strikes, the best known of which were those against the Timken-Detroit Axle Company, involving some 4500 workers, and the Willys Overland Company of Toledo, employing some 13,000 workers. Its present membership in the industry is chiefly confined to a very small percentage of skilled mechanics employed in the repair and maintenance shops. An independent industrial union, the United Automobile Aircraft and Vehicle Workers of America, has been the only organization to include all workers regardless of craft. It developed out of the Carriage and Wagon Workers' International Union of North Amer-

ica, once a part of the Knights of Labor and later affiliated with the federation but expelled in 1918 after a jurisdictional dispute. It claimed a membership of 45,000 in 1920, including workers in the large companies, and carried on strikes against many of them, including the Packard Company, the Seaman Body Company and the Fisher Body Company. In 1929 its membership, after the depression period of 1921–23, had dwindled to 1500. This union forms the nucleus of a new industrial union of automobile workers affiliated with the Trade Union Unity League. Recently some progress has been reported by the federation in its Canadian organization campaign.

ROBERT W. DUNN

EUROPEAN COUNTRIES. Despite an earlier start the development of the automobile industry in Europe has lagged far behind that of the United States. Steam driven omnibuses were in commercial operation in England before 1836, and English experimentation during this period gave great promise of further early developments in this field. Very soon, however, the opposition of horse haulage interests and others led to the imposition of prohibitive fees for the passage of mechanically propelled vehicles over turnpikes and bridges. Despite a favorable report of its Select Committee Parliament refused in 1833 to intervene in behalf of the operators of the new vehicles, and in 1861 and 1865 it enacted a series of stringent restrictions, popularly known as the "Red Flag Acts," which among other things stipulated that every mechanically propelled vehicle operating on the common roads be preceded by a man bearing a red flag and limit its speed to four miles an hour. These measures were not repealed until 1896, when the automobile had already reached the stage of commercial manufacture in France. In Germany the brilliant inventions of Otto and Daimler were not commercially utilized for want of capital and business daring. It remained for France, building upon Daimler's patents, which the Paris firm of Panhard & Levassor acquired, to initiate the commercial production of motor vehicles. A series of racing contests, beginning with one from Paris to Bordeaux in 1895, demonstrated the practical possibilities of the automobile and attracted substantial amounts of French capital to the industry. By 1899 the value of French automotive exports exceeded 4,000,000 francs, and in 1902 the French industry produced 16,500 motor vehicles as against an American output in 1903 of 11,000. However, the lack of an extensive domestic market, which resulted from her relatively small per capita income, and the early loss of foreign markets, due to the imposition of tariff barriers by other countries, soon limited the expansion of French automobile manufacture. The United States imposed an ad valorem import duty of 45 percent; and, with an eye to the military uses of the motor vehicle, England and Germany, no less than France, sought to encourage domestic manufacture both by tariffs and subsidies. In Germany the subvention came to amount to more than $2000, payable over a period of four years, for each motor vehicle earmarked for possible military use; in France, to about $1400; and in England, to about $584. These subventions had the unfortunate effect of encouraging the manufacture of relatively large and expensive vehicles ill suited for widespread sale in the domestic markets. Moreover such vehicles could find few purchasers in countries like the United States, Canada and Australia which combined a high per capita income and the need for more transportation facilities with poorly developed common roads. In these countries the cheap and sturdy American vehicles, adapted to rough roads and modest purses, possessed a superiority that enabled them to hurdle all tariff barriers. Profiting greatly by the adoption of American manufacturing practises, particularly after the World War, the automobile industry in England, France, Germany and Italy has shown steady expansion in recent years, but the limited domestic and foreign markets still operate to restrict the scale of manufacture.

SOCIAL INCIDENCE OF THE AUTOMOBILE. The increasing employment of the automobile has far reaching and many sided consequences of social importance. The multiplication of passenger cars made possible a great increase in the mobility of the population, particularly in the United States. Travel in the guise of "touring" has become very extensive. Although undertaken principally for recreation, it has also increased the role of deliberate choice as a determining factor in the distribution of population and has considerably stimulated the migration of families. Reenforced by other recent developments in the arts of communication, this increased mobility is contributing to the disappearance of distinctive local standards of conduct and belief and perhaps to a corresponding

decline in sentiments of local unity. The new accessibility of farm to village, of village to town and of town to city has brought about a vast increase in social intercourse; and, in the sense that urban standards of conduct, housing, education, dress, business and recreation are dominating all others, a general urbanization of American life is taking place.

It cannot be said, however, that the automobile is merely devitalizing rural civilization. Because of the extensive use of automobiles the isolated American farm of the recent past is rapidly giving way to organized country communities built about the consolidated rural school, the country church and the rural social center. To these communities, many of them not previously served by other means of rapid transportation, the motor truck daily brings the products of the city. The farmer's automobile gives him access to more distant marketing centers and increases the radius of profitable direct marketing of his products. By the use of car, truck and tractor the quantity and irksomeness of human labor on farms has been greatly reduced. Largely as a result of these applications of the gasoline motor the number of horses on American farms declined by approximately 40 percent between 1912 and 1926. As this tendency continues, thousands of acres of land now employed to raise hay and oats may be released for other crops.

The motor vehicle has also encouraged substantial enlargement of the physical areas of cities and thus vitally affected housing and working conditions, land values, urban transportation problems, city planning, recreation, retail merchandising and other elements of urban life. Through the use of cheap new or second hand automobiles workers have been enabled to withdraw from congested tenement districts to residences miles distant from their places of employment. New business sections, composed partly of branches of downtown stores and of units of chain store organizations, have sprung up in the new residential quarters. The chain store system of merchandising now spreading rapidly through the United States owes much to the motor vehicle, both because of the multiplication of residential districts and because it is the motor truck that makes possible a close coordination and administration of the units of such chains. Virtually the entire burden of urban freight transportation has been taken over by motor trucks.

In the realm of public transportation of freight and passengers motor trucks and busses are rapidly gaining ground. Possessing the great advantages of low capital costs, low overhead expenses, flexible routes, ease of expansion and contraction and relative economy for small loads, they are becoming increasingly employed both in urban and interurban service to replace or to supplement steam and electric railway service.

Various new problems have been raised by the motor vehicle. The congestion of traffic in the larger cities and the enormous loss of life and limb in automobile accidents are causing great sums to be spent for traffic regulation and for radical readjustment of city plans. More than a billion dollars annually are now being spent in the United States for highway construction. To the importance of the automobile is largely due the prevailing intense international rivalry for the world's oil and rubber resources. As in the case of other significant inventions, the indirect effects of the motor vehicle are so widespread as to affect virtually all human activities.

LAWRENCE H. SELTZER

See: MOTOR VEHICLE TRANSPORTATION; INSTALLMENT SELLING; ROADS; IRON AND STEEL INDUSTRY; MACHINES AND TOOLS; RUBBER; OIL; GLASS INDUSTRY; MOTOR VEHICLE ACCIDENTS; RURAL SOCIETY.

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AUTOMOBILE INSURANCE. There are six common types of automobile insurance: theft, fire, collision, transportation, confiscation and liability. The first three are described by their titles. Their social incidence is to facilitate the sale of automobiles. Their forms are standardized and the charges for carrying them are recognized by sellers and by most buyers of automobiles as items to be included among operating costs. Transportation and confiscation insurance are less well known. The former covers losses incurred while the vehicle is being transported under power other than its own as in boats, trains, elevators and trucks. The latter type of insurance protects the unpaid vendor against loss of the balance of the purchase price due to confiscation by the municipal, state or federal governments for violation of their respective laws. This phase of automobile finance has followed the enactment of national prohibition. All these types of automobile insurance are relatively simple and differ but little from similar kinds of general insurance.

Automobile liability insurance, however, calls for more extended discussion. General liability insurance originated in the latter part of the last century in connection with employers' liability, and with the advent of the automobile was adapted to the new purpose. The weight of the motor car, the speed at which it was propelled and the increasing number of motor cars on the highways all created new risks of injury to person and to property. Owners and operators of automobiles were faced with the prospect of jury verdicts which at best would be heavy burdens to bear and frequently would be impossible to pay. Self-interest compelled the prudent owner or operator to shift the risk to an insurance company and to list the premium cost among the operating expenses.

Automobile liability insurance is of two types. The first, covered by an indemnity policy, protects a particular person against loss incurred by reason of injuries to the person or property of a third person as a consequence of the operation of a particular car. The obligation of the insurance company to pay arises only with the payment of damages by the insured. The second type insures against liability rather than actual loss. Under this type the obligation of the insurance company becomes fixed as soon as the liability attaches to the insured person.

While voluntary liability insurance compensates the victims of injuries caused by insured persons, it offers no remedy in cases where owners or operators are not insured and otherwise not financially responsible. Cases of this type represent a majority of the whole. The social incidence of such unprotected risks has been increasing with the growing use of the automobile. The first step to meet the situation was the enactment of statutes in most of the states, or the passing of municipal ordinances, requiring an indemnity bond or liability policy covering motor cars for hire. In addition many states by statute allowed a remedy by the injured party directly against the insurance company, in case of both the private and the public carrier. A further requirement was that the insolvency of the insured should not relieve the insurer. These regulations obviously provided only a partial remedy because the private owner or operator was not compelled to carry any liability insurance. It was estimated in 1925 that not more than 25 percent of all owners or operators carried such insurance. Further, if the car was being driven by someone other than the insured owner, the latter was not liable unless the negligent act was committed by one acting within the business of the owner. The sole remedy of the person injured by an employee on a frolic of his own was against the employee, who was generally impecunious. This doctrine was extended in some states to the family car and resulted in exempting the head of the household from liability for the negligence of a child pursuing his own pleasure. While this exemption in turn led to the enactment in some states of laws making an owner liable when the car was being legally used or operated with his permission, such laws were quite generally interpreted by courts as merely changing the family car doctrine and not affecting the liability for an employee.

As a result of the inadequate protection provided, there was much agitation to secure the adoption of compulsory liability insurance laws. Many bills were introduced in various state legislatures, but only Massachusetts has enacted such a law (1925). Liability policies or bonds of at least $5000 are required in that state to provide for possible injury to, or death of, any

one person, and subject to such limits as respects injury to, or death of, one person, similar policies or bonds of at least $10,000 are required to provide for the possibility of any one accident resulting in injury to, or death of, more than one person. These policies or bonds must be secured from authorized companies. In lieu of such bond or policy one may deposit with the Department of Public Works $5000 in cash or approved securities. Such policy, bond or deposit is a prerequisite to registration. The security which the owner provides is made liable for claims against the owner or against any person responsible for the operation of the car with the consent of the owner. In this way some security is afforded those injured by members of a family or employees on frolics of their own—provided the owner consented to the use of the car. No accurate judgment can be made of the effect of the plan in its present stage on accident prevention. The act has been declared constitutional by the Supreme Court of Massachusetts and a similar ruling was obtained from the Supreme Court of New Hampshire on a similar bill.

Two states, Connecticut and New Hampshire, followed Massachusetts part way. In 1927 they enacted that after a person or property had suffered injury from a motor vehicle, the person responsible for the loss must furnish satisfactory proof of financial responsibility to pay the damage claim. In Connecticut the proof must show an ability to pay at least $10,000 for bodily injuries and at least $1000 for property damage. In New Hampshire the security necessary is not over $5000 for bodily injuries and not over $1000 for property damage. Both states accept liability policies or bonds as adequate security; Connecticut also permits the deposit of money or collateral. If the security is not furnished within a specified time, the certificate of registration is suspended. Although these statutes are criticized on the ground that the remedy provided comes too late, the possibility of loss of the certificate of registration is felt to be sufficient compulsion to secure financial responsibility.

Forceful arguments have been brought forward to the effect that these types of legislation do not adequately meet the needs of the situation. Thus it has been pointed out that liability under the policy or bond would not be imposed unless the insured were legally liable. Legal liability, it has been shown, must be established by the negligence suit—the outcome of which is conditioned by the degree of the driver's negligence, the absence of contributory negligence on the part of the person injured and the legal doctrine of proximate cause. The difficulty of proving the existence of these conditions and the legal refinements of proximate cause have been shown sometimes to present insuperable obstacles and quite commonly to make the jury's verdict turn on purely collateral matters. The additional drawbacks created by the slowness and cumbersomeness of the personal injury suit have been brought up, as has the point that the congested condition of court calendars and the attendant delays of procedure frequently result in the meting out of wholly inadequate compensation; while the inadequacy of the remedy is further accentuated by the large deductions from the verdicts for lawyers' fees. Moreover under the negligence suit no compensation can be awarded for the unavoidable accident. Accordingly it has been urged that fault as a basis of liability is an inadequate conception; that since the losses suffered are social, relief should be of the same nature. Those who operate cars or permit cars to be operated, it was argued, should be compelled to include such losses among operating expenses.

The relief suggested was a scheme comparable to workmen's compensation. Under this plan each driver of a motor car would carry insurance with a private company or in a state fund. Whenever a person was injured as a result of the operation of an automobile, he would receive compensation corresponding to the seriousness of the injury, regardless of who was responsible for the accident. Payment of compensation would be supervised by a state commission. The necessity of a hazardous jury trial for the collection of civil damages would be abolished. This plan would not, however, protect a driver from having a criminal suit brought against him. The enormous costs of litigation, the delays and congestion of court calendars connected with it would be obviated. The social gain resulting from the distribution of losses among all owners or operators would be considerable; such distribution would be more equitable, sudden financial strains in the family income would be lessened and the burden on charity would be reduced. Details of this plan remain to be worked out satisfactorily. The main problems pertain to the questions of administration and of constitutionality. The former is one which, it is thought, can be solved by reference to the experience under

workmen's compensation. The latter problem is more difficult, but most of the legal opinion is to the effect that there is no constitutional objection so long as the law is optional, giving the claimant either a jury trial or a claim under the statute. The constitutionality of the plan would be less certain should the right to jury trial be denied. No state has as yet adopted a compensation system for automobile accidents, although a number of bills have recently been introduced in several state legislatures. Opponents of such proposals object to them mainly on the grounds that the administrative difficulties would make the plan impracticable, particularly when accidents occur outside of the compensating state; that irresponsibility and accidents would be increased; and that the state would be performing an improper function to the injury of private insurance companies.

In other countries the situation with respect to liability insurance of compensation for automobile accidents is quite different. The ownership and use of motor vehicles is not so widespread and the personal injury trial is not attended with so many difficulties as in the United States. Denmark and Switzerland have adopted compulsory automobile insurance acts, the former in 1918 and the latter by the federal government in 1926.

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See: COMPENSATION AND LIABILITY INSURANCE; CASUALTY INSURANCE; FIRE INSURANCE; INSURANCE; MOTOR VEHICLE ACCIDENTS; NEGLIGENCE; LIABILITY; BONDING; WORKMEN'S COMPENSATION.

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AUTONOMY in its original meaning is a very general concept signifying the legal self-sufficiency of a social body and its actual independence. By a generally accepted narrowing of the term, however, autonomy implies group relationship not with a coordinate social body but rather with a more inclusive power to which it is subordinate or which demands its subordination. Since the demand for autonomy arises from the strained relations between subordinate and dominant groups, it is possible to find the specific conditions of tension in any epoch reflected in the prevailing demands for autonomy. In our own age the claims to autonomy are asserted by religious, ethnic, cultural and economic groups as against the omnipotence of the state, bound up as that is with the excessive emphasis given to the idea of sovereignty during the last centuries. As a result movements for autonomy bear a political stamp even where the normal activity of the group seeking autonomy is decidedly non-political.

This analysis affords a criterion for distinguishing between what may be called genuine and spurious autonomy, the premise of genuine autonomy being understood to be an essential heterogeneity of the two groups concerned. Since secular power and religion lie on different planes, genuine autonomy of religious associations is possible without the abnegation of the state. The more the two spheres of life resemble each other, the nearer does the autonomous character of the relationship come to disappearing, as for example in a federation of states where the autonomy of the individual state oscillates toward sovereignty.

Autonomy on a territorial basis would from this point of view easily conflict with the state, but the two are not irreconcilable. Territorial autonomy is sometimes frankly demanded of the state. This applies especially to imperial states of large territorial compass and to multinational commonwealths. If a state fails to induce interest in the continued maintenance of the state union on the part of frontier, outlying or racially alien regions, it incurs the danger of their being annexed or of their gaining independence. As a remedy it may grant to such regions a certain measure of self-government within the larger political framework. The British Empire, disposed toward such a course because of its lack of unitary character, pursues this policy on a large scale and grants its dominions and colonies a rather extensive quasi-state autonomy. Indeed Australia, Canada, South Africa and perhaps New Zealand have in so large a measure attained a quasi-state character that it is difficult in their case to speak of mere

autonomy in the strict sense. Before the World War the German Empire followed a similar policy in the imperial territory of Alsace-Lorraine, which had by 1911 attained an almost complete federal autonomy. Since the empire of 1871 had originated in a free union of sovereign states, Alsace-Lorraine before the war, on that theory, was already approaching a certain measure of sovereignty beyond the existing comprehensive autonomy. If the inhabitants of Alsace-Lorraine demand autonomy in France today, more serious, perhaps even insuperable, difficulties in its execution arise because the unitary and centralized organization of France would have to create an exceptional status in this case, whereas in the German Empire a far reaching quasi-state autonomy is the rule, as it is in the United States and in Switzerland. The purpose of statecraft in the instances of territorial autonomy which have been cited is to arrest and divert centrifugal tendencies by conserving or creating semi-independent regions within the state. And regardless of the question of threatened frontier areas a similar psychological effect can be attained without regional decentralization through the strengthening of local autonomy. If public life in local communities and rural districts gives play to the political energies of the population and permits the development of a regional individuality, forces are arrested and diverted which might otherwise pursue more far reaching, separatistic aims. Partly because of strongly developed local autonomy, conditions of national strain are not readily noticeable in Anglo-Saxon countries. On the other hand Romanic centralization in France and Italy and its imitation by the states of east central Europe generate, through the annihilation of local autonomy, a destructive force which may endanger the state.

This psychological basis of autonomy will bring out the significance of the role that it plays in the program of the Soviet Union for the territorial expansion of the state's power. Here autonomous frontier regions (e.g. Carelia on the Finnish border, White Russia on the border of Polish White Russia, the Moldavian Republic on the border of Bessarabia) are created with the avowed expansionist purpose of exerting an attractive force on neighboring territories. A border population satisfied by autonomy is to be exhibited to its kinsfolk on the other side of the border to increase the dissatisfaction of the latter and to dispose them socially and psychologically to annexation.

Such territorial autonomy for outlying regions may be incorporated organically in the prevailing structure of the state or it may be an exceptional arrangement. The latter may often occur because of the unique ethnical position of such regions, as in the autonomy of the Swedish Aaland Islands within the state of Finland or in the case of the German minded Memel region whose autonomy within Lithuania was demanded and carried out by the conference of ambassadors after its occupation by Lithuania (1923). A similar arrangement for Carpathian Ruthenia within Czechoslovakia was demanded by the Paris Peace Conference and formally carried out. There is of course always a danger that such autonomy may be tantamount to a preliminary step toward independence or toward annexation to another state. Examples of this are the Balkan states—Rumania, Greece, Bulgaria and Servia—which before their liberation from Turkey demanded autonomy within the Ottoman Empire and gradually increased it to complete independence. Nor are instances lacking in which a federal state becomes so disjointed by the autonomy of its constituent parts that it finally disintegrates. There is less likelihood of this in states that have originated in the voluntary union of independent states or territories, as is the case in Germany today, Switzerland and the United States. Here the sovereignty of the individual states is gradually absorbed by the sovereignty of the central power so that by the delimitation of functional spheres there is a clear division of authority between the central and the local government and the latter is converted into a stable autonomy. On the other hand, where the political unification of a territory with a heterogeneous population was early effected through force, conquest, dynastic politics or colonization, and where the ethnic and cultural differentiation has since increased, subsequent autonomy for the constituent parts will easily become a menace to the permanence of the whole. In the course of the nineteenth and twentieth centuries the Ottoman, the czarist and the Hapsburg empires have in this way been successively dissolved. And in Jugoslavia, Czechoslovakia, Soviet Russia and to a certain extent in Spain, Belgium and France the movements for autonomy are even today to be understood as indications of fundamental crisis in synthetic states.

Thus far we have been concerned with territorially conditioned autonomy, but the essential characteristics of autonomy are more clearly

revealed when they are embodied not in a territorial but in a social entity. Problems of this sort of autonomy arise from the close mingling of various confessional, denominational and ethnic groups. In such instances, instead of "territorial autonomy" we speak of "personal autonomy," better designated as "group autonomy."

A group that claims autonomy does not depend, as does a club, merely on the solidarity of its members; it must have at least the beginnings of a corporate organization that represents something more than the sum of its parts. It is organized for survival, and develops a tradition which forms an essential constituent of its existence. It is held together in public responsibility by devotion to an ideology, by discipline and by corporate self-consciousness. Corporate group autonomy of this sort was developed by class and professional associations of the most varied kinds in the Middle Ages and in early modern times. Guilds, corporations, craft brotherhoods, universities, military officers' corps, as in the Prussian army, are illustrative of the kind of autonomy which largely controlled social life in the Middle Ages and which has retained its original character in England more than in any other modern state. In France the autonomy of the estates was substantially destroyed by the great revolution. In Germany it fell into decay under the influence of English liberalism in the nineteenth century, although the autonomy of the high nobility, for example, survived down to the revolution of 1918. The latter instance shows that autonomous groups may consist not of individuals but of families, so that the legal privileges resulting from autonomy are hereditary.

A religious corporation may be autonomous, but the extent to which it may be so considered depends on the fundamental questions involved in the relation of church and state. Or a certain kind of autonomy may be conceivable within the church as well, as in the relations of clerical orders or monasteries with the central church authority or possibly the position of the parish within the Protestant state church. The problem of autonomy has become very important for religious minorities and sects ever since religious liberty became an accomplished fact during the Enlightenment. It is well known that the regulations for the protection of religious minorities like those imposed upon Turkey by the Berlin Congress were the direct forerunners of contemporary protection for national minorities.

In the latter field the doctrine of autonomy finds its most modern application. The idea of national autonomy on a group basis, that is, on the basis of the so-called principle of personality, was first discussed in pre-war Austrian literature (Herrnritt, Renner, Bauer), from which it passed into the comparatively unknown literature of the Russian Jews. Considerations of this sort became thereby familiar to Russian Bolshevism and likewise to the Peace Conference through the Jewish delegation in Paris. After the war, however, practical attempts at national cultural autonomy on a group basis were influenced only indirectly by these theoretical developments of the last pre-war decades. The most important attempt of this kind was undertaken in Esthonia on the initiative of the inhabitants of the German Baltic provinces under the leadership of Deputy Hasselblatt, with the result that the cultural autonomy first of the German, then of the Jewish, minority was acknowledged and administratively protected by the state. While in the religious field the state finds in the church a fully formed organism to serve as the bearer of ecclesiastical autonomy, such a medium in the national cultural sphere must first be created. The foundation is provided by that voluntary affirmation of ethnic individuality, uninfluenced by the state, which in the linguistic usage of central and eastern Europe is designated as "nationality." It may be mentioned that the divergent interpretation of "nationality" among western peoples as the qualities pertaining to the state has been a cause of misunderstanding in the sessions of the League of Nations. Although nationality has objective psychological and cultural foundations, the principle of national self-determination in political practise has of course chiefly a subjective emphasis: its premise is that the government shall be forbidden by positive law to assign its subjects to this or that nationality by reason of such external criteria as name, birth or residence. But this principle is but the point of departure for the establishment of a positive national system of registration which is one of the most important technical means for realizing cultural autonomy. The vital content of national cultural autonomy is the responsible self-maintenance of public education and welfare consistent with the preservation of the sovereignty of the state and under state supervision. These projects can be financed from state funds reenforced by self-taxation of the minority under state orders and protection. At the Geneva nationality congresses

(since 1925) a culture autonomy of this kind has become a common feature of the program of European minorities.

From the formal, juristic standpoint the concept of autonomy has recently undergone a narrowing process. Explanation for this is to be found in the state monopoly of legislative and administrative functions, especially in the Romanic or Romanically influenced countries of modern times, the result being that the state matches its own original power against the derivative power of autonomous bodies. Modern jurisprudence understands by autonomy the "competence of an association that is not a state to produce objectively established law" (Schücking). This law is acknowledged as such by the state in contrast, let us say, to the regulations of a club. Whether in such autonomous, public law associations we are dealing with a law making power that is delegated by the state or only acknowledged by it is contested in theory. Pluralistic legal thought tends to attribute to the state a declaratory and not a constituent power as against the domain of autonomous law, so that the state is considered as recognizing autonomy but not as granting it. It is important that the right to have the statutes confirmed by the state does not involve the corresponding right on the part of the state to nullify the statutes of the autonomous associations by its own administrative acts. Modern constitutions, taking as their point of departure the theory of the fundamental rights of a free personality, look forward under certain circumstances to a continuous renunciation by the state of regulative power in important provinces of law. In this way in the "state-exempt sphere" (Renner) the soil may be prepared for a true autonomy which, by means of a dualistic or pluralistic conception of law and society, can regain its character of independent law making

The further development of autonomy is conditioned by the dominant social and intellectual forces of the day. In the two chief domains of institutional autonomy—the ecclesiastical and the ethnic cultural—a restless movement may be observed which in its search for new forms of social organization builds on the decaying but not yet extinct forms of older autonomies. There is a significant reversion to these older concepts in the designation of a culturally autonomous group in a multinational state as "national status" (Boehm, Hasselblatt). But more than with any other factor, the fate of autonomy is linked with that of the modern national state and the concept of state sovereignty. The omnipotence of the modern state—the result of the development of Romanic law from the fourteenth to the nineteenth century—is approaching a crisis. Especially are the young states of the new Europe unable to cope with the multiplicity of tasks and functions which the modern state has accumulated.

The immediately visible lines of development point on the one hand to a restriction of the overstrained traditional theory of state sovereignty by intervention from above through the activities of the League of Nations. On the other hand a reaction in favor of further state sovereignty may unmistakably be seen in the outcropping of dictatorships and in the concern of theory with the endangered claims of state sovereignty. The decisive question is whether there is a fundamental incompatibility between the sovereignty of the state and the existence of autonomous associations. Seen from the standpoint of the modern omnipotent state with its monistic monopoly of law, autonomy is essentially falsified. Genuine autonomy premises a conception of the nature of law according to which it does not flow from the power of the state alone but fluctuates between the two poles of state and society. The "state-exempt sphere" is not arbitrarily conceded by the state and freed from its regulatory claims, nor may it be arbitrarily withdrawn. It is controlled by norms and values which do not necessarily belong within the sphere of the state's power but demand its respect on their own ground. Religion, national culture, profession and household are spheres of life which may be exposed neither to anarchy and libertinism nor to the tyranny of state compulsion. They seek to evolve their own forms of law in the framework of society and under a state sovereignty which is necessarily self-restricted

It cannot be denied that the contemporary demands for autonomy involve a possible danger to the state. The immediate cause of the formation of centralized omnipotent states since the fourteenth century was the growing social anarchy arising from the sheer numbers of socially rooted intermediate powers (*puissances intermédiaires* in Montesquieu's phrase). A state which, to conduct its wars, had to rely on the good will of feudal associations, which in its administration was dependent on the church hierarchy outside the state, which had to seek appropriations for both in the form of taxes from the rising estates, was extraordinarily

limited in its political power. The swing toward the absolute state in the struggle with outworn autonomous agencies was therefore historically consistent. The modern state after the French pattern assumed the socio-autonomic functions itself, destroyed institutional autonomy and evolved a group of social organizations dependent on the state (the army, the bureaucracy, political economy). If at present the arrogation of powers to the state is becoming notorious and autonomous associations press their demands for a measure of restitution, the danger points must nevertheless not be overlooked. The transcending of state boundaries by such social forces as the Catholic church, the oecumenical movement in the other churches, the con-national aspirations of minorities, the formation of world trusts and cartels and the workers' internationals constitutes under the guise of internationalism a set of phenomena similar to those which in the Middle Ages brought on the emergence of the absolutism of the state as a counteracting force.

Nor is the situation which an autonomously constituted society would have to face the same as it was in the Middle Ages. We have in the meantime passed through an individualistic age; the continuity of social development has been repeatedly interrupted; populations have increased many times over; the problem of mass organization is subject to new laws; mechanical instead of organic methods of social construction are often required. It would be a sociological romanticism that would fail to recognize this change in the world situation. The same technical problems which the democratic state faces —a system of representation, majority decision, bureaucracy, formalism—emerge in an autonomous society when it strives to fashion a unified organic will to meet modern mass conditions.

MAX HILDEBERT BOEHM

See: STATE; SOVEREIGNTY; FEDERALISM; LOCAL GOVERNMENT; DECENTRALIZATION; REGIONALISM; ADMINISTRATIVE AREAS; HOME RULE; ORGANIZATION, ADMINISTRATIVE; MINORITIES, NATIONAL; NATIONALITY; SELF-DETERMINATION, NATIONAL; NATIONALISM; IMPERIALISM; INTERNATIONALISM; FEUDALISM; GUILDS; COMMUNE, MEDIAEVAL; CHURCH; ASSOCIATION; GUILD SOCIALISM; PLURALISM. See also "The Growth of Autonomy," vol. i, *Introduction*, pt. i, ch. v.

Consult: For general aspects: Herrnritt, Rudolph Hermann von, *Nationalität und Recht* (Vienna 1899); Bernatzik, Edmund, *Über nationale Matriken* (Vienna 1910); Renner, Karl, *Das Selbstbestimmungsrecht der Nationen in besonderer Anwendung auf Österreich*, vol. i (Vienna 1918); Wolzendorff, Kurt, *Grundgedanken des Rechts der nationalen Minderheiten . . . mit einem Exkurs über Nationalkataster* (Berlin 1921); Fouques-Duparc, Jacques, *La protection des minorités de race, de langue, et de religion* (Paris 1922); Bauer, Otto, *Die Nationalitätenfrage und die Socialdemokratie*, Marx-Studien, vol. ii (2nd ed. Vienna 1924); Boehm, Max Hildebert, "Die Nationalitätenfrage" in *Nation und Nationalität*, supplementary vol. i to *Jahrbuch für Soziologie* (Karlsruhe 1927) p. 116–51. For autonomy and the church: Dibelius, Otto, *Das Jahrhundert der Kirche; Geschichte, Betrachtung, Umschau und Ziele* (5th ed. Berlin 1928). For autonomy in the British Commonwealth: Keith, A. B., *Dominion Home Rule in Practice* (London 1921). For state autonomy in the American federal system: Willoughby, W. W., *The American Constitutional System* (New York 1904) chs. i–x; McBain, H. L., *The Living Constitution* (New York 1927) ch. ii. For the international aspects of recent movements for autonomy: Buell, R. L., *International Relations* (rev. ed. New York 1929) ch. ix.

AVERAGE. A statistical average is a single value which can be used to represent many divergent items for some specific purpose. Statistical analysis deals with measurable characteristics common to many cases such as weights of infants, prices of a certain commodity, wages of a labor group. Since the quantitative value of a characteristic varies for different objects which may possess it, the investigator studying the distribution of a characteristic within a certain group is generally faced with a multiplicity of numerical data which are not as such capable of being analyzed. He must reduce the great number of items to a few significant figures which may be treated as representative of the entire group. The average is one of the most important and widely used devices in this process.

The average is familiar not merely to the statistical technician; it is commonly used in everyday affairs, although not always with an articulate understanding of its nature and its limitations. Very frequently an average is regarded simply as an arithmetical result obtained by combining all the numerical items and dividing by their number. Thus average wage is computed from the total payroll and the number of workers, without knowledge of the individual wages or of their distribution. The average best understood by the layman is the value which occurs most frequently and around which other items cluster with greatest density. In this manner we describe the most common age of college graduation, the prevailing length of the work day, the typical individual contribution in a church collection, the usual price. The manufacturer of ready-to-wear clothing and the retail distributor must give careful attention to the sizes most frequently demanded and to the

relative frequency of other sizes grouped about them.

The astronomers Laplace and Gauss, who independently formulated descriptions of the normal curve of error, were the first to deal with the average in a scientific fashion. They employed it as a method of finding the most probable value of an observation by making a number of measurements of the same phenomenon and averaging them. In this case the average is a central value about which individual values cluster more or less closely and in symmetrical distribution. It is a part of the description of a distribution of data according to some definite principle or law of arrangement. The application of averages to statistical data in the field of social science owes its general use to Quetelet, who was impressed by the symmetry of the distribution of measurements of the physical and psychological characteristics of man and by the relative constancy of magnitudes shown by the statistics of crime. He developed the concept of the "average man," a type characterized by average height, weight, girth, lung capacity and other measurable characteristics. Quetelet regarded the average as a measure of central tendency about which similar measurements were grouped in accordance with a definite law of distribution. In contrast to Laplace and Gauss, however, he did not assemble many measurements of exactly the same object but many observations of the same characteristic common to many persons or things.

In modern statistical practise an average has several closely connected aspects. It serves as a summary value representative of many individual items for purposes of comparison; a measure of central tendency, descriptive of a distribution of observations in more or less symmetrical form about a central value; the most probable value in a large universe of which we have actually investigated only a part as a sample; a type value or norm from which to measure individual deviations and the dispersion of the entire distribution.

There are several types of average adapted to differences in purpose for which a group of measurements needs to be represented and to differences in the character of the distribution of measurements. Nothing short of the entire distribution of values is really a complete measure of a variable. Hence a single value may be selected to represent a series of individual measurements only for a particular purpose. The reliability of this value depends upon its representative character; the character of the distribution is the most important factor in determining this degree of representativeness. Are the cases closely grouped about a central value, or are they distributed with a wide dispersion? In the latter case there is less homogeneity and any single value is less typical of the whole distribution. Therefore in describing a specific distribution the average needs to be supplemented by a measure of dispersion. Sometimes there is more than one point of concentration along the scale; for example, in cases where wage data for men and women have been combined in the same distribution, probably no single value can fairly represent the entire group. Again, the distribution may be bell shaped, symmetrical about the central value (heights), or it may contain extreme variants at one end of the scale (income). In the former case one kind of average will serve as well as another, but in the latter care must be exercised in choosing the best average for the purpose.

The arithmetic mean, that is, the quotient of the sum of items over their number, is perhaps the most important and widely used type of average. It has the advantages of being rigidly defined, easily computed, capable of algebraic treatment and widely understood. However, since it is affected by each value in the series, extreme variants often influence it to such an extent that the result is not typical of the group, as, for example, in a distribution of the salaries of college teachers.

The difficulty of the undue influence of extreme variants is avoided by the use of the median or of the mode. The median is a position average obtained after arranging the items in order of magnitude; it is the value which has as many cases above as below it. Similar in character to the median are the quartiles, values preceded by one fourth of the cases from the lower and upper ends of the distribution. Together with the quartiles the median frequently offers a more complete description of the distribution than any other average. It is also useful when data at the extremes of the distribution are incomplete or presented in undistributed groups. While not so well adapted to algebraic treatment as the arithmetic mean, it is easier to determine provided the data are already grouped. Whether or not the median is a typical value must be determined by careful scrutiny of the entire distribution, especially in graphic form.

The mode is an average entirely unaffected by extreme items; it is the value occurring most frequently. The mode is easily understood by the layman and has numerous practical applications. For many distributions it is the logical choice of average, but it has definite limitations and should be used with caution. It has no significance unless the number of cases is fairly large and there is a distinct tendency to concentration along the scale. There may be more than one mode in the same distribution and this may indicate that the data have not been well classified from the point of view of homogeneity. While this form of average is not capable of algebraic treatment, the approximate mode is easily located. It lends itself readily to graphic representation and is especially useful in emphasizing a particular part of the distribution.

One of the less frequently used averages is the geometric mean. The geometric mean of n items is the nth root of the product of the separate items. It gives equal influence to equal ratios and therefore is especially useful in averaging rates and ratios. It is employed, for example, in combining relatives in the construction of index numbers and in determining the annual rate of growth of population between two census enumerations. Like the median it gives less weight to extreme variants than does the arithmetic mean.

Still less frequently used is the harmonic mean. It is the reciprocal of the arithmetic mean of the reciprocals of the individual items. It is useful in averaging time rates and in the analysis of price data for certain purposes. Generally the same result may be obtained by the use of a properly weighted arithmetic mean, which is much more easily understood.

ROBERT E. CHADDOCK

See: FREQUENCY DISTRIBUTION; INDEX NUMBERS; STATISTICS.

Consult: Zizek, Franz, *Die statistischen Mittelwerte* (Leipsic 1908), tr. by W. M. Persons (New York 1913); Edgeworth, F. Y., "Methods of Statistics" in Royal Statisical Society of London, *Jubilee Volume* (1885) p. 181–217; Bowley, A. L., *Elements of Statistics* (5th ed. London 1926) ch. v; Yule, G. U., *An Introduction to the Theory of Statistics* (5th ed. London 1924) ch. vii.

AVERROES (Abūl-Walīd Muhammad ibn-Ahmad ibn-Muhammad ibn Rushd) (1126–98), Arab philosopher, theologian and writer on jurisprudence, astronomy and medicine. Born in Cordova, Averroes held positions as judge (in Seville and Cordova) and as chief physician, under Ibn Yusuf and Al-Mansur. He was banished from Cordova and his books were burned when philosophy fell into disrepute under the criticism of orthodox theologians; he returned from exile shortly before his death.

The works of Averroes have been preserved chiefly in Hebrew and Latin translation; particularly his commentaries on Aristotle were early available in Latin (1230–40) and the Aristotelian debates of the thirteenth century were largely determined by them. As Aristotle was known as "the Philosopher," Averroes was known as "the Commentator." Of his commentaries on Aristotle one deals with the *Ethics*; he wrote none on the *Politics*, however, because the translation of this work had not yet come to Spain from the Orient. The mediaeval discussion of political theory, therefore, was determined in good part by his paraphrase of Plato's *Republic* until the *Politics* was translated. Latin Averroism was condemned in 1270 on 13 points, and in 1277 on 219 points; the Aristotelianism of Aquinas narrowly escaped suppression at the same time. The doctrine of the double truth, developed from Averroes' theory of scriptural interpretation, permitted a philosophic truth of reason in conflict with the revealed truth of religion. Such philosophic truths were stigmatized as errors; among them were the doctrines of the eternity of the world and of matter, the unity of the active intellect and its identity for all mankind, the denial of the freedom of the will, of God's knowledge of particulars and of the immortality of the soul, all of which were avowedly in contradiction to Christian doctrine. Averroism continued to flourish, however, particularly in the school of Padua, until the end of the sixteenth century.

RICHARD MCKEON

Works: The Latin translations were frequently printed in early editions of Aristotle, the best being that of Venice 1553.

Consult: Renan, Ernest, *Averroès et l'Averroisme* (5th ed. Paris 1893); Boer, T. J. de, *Geschichte der Philosophie im Islam* (Stuttgart 1901), tr. by E. R. Jones (London 1903) ch. vi; Gauthier, Léon, *La théorie d'ibn Rochd (Averroès) sur les rapports de la religion et de la philosophie* (Paris 1909); Mandonnet, Pierre, *Siger de Brabant et l'Averroisme latin au XIIIe siècle*, 2 vols. (2nd ed. Louvain 1908–11); Munk, Salomon, *Mélanges de philosophie juive et arabe* (Paris 1927) p. 418–58; Carra de Vaux, Bernard, *Les penseurs de l'Islam*, 5 vols. (Paris 1921–26) vol. iv, p. 65–93.

AVES, ERNEST (1857–1917), English labor investigator and chairman of the British Trade Boards. At the University of Cambridge he

came under the influence of Henry Sidgwick and after graduation became a resident of Toynbee Hall, London's pioneer settlement, where he was subwarden from 1892 to 1897. Aves' first important contribution to the literature of social science was the collaboration with Charles Booth on the *Life and Labour of the People of London* (5 vols., London 1892–95), a massive work several chapters of which (on furniture trade, vol. iv, p. 157–218, and on the building trades, vol. v, p. 31–172) were written and signed by him. Articles of his on labor topics, including the quarterly Labour Notes in the *Economic Journal*, which appeared between 1898 and 1906, display a sympathy with trade unionism tempered by a belief in the fundamental harmony of social classes. In 1906 Aves was appointed by the home secretary to report on the applicability to English conditions of wage boards and compulsory arbitration systems developed in Australia and New Zealand. His report (published in Great Britain, House of Commons, *Parliamentary Papers*, vol. lxxi, 1908), a thorough and honest piece of work, drew no conclusions as to the principle of a minimum wage and merely advised the establishment of wage boards in Great Britain. These were to investigate labor conditions in various trades and to formulate standards which would be adopted by employers under the pressure of public opinion. In 1909 Aves investigated wages, housing and cost of living in the United States for the Board of Trade. In 1912 came the appointment to the chairmanship of all the British Trade Boards, a position which allowed him to apply his wide knowledge and judicial cast of mind to the service of industrial conciliation.

J. J. MALLON

Consult: *Economic Journal*, vol. xxvii (1917) 293–97.

AVIATION

HISTORICAL DEVELOPMENT ..... C. H. BIDDLECOMBE
INTERNATIONAL ASPECTS ..... EDWARD P. WARNER
COMMERCIAL AVIATION ..... STUART DAGGETT
AVIATION INDUSTRY ..... MYRON W. WATKINS
AVIATION LAW ..... CHARLES G. FENWICK

HISTORICAL DEVELOPMENT. The romance of flight has appealed to humanity for many centuries, stories of attempted flying being numerous in the legends alike of Greece and Rome, India, Egypt and Scandinavia. The names of Daedalus and Icarus, Archytas of Tarentum, Oliver of Malmesbury and John Damian have survived the centuries because of their connection with the legends of aeronautics. In the thirteenth century Roger Bacon made actual experiments on the possibilities of flight, and Leonardo da Vinci in the fifteenth century carried on more extensive researches. On June 5, 1783, the Montgolfier brothers sent a hot-air balloon into the air and the remaining years of the eighteenth century saw many successful balloon ascents, one of the most notable of which was the crossing of the English Channel by Blanchard and Jeffries on January 7, 1785.

The birth of the airplane, or heavier-than-air machine, dates from the first years of the nineteenth century. Sir George Cayley, an Englishman born in 1774, was the real pioneer of this type of vehicle; his gliding experiments were highly successful and only the lack of an engine prevented him from obtaining power flight. Cayley was followed by Wenham, Stringfellow, Pilcher, the Lilienthals, Montgomery and Chanute, all of whom did much gliding in France, England, Germany and the United States during the years between 1850 and 1900. Others, notably Maxim, Langley and Ader, devoted years to the search for an engine sufficiently light and powerful to make flight possible with a heavier-than-air machine.

During the same period ballooning as a sport and for military purposes, as at the siege of Paris in 1870, was progressing rapidly in France and the United States; an American named John Wise made 440 balloon ascents between 1835 and 1879, traveling on one occasion from St. Louis, Missouri, to northern New York, a distance of somewhat more than 800 miles, in twenty hours.

Both forms of air travel, aerostation and aviation, were, however, seriously handicapped by the absence of a suitable engine with which to equip balloons and airplanes, and this handicap was not removed until the invention of the internal-combustion gasoline engine. The Wright brothers had started gliding in 1900, making many successful gliding flights without an engine. Meanwhile they built an especially light sixteen horse power gasoline engine of their

own design, with which Orville Wright made the first power driven flight in December, 1903. As in the case of other inventions public recognition was slow. A modest degree of interest was aroused in Europe in the power driven airplane flights of Santos-Dumont and Ellenhammer in France in 1906, but widespread belief in the practicability of flying awaited the demonstrations made in France by Orville Wright in 1908. From then onward progress became sustained and rapid; in England and France particularly aviators and airplanes increased in number with surprising speed, so that by the end of 1910 there were 578 certified airplane pilots, of whom 353 were French, 57 British and 26 American. Concurrent with this general development of the airplane came the first crossing of the English Channel by a heavier-than-air machine, when Bleriot flew from France to England on July 25, 1909. The importance of this flight was recognized by only a few farsighted individuals although like the first cross channel balloon flight in 1785 it was a harbinger of the ultimate influence of aircraft on social, military and naval affairs throughout the world.

During the period of 1909 to 1914 aviation developed chiefly as a new form of sport. In this phase of its growth it was truly international; the United States and Europe became a common arena of contest for sporting supremacy. The Gordon Bennett race of 1911 is illustrative; a prize donated by an American was won for America in England by Charles Weymann, a West Indian of part native and part French extraction, flying a French machine. Thus even the early stages of aviation led to an unrestricted exchange of material and personnel by the nations engaged in aeronautic development.

From 1911 onward progress in airplane construction was fostered by the various governments of the world, cash prizes of varying amounts being offered for machines which would meet the specifications laid down. In addition flying branches of the naval and military forces were established in many countries and the airplane became recognized as a powerful weapon. The potential value of this new weapon brought rapid improvement in the airplane design during the period 1912 to 1914, and the four years of the World War gave a tremendous stimulus to aircraft production. Almost overnight the new adjunct of warfare became a vital factor in the continued existence of great nations, and the imperative demands of war, unhampered either by financial restrictions or by regard for human life, produced in four years technical results which would probably have come only during fifteen years of normal progress in times of peace.

Unlimited funds and the best available brains were devoted to the problems of obtaining better aerodynamic designs, improved engines, lighter and stronger metals, special guns, ammunition and bombs, special clothing for aviators, new flying instruments, novel aerial cameras and map making equipment and a host of other new and previously unthought of articles needed for aerial warfare. A complete new industry came into existence, manned by specialists in the fields of mathematics, chemistry, mechanical engineering and factory production and giving employment to large numbers of highly skilled and well paid artisans. Technical progress made during the decade ending in 1920 may be illustrated by three examples: the world's speed record for airplanes was 66.20 miles per hour in 1910, and 194.51 miles per hour in 1920; the airplane altitude record increased from 10,170 feet to 33,114 feet; and the duration of non-stop flight from 8 hours 13 minutes to 24 hours 19 minutes.

At the end of the war various attempts were made to develop commercial aviation with military equipment. In Europe unsubsidized air transport lines were started, but quickly became bankrupt through lack of sufficient use by the public and the impossibility of charging lower fares while operating surplus war equipment totally unsuitable for commercial use. Casual sightseeing flights—the so-called "gypsy" or "barn-storming" flying—with small war surplus airplanes purchased at scrap prices were, however, very popular. This form of aviation, conducted somewhat on the principles of the traveling circus, provided a more or less narrow margin of profit for small struggling companies and individuals in the United States and the British Empire during the period 1919 to 1926.

On the collapse of the unsubsidized transport lines in England the British government stepped in in 1921 and subsidized various companies to operate between London and the continent; the French, Dutch and Belgian governments also adopted the system of subsidizing air transport, and a regular service of air liners was soon in operation throughout various European territories.

The German government had meanwhile encouraged the development of commercial aviation within the technical restrictions of the

Versailles Treaty, and given a very considerable measure of financial support to manufacturers and operators in the search for means to overcome the limitations of engine power and aircraft performance laid down in the treaty. In the ultimate outcome the restrictions placed on German military aviation unquestionably assisted in the very satisfactory technical development of commercial aeronautics in Germany, where the heavily subsidized Luft Hansa now operates a network of transport lines. The basis of air transportation in Europe then became and has remained the subsidizing of one large transport company by each government. In the United States, government support was not provided and the few air routes started were definitely abandoned.

For reasons of national defense it was imperative for most countries that the skilled personnel and equipment in the aircraft manufacturing industry should not be entirely dispersed, and subsidies were also given to assist in keeping this industry in existence. In the United States, protected from potential aerial attack by the Atlantic and Pacific oceans, the urgency to support an aircraft industry did not exist and government participation in air transport development was limited to the operation of air mail service by the Post Office Department.

A broad survey of aeronautics throughout the world at the end of 1925 would have showed military preparedness paramount in all European countries except Germany; a general support by all European governments of commercial air transport lines carrying passengers and freight; no regular passenger transport in the United States, but a government operated air mail system between New York and San Francisco for which there was no parallel elsewhere; the gradual growth of military aviation in Japan and various South American republics; and an almost complete absence of private capital and public interest in air transportation.

In the period since the end of the war there had been, however, a number of spectacular flights by private individuals and military personnel in various parts of the world. Among the more notable episodes were the first transatlantic flight by the United States Navy flying boat NC-4 from America to Portugal via the Azores in 1919; the first direct transatlantic flight from Newfoundland to Ireland by a British airplane in 1919; flights from England to Australia and South Africa by British airplanes; flights across the South Atlantic by Portuguese, French and Italian aviators; flights around the world and across the United States and the Andes in South America by American aviators; the return flight of the British airship R-34 from England to the United States and back to England in 1919; and the flight of the Zeppelin airship *Los Angeles* from Germany to the United States in 1924.

There had thus been ample demonstration of the ability of airplanes and airships to make long journeys in safety although at great cost and with elaborate preparations in ground organization. These flights, together with the operations of "gypsy" flyers in the United States, the work of the United States Post Office air mail service and the subsidized passenger lines in Europe, served to keep alive a public interest in aeronautics in the abstract, even though they failed to demonstrate the economic value of aviation or to bring concrete support from the investing and traveling public.

At the end of 1925 a new period in the development of commercial aviation was initiated by the passage of the Kelly Act by the United States government. This bill authorized the Post Office Department to contract with private firms for the carriage of air mail. As the basis of the tremendous growth of aviation throughout the western hemisphere since 1925, the ultimate effects of which are influencing aviation in all parts of the world, the passage of this bill may well be considered one of the most important events in the history of commercial aviation.

Under the act the government operated line from New York to San Francisco was turned over to private companies, while new air mail lines were privately financed and operated throughout the United States and to Canada, Central and South America. Thus the government established at one stroke the foundations of a new industry, air transport, and gave a definite incentive to the investment of capital for the reconstruction of aeronautics as a public utility instead of a military necessity. This development was furthered by the Air Commerce Act of 1926, which authorized the formation of an Aeronautics Bureau within the Department of Commerce for the purpose of legal control and the provision of various aids for aerial navigation. The practical effect of the two bills has been to give commercial aviation in the United States an indirect subsidy from the government, inasmuch as the payment made to contractors for the carriage of mail is greater than the amount received by the Post Office in

revenue from the sale of stamps; the facilities of collection, delivery and advertising are also provided free of charge. In addition ground organization such as landing fields, route lighting, weather reporting and radio stations are established and maintained by the Department of Commerce.

Fresh stimulus to public interest in aviation resulted in 1927 from a series of spectacular and widely publicized flights across the Atlantic and Pacific oceans. The success of Lindbergh, Byrd, Chamberlin, Kingsford-Smith, Jensen, Goebel and others in America and flights from Europe to Australia, India, South Africa, China and other parts of the world by men and women pilots in 1927 and 1928 captured the interest of the whole world and particularly that of the United States.

These two years witnessed the culmination of a popular curiosity and attention toward aeronautics which had been growing slowly and steadily for over a decade. Ability to participate in the new industry existed to a peculiar degree in America because of the period of unusual prosperity through which the country was passing. Investors were captivated by the potential profit earning capacity of air transport to an extent which caused hundreds of thousands to buy any stock issues in which the word "air" appeared. For instance the stock of a railroad known as the Seaboard Air Line was purchased by many under the impression that the line was engaged in air transport. The general public in other countries was also affected by the same considerations, although to a lesser degree, and air transport and airplane manufacturing companies were readily financed and multiplied in almost all parts of the world.

This condition continued through 1928, with a corresponding growth of passenger and mail services in the Americas, Europe, India, Australia, Russia and South Africa. With a few rare exceptions, however, the only transport lines enjoying an excess of revenue over operating expenses were those subsidized either directly or indirectly; air mail contracts in the United States and foreign countries were in general profitable, but passenger lines unsupported by subsidies drew on their capital in most cases in order to meet expenses. The public were prepared to gamble with the stocks of aviation companies but not in general to fly in airplanes at the fares charged.

The manufacturing division of the industry enjoyed substantial profits during 1927 and 1928, but overexpansion of production facilities rapidly overtook the demand for airplanes so that by the middle of 1929 manufacturers met evident signs of an impending marked contraction of sales. The general industrial recession at the end of 1929 confirmed these indications, but in the meantime a number of mergers had taken place between the strongest units in the manufacturing and transport fields, which strengthened financial resources, eliminated much overlapping of effort and placed the large combines in a position to withstand losses without serious lasting effect.

Early in 1930 the passenger lines in the United States drastically reduced fares from an average of about 11 to 12 cents per passenger mile to about 5 cents; the result was immediate and startling, a fivefold increase in the number of travelers occurring in the first month. Even with the increased gross revenue obtained, the majority of airplanes are operated at a loss, as it is impossible for almost any existing aircraft to make profits at the low rate quoted. Further economies in operating costs are available, however, with improved airplanes and more efficient methods; the satisfactory stabilization and profit earning capacity of the passenger lines is thus assured, but another year or two is needed to effect the improvements possible. As an additional aid to passenger transport the Watres Bill was enacted by the United States government in April, 1930; this bill allows payment to air mail contractors for space made available for the carriage of mail in passenger airplanes and revises the rates paid for the carriage of mail only. In final result the bill will indirectly subsidize the passenger lines and increase the revenue of air mail lines now underpaid, but will reduce the profits of the mail lines admittedly overpaid at present under original contracts made on the basis of the Kelly Bill. A sales outlet for part of the production of airplane factories is provided by this promised stability of the transport lines, but there is still an uncertain market for the output of smaller airplanes intended for private or limited business use.

An important reason for the lack of patronage of air lines and the slow development of private flying has been the exaggerated view of the dangers of air travel existing in the minds of the majority of people. Reliable statistics regarding accidents were available only in England, Germany and France during the years 1919 to 1927 and in the United States from 1927 onward. The available figures are capable of varying interpre-

tations when comparisons are made between various countries and over various periods. At the same time it is clearly established that the number of accidents for mileage flown is decreasing each year in all countries and that this ratio of accidents to mileage is much less on the regular scheduled transport lines than in other types of flying. In general it is probable that over 90 percent of airplane accidents are traceable in first cause to errors of judgment on the part of the operating personnel, although secondary causes may appear as the final reason for many such accidents. This is indicated by the fact that on the regular scheduled air transport lines, those managed with systematic care, accidents are markedly less than in casual flying. Thus in the United States the total accidents on such regular lines in the last six months of 1929 numbered 76, of which 15 caused death; while in miscellaneous flying, including student instruction, experimental, commercial and pleasure flights, there were 848 accidents of which 168 were fatal. Similarly there were 14 pilots killed on the regular transport lines and 126 in other flying activities. During 1929 there was in the United States one fatal accident for every 15,940,161 miles flown on schedule and one for each 375,000 miles of other flying. It is thus very clear that careful management and good judgment lead to a very marked reduction in the dangers of flying and that by the exercise of care and the avoidance of obvious risks air travel can be conducted with a high degree of safety.

It is now well established that during the fine summer months and in territory where favorable weather is almost constant a safety and regularity of approximately 100 percent can be maintained by air transport operators using modern equipment and methods; under markedly adverse weather conditions the regularity of service decreases to about 90 percent of scheduled flights. This latter percentage is improving yearly with the increased use of better flying instruments, weather reporting systems and radio aids to navigation. The importance of maintaining the highest possible standard of safety in air transportation is fully recognized by the government and commercial agencies concerned, to the extent that in addition to the adoption of national safety measures in all countries the first International Aerial Safety Congress is being called in Paris in December, 1930. This congress will provide for the interchange of experience and information by all countries, thus placing at common disposal a vast and valuable accumulation of knowledge of the means to insure the maximum safety of air travel.

The use of airplanes has been further encouraged by the spread of aeronautical education. In the United States there are 61 universities and colleges offering an aviation course, of which 13 grant a degree in aeronautical engineering. A total of 226 elementary and secondary schools give aeronautic instruction of some kind. The universities of England, Germany, France and the British dominions also offer engineering courses in aeronautics. The tuition in nearly all universities, colleges and schools in all countries is of a technical nature chiefly based on theoretical and practical engineering and the actual operation of aircraft. Tuition in the business management of air transport is rare.

Education in the use of airplanes is also given by the flying clubs formed in large numbers since 1928 in England, Canada, Australia, New Zealand and various European countries. These clubs are government subsidized by the gift of airplanes or funds for their purchase and by bounty payments for each pilot trained to a certain standard of flying ability. In Canada there are 23 clubs with a total of 5000 members, each club receiving a subsidy of $100 per pilot trained; Australia has 6 clubs and New Zealand 21 clubs, receiving $150 for each pilot trained. There is a total of about 300 such clubs existing throughout the world, excluding the United States, Russia and Turkey, for which no reliable figures are available.

A similar club movement has not developed in the United States, where there is no government subsidy, although efforts are being made to obtain this assistance. The most successful attempt at the formation of clubs is the Aviation Country Clubs organization formed and operated by a group of wealthy sportsmen owning airplanes and preferring their own private airports for flying activities. At a very limited number of universities, including Harvard and New York, flying clubs have been fairly successful in the number of members secured and the amount of flying done.

The most outstanding private contribution to aeronautical education is the Guggenheim Fund for the Promotion of Aeronautics initiated and supported privately by Daniel Guggenheim. This organization has endowed educational facilities at various American universities, notably at New York University, by the estab-

lishment of a School of Aeronautical Engineering. The fund also financed such aids to the advancement of aviation as Lindbergh's nation wide tour by air in 1927, the $100,000 prize contest for the safest airplane and fog flying experiments aimed at the development of means to provide safe flying in adverse weather.

Public interest in aviation is also fostered by the Aeronautical Chamber of Commerce, an organization representing the whole industry and functioning as a cooperative association for the dissemination of information and the control of trade practises. The Society of Automotive Engineers serves as a liaison between the aviation and automotive industries, providing a clearing house for the discussion of common problems.

A widespread influence is wielded by the Fédération Aéronautique Internationale represented in the United States by the National Aeronautic Association with nearly 200 chapters and a large and growing membership. The Fédération is devoted to the promotion of all phases of aviation and is the governing body for all aircraft sporting matters as well as the channel through which all aircraft records are recognized.

Important in the provision of airports and landing fields and the growth of public support of aviation are the activities of aviation committees within the Chambers of Commerce in various cities throughout the country; in 1929 there were 366 such committees in 47 states.

The purely technical progress in aeronautic science is recorded by the National Advisory Committee for Aeronautics, a government agency entrusted with the collection and dissemination of technical data from all countries and functioning also as an experimental department with the necessary laboratory facilities. The results of the committee's work are made available to the public and particularly to the aircraft industry and to all educational bodies; a great portion of the experimental and research work carried out is of value to naval and military aeronautics as well as to the improvement of commercial aircraft.

The spectacular growth of aviation completely overshadowed for a time the current development of lighter-than-air craft. Within the past few years, however, the airship has again attracted attention as a possible and commercially feasible method of transportation. The forerunner of the present navigable airship was the free balloon. The first flight of a man-carrying balloon was made by de Rozier in France on November 21, 1783, one hundred and twenty years prior to the first airplane flight by Orville Wright in 1903. Balloon development continued through the eighteenth and nineteenth centuries, nearly all scientists and engineers interested in aeronautics devoting their major work to the lighter-than-air vehicle in the belief that flight with heavier-than-air machines would remain impracticable. Various semi-navigable balloons fitted with steam and electrically operated engines were constructed in the later years of the nineteenth century, and Santos-Dumont, a Brazilian living in Paris, started airship construction on a large scale in 1898. Between then and 1904 fourteen non-rigid airships were built and flown by Santos-Dumont; all were fitted with gasoline engines, which it may be noted made possible the practical use of airships and also at a later date of airplanes.

Nearly all important airship progress had been in France until 1900, when other nations entered the field. Between 1900 and 1914, 119 airships of various types and sizes are known to have been built; of these, 40 were made in France, 56 in Germany, 14 in England and 9 in Italy. Count Zeppelin was the leading producer during this time. In the United States, airship history dates from 1908 with the purchase by the War Department of a very small airship of 20,000 cubic feet capacity; a second ship of 50,000 cubic feet was bought from France by a private company in America in 1911. Progress then slowed down until 1916, when construction of various types was started by the Goodyear, Goodrich and Connecticut Aircraft companies, these three concerns building about sixty ships during the years 1916–19.

The first record of commercial passenger service by an airship was the operation of an "Astra"-built ship at Nancy, France, in 1909; in Germany airships were used for the same purpose during 1910–14, particularly by the Deutsche Luftfahrt A. G., a subsidiary of the Hamburg-America Steamship Line. During 1910–14 this company used six ships on 1600 flights, carrying 37,250 passengers without accident on a town-to-town service in Germany. Passenger revenue was amplified by a subsidy from the German government, thus giving the company a profit. The war period was marked by a great increase in airship development, especially in Germany, where zeppelin ships were used extensively for bombing and scouting purposes.

A remarkable demonstration of the capabilities of the airship for long distance travel was made in November, 1917, by the zeppelin airship L-59, which went from Bulgaria to East Africa and back without landing—a total distance of about 5000 miles in 95 hours. This flight was unequaled in importance until July, 1919, when the British ship R-34, 2,000,000 cubic feet in size, flew from England to the United States and back, covering 3600 miles in 108 hours on the westward journey and 3450 miles in 75 hours on the return.

During 1919 efforts were made to prepare for regular passenger services by airship in various parts of the British Empire, the government spending large sums in experimental work such as the conversion of ships designed for war to passenger carrying purposes. This proved economically impracticable and the adoption of a government program of construction for new and larger ships was delayed from year to year by national financial stringency; however, two large ships of 5,000,000 cubic feet each were completed in 1929 and flown in 1930. In Germany the zeppelins remaining at the close of the war were either destroyed to prevent their falling into Allied hands or taken over by the Allies for experimental purposes. Seven naval zeppelins and two commercial ships were surrendered in 1920 to England, France, Italy, Belgium and Japan, but were not utilized for commercial purposes. The United States failed to receive a ship at this time chiefly because of lack of interest. In 1921 the American government decided to accept a zeppelin ship as part of the reparations payments due from Germany, and the *Los Angeles* was built and flown to the United States in October, 1924.

In the United States the Goodyear-Zeppelin Corporation was formed in September, 1923, for the manufacture and operation of airships under the Zeppelin patents and built a number of small experimental non-rigid ships. The navy also built a ship during the period 1919–23, the *Shenandoah*, of 2,115,000 cubic feet gas capacity, which was accidentally destroyed in 1925. Accidents of this kind had been frequent in the history of airships, causing a lack of public confidence in the safety and practicability of this form of travel. Confidence was in a measure restored by the successful flights in 1927 and 1928 of the *Los Angeles*, operated by the navy; and in 1927 the five-year naval aviation program of the United States government included an appropriation not to exceed $8,000,000 for two rigid airships of about six million cubic feet capacity each. In 1928 the navy placed a contract with the Goodyear-Zeppelin Corporation for these two ships.

A further renewal of world interest in airships came in October, 1928, when the German *Graf Zeppelin* flew from Germany to the United States, covering 6000 miles in 111½ hours, having been delayed by storms. The return journey was made in 71 hours with 25 passengers and a crew of 40, a record voyage for airship travel. The *Los Angeles* in February, 1928, also made a non-stop long distance flight to Panama of 2178 miles in 40 hours, so that by 1929 public opinion had definitely come to accept the possibilities of the large airship.

That year witnessed greater and more varied activity with lighter-than-air craft than any year since the war; the *Graf Zeppelin* flew around the world in twenty-one days; construction was started on the two super-zeppelins for the United States Navy; two British dirigible ships, R-100 and R-101, were completed and made trial flights; the first all metal airship was completed and flown at Detroit and a fleet of six commercial airships of the small semi-rigid type were in constant operation in the United States. A giant zeppelin hangar was completed at Akron, Ohio; this building will house the large airships intended for transatlantic service by a German-American company which started preliminary work in 1930, partly as the result of the successful flights of the *Graf Zeppelin*. This ship's journey around the world was made in August, 1929, and was remarkable for one non-stop flight from Germany to Japan of 6800 miles in 101 hours, 53 minutes. The *Graf Zeppelin* flew a total distance of 72,648 miles in 1928 and 1929 during fifty voyages, carrying a crew of about 40 at all times and a total of 1574 passengers.

Great Britain has made preparations for an airship passenger service in England, Canada, Egypt and India and will eventually establish similar facilities in South Africa and Australia to make possible the world wide operation of R-100 and R-101, each of which will carry from 50 to 100 passengers in very luxurious accomodations. The ultimate development of air travel will without doubt be on the basis of airship use for distances of 1000 to 2000 miles non-stop over oceans and continents at speeds somewhat less than 100 miles per hour, with airplanes for overland distances up to about 1500 miles at speeds of around 150 miles per hour.

Because of the immense importance of such

TABLE I

GOVERNMENT EXPENDITURES FOR AVIATION

COUNTRY	1921	1922	1923	1924	1925	1926	1927	1928	1929
United States									
Military	101,959	84,093	71,689	97,778	82,131	87,586	102,194	98,291	107,726
Civil*	1,500	1,417	1,910	1,122†	2,012	1,567	1,454	3,791	5,434
Great Britain									
Military			57,310	70,530	73,700	75,650	73,440	76,960	76,560
Civil			1,390	1,720	1,800	2,250	2,260	2,040	2,190
France									
Military						18,720	27,200	32,940	49,800
Civil						5,380	6,600	8,660	12,200
Italy									
Military									35,565
Civil					365	721	1,620	1,870	3,158
Germany									
Civil					5,750	11,150	10,430	12,050	6,675

Note: All figures given in thousands of dollars. Table compiled by author. Detailed analysis of the figures for foreign countries may be found in *Aviation*, vol. xxviii (1930) 600. Figures represent appropriations for fiscal years (beginning July 1 for the United States and Italy, April 1 for Great Britain and Germany, January 1 for France). Wherever figures are not given they are not available. There has been no military aviation in Germany under the provisions of the Treaty of Versailles.

* Figures for 1921 through 1926 represent the difference between the operating expenses of the Air Mail Service and the revenue received in excess postage. The amount for 1927 is on the same basis for the eight months from January 1 to August 31, 1927, but also includes an appropriation of $550,000 made for the then newly formed Bureau of Aeronautics in the Department of Commerce. The 1928 and 1929 expenditures represent only the appropriations for the Department of Commerce.

In addition to the amounts shown in this table, civil aviation in the United States is directly or indirectly assisted by sums spent by the Post Office Department, the Bureau of Standards, the N.A.C.A., the Army and the Navy. It is estimated that the aids to air navigation, primarily installed for the benefit of the transport lines but open for use by all aircraft, and other similar expenditures made by the United States government cost some thirty million dollars annually; in addition the Post Office experienced a deficit of three million dollars in 1928 in the Contract Air Mail Division.

† Six months July–December, 1924.

new means of travel most governments have since 1919 adopted a definite policy of the establishment of a military organization for aeronautics; and many countries have also supported commercial aviation to provide a reserve of men and material in time of war. The strategic, political and financial problems involved in the provision of defense organizations vary widely in different countries, but it is clear that one of the chief factors which led governments generally to offer subsidies for the encouragement of air lines was the obvious military importance of an aircraft industry and the possibility of military employment of commercial aircraft. An industry built up for the manufacture of airplanes for commercial uses still stands as one of the most important elements of a nation's industrial preparedness. The direct convertibility of commercial and military machines is also a possibility for certain military services, but appears less important now than it did in the period 1919 to 1924. Types have become more specialized, with the consequence that airplanes cannot be at the same time fully efficient for military and for commercial purposes, although it is possible that a very satisfactory military machine might be slightly modified and operated commercially at rather low efficiency, if sustained by a subsidy. There are indications in some countries that this is being done, but on the whole it is clear that the design of commercial aircraft has taken account only very slightly, if at all, of military factors. This possibility of conversion or of disguise remains, however, one of the most serious difficulties in the way of any effective limitation of aerial warfare.

Reliable statistics regarding military or civil expenditures for aviation are difficult to obtain in countries other than the United States and Great Britain, and direct comparison of the figures for various countries may therefore be misleading, because of the varying prices of aviation material, the widely different scope of "aviation" budgets, the indirect support given by agencies other than governments and the wide variation in the basic systems of subsidy in force. Thus in the case of military aeronautics in

Great Britain and France the pay of personnel is included in the aviation budgets, but in the United States it appears in the general funds for payment of navy and army. Research and experimental costs are charged to civil aviation in Germany, but to the military appropriation in other countries. Various commercial airports in England are established, maintained and operated from the civil appropriation, but such airports are provided by municipalities or private agencies in the United States. Expenditures for buildings and land are shown in the aviation budget in some countries, but not in others.

Comparison is further complicated when the basic systems of subsidy are considered; in some countries, notably the United States, the support given to civil aviation is definitely a return for services rendered to the community by the carriage of mail; in Great Britain mail and passengers are carried, of course, but the subsidy is based on the mileage flown, so that an empty airplane earns as much as one loaded with passengers. In France the mileage basis also obtains, and in Germany and other European countries gifts of airports, hangars, gasoline, etc. are made with no obligation on the part of the transport companies other than the ownership of airplanes operated at their own will. The figures shown in Table 1 should thus be considered with the reservations outlined above.

Although comparison of governmental expenditures in various countries is difficult, an approximate calculation can be made of the total civil aviation costs in relation to the miles flown by regular transport planes. Such a survey indicates that Great Britain spends about $2.00 for every transport mile flown, France $2.00, Italy $1.75, Germany an average of $1.50 for 1927, 1928 and 1929, and the United States about 70 cents.

In the field of military aeronautics it is impracticable to make even the most general comparison of expenditures in relation to military efficiency, beyond stating that the pacification of territories such as Somaliland, Iraq, the Indian northwest frontier, etc. has been carried out by air power at a fraction of the cost involved in the use of any other means.

C. H. Biddlecombe

International Aspects. The problems of aeronautics are essentially international in their nature. There are few parts of the world where commercial flying does not inevitably become international, simply because of the range and speed of the aircraft. Even more dramatically the military importance of the airplane and airship makes them an important factor in international relations.

The airplane has imported a new element into warfare, radically revising not only certain general strategic doctrines but especially the strategic position of certain nations. Insularity is no longer assured by a narrow body of water like the English Channel. Where the stretch of water is very wide, on the other hand, the airplane is unable to make an effective attack by coming under its own power and must be carried to somewhere near the intended striking point in ships. In such a case, except for sporadic raids, the introduction of air power is likely to strengthen a country's defense rather than to weaken it.

There is hardly a city in all of western or central Europe which could be considered safe from direct attack by air from within the territory of some potential enemy in the event of war. The United States, on the other hand, unless the enemy should gain a strong air base in the territory of one of the United States' immediate neighbors, is in the present state of aeronautical art beyond the reach of direct attack by airplanes coming under their own power and carrying any substantial military load. The problems of air defense and of the organization of air forces are thus entirely different for the United States, and in a lesser degree for Japan, than for any European country. The fact that an air attack upon the territory of the United States would be most likely to come from airplanes that have been brought from overseas on ships makes the coordination of aerial and naval operations of the utmost importance to America. For England, France, Germany or Italy, on the other hand, the military aeronautical problem is almost entirely one of readiness to meet and to repel air attack with air defense on very short notice. One result of these conditions has been that the air power in the United States has been kept an instrument of the army and of the navy, worked into the operations of the two services independently, while in most European countries, notably Great Britain, Italy and, since the summer of 1928, France, there have been created independent air forces, unifying all air operations in a single command and divorcing them from the immediate direction of surface warfare.

The airplane has gone far to eliminate in one respect the element of surprise from war, while

it enormously augments it in another. It has introduced a new form of surprise attack more certain and rapid than any previously known, but it has also provided a means of scouting to safeguard against surprise upon the surface, either of land or of water. The most serious of its effects upon the conduct of war, however, is the prospect that it brings of the termination of the immunity of civil population from direct injury. The prospect of attack upon centers of civilian population is one that is viewed with abhorrence by many military leaders. Nevertheless it is the prevailing belief that there can be no assurance against such attack in view of its great possible military advantages and that in a long and hard war in the future, if not indeed in every outbreak of hostilities, such raids as were made on London in a small way from 1914 to 1918 would become a daily event. The advantages of an attack on, and destruction of, centers of munitions production are obvious, and unfortunately industrial centers are always centers of civil population as well. No less striking are the possible military advantages of the demoralization resulting from destruction of governmental buildings and records. The effect of constant air attack on the morale and will to continue the war of a civilian population, while it does not furnish a satisfactory argument for permitting such attacks under the laws of war which have been developed in the past, is nevertheless clear and cannot be overlooked by military leaders, whether they consider the desirability of air attacks on civilian centers for their own use or merely as a weapon likely to be employed by an enemy and having to be countered.

Various attempts have been made since the war to bring warfare under some sort of control. The Commission of Jurists which sat at The Hague in the winter of 1922–23 declared in its report, Article 22, that: "Aerial bombardment for the purpose of terrorizing the civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants, is prohibited." The report of the commission has not entered into full effect, and in any case the violation of such regulations is so easy and can be so subtle that it is almost impossible to draft a treaty, especially one unaccompanied by very severe sanctions, which will give any real feeling of security against aerial attack upon the civilian population to nations actually engaged in war or immediately threatened by it. In the wording just cited there exists the greatest doubt as to what would consti tute "private property not of military character.' Moreover the report went on to state that bombardment would be legitimate when directed against factories constituting important centers engaged in the manufacture of distinctively military supplies. In time of war between major powers that could include most of the nation's industrial plants.

These considerations lend a grave importance to the limitation of aerial armaments. It is to be anticipated that such limitation will finally be arrived at, if at all, upon that method of ratios which has proved the only one capable of effecting any limitation of naval construction. The necessary prelude, however, is the development of a means of measurement, of a general principle of limitation. It seems probable that the best results will be obtained by the simultaneous use of several forms of partial restriction. The limitation of subsidies alone, often suggested, involves extreme niceties of discrimination between what is and what is not a subsidy. Limitations of appropriation are obviously unfair to those countries where the general level of costs is high, but they might be made to work if the modifying factors were taken into account. Limitations upon numbers of pilots involve undue restrictions upon the free development of private and commercial flying. To limit the airplanes themselves simply raises another question, that of the means of measuring the effectiveness and fighting power of the individual aircraft entering into the summation. Results might be secured, if it proves practicable to arrive at any agreement at all, by a combined use of limitations of the number of pilots actually enrolled in military units, active or reserve, and of the amount of active training given to the reserve, of the number or aggregate power of certain specific types of airplanes, such as fighting machines, and of the aggregate appropriations for military aeronautics. These methods, or any of them, should be combined with a definite agreement on the part of all nations not to use the promotion of commercial aeronautics for any military purpose. Provisions to that end have now been unanimously accepted and included in the draft convention prepared by the League of Nations' Preparatory Commission on Disarmament. Without such an agreement and appropriate safeguards for it any direct limitation upon purely military aeronautics would lose much of its value, as the same problem might reappear in disguised form

through the organization of commercial pilots in military units or through specifications that commercial airplanes must be suitable for certain military conversions before they can be registered.

Aviation has thus become a new source of danger in international relations. At the same time it has made possible new forms of communication which will affect international relations and policies in a variety of ways. It is a striking fact that almost all commercial aviation is international. To develop properly the utility of aircraft in transportation it is necessary that they be used on routes of from two or three hundred up to two or three thousand miles in length; only in the United States and a very few other countries have many useful air lines been created without crossing international boundaries. The very first passenger air route to be operated with any regularity was an international one—that between London and Paris, upon which service began on August 25, 1919. In the United States there has been built up within the last two or three years a splendid and far reaching system of internal air communication, but in Europe such a thing is virtually unknown. At present only Germany has an internal network of any importance. The air lines originating in Great Britain and under British management run on to the continent. Those under French control connect France with northern Africa and with various points of central Europe and the Near East as well as with Great Britain. The smaller countries, such as the Netherlands, Belgium and Switzerland, some of them very active in air transport promotion, must run their planes onto foreign territory or find themselves virtually unable to run them at all. Under the circumstances the international law of the air and the political arrangements between governments which facilitate or place limitations upon the free flow of international air transport are obviously of the utmost importance in the progress of air communication. Even in the United States, especially through the interest of the government in communications with the countries of South and Central America, the effect of international relations upon commercial aviation is important. In western Europe it is absolutely vital. The taking of full advantage of technical progress has often to wait upon legal and political arrangements.

It is not only the negative factor of limited geographical extent of individual countries, and consequent limited scope for the development of air lines within the bounds of any one, that is responsible for the large proportion of commercial air transport activities that are conducted on international lines. There have been explicit and positive reasons for the encouragement of flight into foreign territory. The airplane has been hailed with delight by countries holding dominion over large overseas territories as a new instrument for the furtherance of imperial loyalty, for the facilitation of understanding among the several parts of the empire and of its efficient government as a whole. The possibility of the provision of means for travel and for the dispatch of mail from the farthest dominions of an empire to the mother country in five or six days, instead of in almost as many weeks, has both sentimental and practical value. Improved communications make it easier, for instance, to secure the desired class of personnel to represent the home government overseas. They make it easier for emigrants to the colonies or dominions to feel themselves still a part of the life of the center of the empire.

Recognition of the imperial advantages of commercial aviation has been especially clear in the British Empire. In a report on *The Approach Towards a System of Imperial Air Communications* issued in 1926 will be found the most general study of British air transport. Of the several air lines at present operated under British management the most important in its bearing upon probable future development is that which was opened in January, 1927, between Cairo in Egypt and Basra in Iraq. It formed the first link of what was destined to be a through service from England to India and Australia. The interruption at Basra was temporarily enforced by political difficulties in arranging for passage across Persian territory, but this obstacle was overcome in the early months of 1929, and the line extended to Karachi soon thereafter. A survey is now under way for a London to Capetown service which will link England and Africa.

French lines to Morocco, Algiers and to French West Africa have been backed by similar motives and have already been in operation for several years. The first flights upon a Dutch service from Amsterdam to the Dutch East Indies were made during the latter part of 1928, but the service was shortly suspended because of difficulties raised by the government of India.

Not only imperial communications but those with foreign countries as well are of obvious political interest. They permit of easier ap-

proach to foreign markets, of quicker communication by mail with representatives abroad and of prompter dispatch of samples or of repair parts for damaged machinery. They serve also to promote political prestige, for the aircraft registered under the flag of a great power, constantly running to and fro across the territory of smaller or less highly developed countries, are recognized as having an excellent effect in political advertising. Naturally the Powers are especially anxious to secure and maintain aerial communication with those nations with which their political relations have been especially close. One of the earliest of post-war French air lines operated under the name of the Franco-Roumanian Company (since become the Compagnie Internationale de Navigation Aérienne) and has connected Paris with the countries of the Little Entente, with Warsaw, Prague, Belgrade, Bucharest and Constantinople. German initiative has been especially active in the Baltic states, in Russia and in Austria and Hungary, although German air lines, lacking any opportunity for communication with German colonies overseas, have more recently come to touch upon most of the countries of Europe.

The case of the United States is one of the aptest of all, for the interest of American government and industry in securing aerial communication with all the countries of the western hemisphere, and especially with those bordering the Caribbean, has been constantly and actively displayed. At the beginning of 1928, with the exception of an air mail line from Miami to Havana, no air line connection existed between the United States and countries beyond its southern border. Early in 1930 there were in full operation air lines touching upon practically all of the Caribbean and Central and South American countries, with continuous through service as far south as Buenos Aires on the eastern coast and Santiago on the west.

At the same time the consciousness of community of interest with Latin America based upon racial, linguistic or merely traditional or commercial grounds was strongly felt in certain European countries. Plans were studied for connecting South America with Europe, both by the use of airplanes under the management of a French company and by an airship service under German-Spanish direction. Airplane service liberally subsidized by the French government is being constantly pressed forward and has already reached the stage of actual commercial carriage of mail by airplanes from Paris to Dakar in French Equatorial Africa, to Natal and thence to Rio de Janeiro and Argentina. The first delivery in Buenos Aires by the all-air service was made three and a half days after the mail had left France.

Governmental interest in these imperial and foreign air lines has led to a general provision of subsidies for their encouragement. Practically all European countries have been granting direct subsidy payment to their air transport companies at least since 1922, while some of them began the practise as early as 1920. Although internal air communication in the United States has been developed without direct cash subsidy payments, the general principle of the subsidy for international lines has been accepted in America as well as in Europe, and the services which communicate with South and Central America and the islands of the Caribbean are given a guaranteed payment per mile flown, irrespective of the traffic.

The rivalry which the various governments have waged through the medium of subsidy-backed companies has been especially keen in the Near and Middle East and somewhat less so in Central and South America. British plans for communication across the Middle East and ultimately to Australia have already been mentioned. The French line through the states of the Little Entente was subsequently extended to Constantinople and for a time to Angora, and further extensions across Asia Minor to Bagdad have been planned. Proposals for entry into Russian territory by French lines in continuation of the one that now runs to Warsaw have been made but never put into effect. German enterprise was very forehanded in both the northern and southern parts of the eastern territory. A company under combined German and Russian management has run an air service from Berlin to Moscow since 1922. Its extension to Peking is planned as soon as political conditions permit, and trial flights over the route have already been made. A German company has also secured important concessions in Persia to operate sundry short lines there, connected with the German services to the north by the operation of a Russian company between Moscow and Baku and Teheran. There are three converging lines of approach to Mesopotamia and Persia by air—the German from the north, the French in the center and the British from Egypt in the south.

In so complex a network of conflicting international lines and conflicting national interests

there is obvious danger of stalemate by mutual obstruction. This was especially clear immediately after the war, when the military dangers of the free travel of aircraft were present in every statesman's mind. The doctrine of a "freedom of the air" as well as that of a vertically limited sovereignty corresponding to the three-mile limit in maritime affairs, both of which had been espoused by eminent jurists prior to 1914, appeared in the light of war experience obviously untenable in practise. Recognition of complete national sovereignty over air space was inevitable. Fortunately for the development of air transportation that recognition embodied in Article 1 of the International Convention for Air Navigation, drawn up at Versailles in 1919, was coupled with assurance of the mutual granting of freedom of innocent passage by contracting states. On the other hand Article 15 of the convention provides that: "The establishment of international airways shall be subject to the consent of the states flown over." The maintenance of a regular international service is therefore the necessary subject of a special agreement among the states concerned, and a certain amount of jockeying for advantages before consent to the inauguration of a new air line is given still takes place, even among states having ratified the International Convention.

The International Convention was signed by the representatives of all the Allied Powers at Versailles and has been ratified by a substantial number of them and by some neutrals as well. Germany and the United States, among others, have declined to ratify. Refusal has in some cases been due to objection to relatively minor points in the convention or to the rigor of the technical annexes drawn up in connection with it, in others to an unwillingness to accept as sound the fundamental principle upon which the document was based. The representative of the Persian government, for example, presented during the International Civil Aeronautics Conference at Washington in December, 1928, a memorandum setting forth the unwillingness of his government to consider the complete freedom of innocent passage through air space as necessarily or universally desirable. The U. S. S. R. has taken a similar position.

The German government had no opportunity to ratify the convention at the time of its drafting, and European air transport was much complicated and harassed thereby. Under the Treaty of Versailles, Germany was permitted no military or naval air forces, and the Allied authorities responsible for administering those clauses defined the purely commercial aircraft upon which German industry was allowed to work in such a way as to place severe restrictions upon their performance and upon the development of aircraft manufacture and operation. The treaty provided freedom of passage over German territory to Allied aircraft until January 1, 1923, but thereafter the German government regained liberty of action and promptly placed similar restrictions upon the operation of the aircraft of Allied states. Since Germany occupied a very strategic position in the center of Europe, aerial communications between France and Great Britain and the eastern part of the continent were for the time being virtually severed. Not until 1926 was a new and generally satisfactory agreement reached with increased freedom of action for the German aircraft industry and with free permission for British and French airplanes to operate across German soil without danger of confiscation in case of descent.

In the western hemisphere there was drawn up at Havana in the spring of 1928 a Pan-American Air Convention on Commercial Aviation designed to serve the same purpose as the International Convention of Versailles eight years earlier. The two conventions have much in common, but the Pan-American includes no such elaborate technical annexes as have been attached to the earlier document and it is designed to insure the utmost freedom of regular international transportation as well as of occasional and sporadic flying. The differences are not so great as to seem irreconcilable; and the desirability of arriving at an understanding which will make it possible to evolve a single convention which will serve the purposes of the entire world has been generally recognized. At Paris in June, 1929, the differences were frankly discussed in meetings at which the principal non-ratifying Powers, with the exception of Russia, were represented. A group of amendments to the convention was drafted, which it is hoped will, when duly ratified and in full effect, make possible virtually universal acceptance of the convention.

A very serious problem in international flying in the western hemisphere is the Isthmus of Panama and the necessity of insuring the defense of the Panama Canal. It has been treated as a military area, and special regulations have been drafted governing the passage of aircraft above the canal and the surrounding territory. Under the Pan-American Convention as well as under

its predecessor at Versailles such reservations are possible provided only that the restrictions placed upon foreign aircraft must not be more severe than, or different from, those to which machines of native registry must submit.

EDWARD P. WARNER

COMMERCIAL AVIATION. Extensive commercial use of the airplane dates from the close of the World War. What little flying had been done previous to the war was either experimental or for stunt and exhibition purposes. The rapid technical advances of the war years resulted in the creation of a practical machine, and the availability for commercial and civil uses of planes and personnel released from war work gave a sudden impetus to aviation. Most European governments, with a ready appreciation of the military value of a continuing supply of aircraft, encouraged the formation of aviation transportation companies, offering both technical and financial assistance. In the United States the government was slower in formulating a policy and the development of commercial aviation was for some years sporadic and unorganized. The distribution of large numbers of former military planes led to a spectacular amount of stunt and taxi flying in the United States immediately after the war. This discouraged the development of regular air transportation by giving an exaggerated impression of the dangers of flying. It could not prevent, however, the discovery of new and important uses for the airplane, such as forest patrol and forest survey work, the dusting of cotton fields to combat the boll weevil, the spraying of trees and tobacco, and aerial photography and map making. Such operations, carried on at first irregularly and by individual operators, have within recent years been developed on a profitable basis by large companies using special equipment. With the growth of regular transport companies and the purchase of airplanes by an increasing number of industrial corporations, the "special charter" flying activities of these service companies have somewhat decreased in importance although not in extent. On the other hand new uses for aerial photography or air surveys are continually developing and establishing more firmly the commercial position of service aviation.

Largely because of the early development of regular air transport, special passenger and baggage carriage did not develop in Europe to anything approaching its extent in the United States, although taxi service may be found in most countries. On the other hand aerial photography has been extensively developed in Europe, often by large and specialized companies; it is used for map making, for the preparation of engineering plans of all kinds and for general exploration work; it has been of particular importance for flood control and river development in India and for map making in Africa. Technical advances in photography indicate an increasing importance for such aviation services in the future. In a number of tropical and semi-tropical countries poison dusting by airplane has been widely used to combat insects or plant pests.

The following table gives summary figures covering all such forms of non-transport commercial aviation in the United States for the years 1926–29; the figures are based on reports of operating companies. Unfortunately, similar figures for Europe are unavailable except in scattered form.

TABLE I

AERIAL SERVICE SUMMARY—UNITED STATES

YEAR	PLANES IN SERVICE	MILES FLOWN	PASSENGERS CARRIED
1920	1,000*	3,136,550	115,163
1921	1,200*	2,907,245†	122,512
1922	450	2,846,037	75,268
1923	429	3,014,611	80,888
1924	217	922,048	48,904
1925	676	5,396,672	205,094
1926	969	7,656,492	380,201
1927	768	8,341,517	476,724
1928	489	8,411,889	526,203
1929	7,408	104,336,560	2,995,530

Source: These figures are taken from the *Aircraft Yearbooks* for 1922–30. They represent figures gathered by the Aeronautical Chamber of Commerce of America through circularization of its members and other operators. No comparable government figures are available. The figures through 1925 are reported as commercial operations of fixed base operators and represent all commercial flying for hire during that period. After 1925, when an appreciable number of transport companies first appeared, the statistics for air transport and aerial service are given separately (for air transport see Table II). For none of the years are air mail figures included. After 1925 the number of operators (companies) reporting are recorded:

for 1926–420
1927–357
1928–168
1929–800 (estimate).

* Estimated.
† Decrease explained by fewer free and more paid flights.

Despite the extent of such developments and the increasing importance of individual flight for sport or business purposes many observers feel that the significant future of commercial aviation lies in the field of common carriage. In Europe the development of air transportation

routes began immediately after the war. Service was instituted on the London-Paris route in the latter part of 1919 and the first German line was opened the same year. Germany, forbidden by the Treaty of Versailles to construct military planes, was free to concentrate all her attention on civil aviation and within a few years had developed an extensive internal network. By 1924 most of the capitals of Europe were connected by air routes. The bulk of the business of European aviation companies has always been passenger traffic, although they have also carried mail and freight. Rates have been comparatively low, arrangements for through rail and airplane service were early made and the development of air transportation has been on the whole gradual and steady.

In the United States, on the other hand, regular air transport can scarcely be said to have existed before 1926, and until the end of 1928 passenger service was of relatively slight importance in comparison to the mail, which constituted the principal traffic. The initiative in the development of commercial air service was taken by the Post Office Department when it established a line between Washington and New York on May 15, 1918. In 1919 plans were made for a transcontinental air mail route, and plane and night rail transcontinental service began on September 8, 1920. Through transcontinental service entirely by air began July 1, 1924, after the lighting of sections of the route for night flying. Thus a series of air routes became available for commercial aviation. During 1925 and 1926 there was considerable popular discussion of the failure of the United States to develop air transportation service comparable to that of European countries. A prominent army officer made charges of corruption and mismanagement of military air services. The ensuing investigations led to the formulation of a five-year military program and the passage of the Air Commerce Act of 1926. This formulation of a policy of regulation and encouragement gave impetus to the development of commercial air transport. The Kelly Bill, passed in 1925, had provided for the contracting out of air mail routes, and at the close of June, 1927, the Transcontinental Airway was transferred to the Department of Commerce; the Post Office Department sold its planes and by September 1, 1927, the entire air mail service was in the hands of private companies. It was some time, however, before these companies developed an extensive passenger or freight business beyond the carriage of mail. With this start and with the added stimulus of the general commercial optimism of 1928 all types of aviation and air transport activities in particular developed at an unprecedented rate. Passenger traffic advanced from its place of minor importance. It had increased less than 50 percent in 1927; suddenly it multiplied sixfold in 1928 and more than tripled again in 1929. One cannot look for the maintenance of this rate of development for any length of time; but it is already clear that commercial air transport has found a definite place for itself in the United States.

A similar outburst of rapid development of air transport facilities has begun to manifest itself in other parts of the world. The South American countries have extensive air routes with most of the planes operated by foreign countries. Mexico is developing an air service. Japan, long hindered by geographic difficulties, has built up a record for civil aviation since 1928.

It is still almost impossible to get accurate statistics as to aviation development. Data are unreliable, particularly for the earlier years. In few countries were air ministries or separate departments established before 1924 or even 1928; in some cases, however, transportation departments have collected a few statistics for aviation, and trade associations in various countries have secured data of considerable value. The information in Table II is perhaps as accurate as can be secured at the present time. In spite of gaps it shows clearly the general trends in the development of commercial aviation.

The striking contrasts between the development of air transport in the United States and that in Europe are due largely to the early adoption by most of the European governments of a policy of direct subsidy payment to transport companies. Particularly in the case of France and Italy a part of the payments to civil transport agencies is really disguised military subsidies, but whatever the purpose large sums have been devoted to the development of air transport. No important governments have engaged directly in the operation of civil transport lines but all have exercised a fairly extensive control over their development. In most countries the granting of subsidies has been contingent upon the rendering by the companies of certain services such as the free carriage of mail and the conformity to certain conditions, most frequently that of use of nationally made motors or materials. The state usually sets up technical specifications and determines methods of ac-

counting. In the early years considerable confusion existed and governments were frequently paying subsidies to each of two companies competing on the same route. Such a condition was both politically and economically undesirable and there set in a period of consolidation, culminating in 1924–25, which resulted in the formation of monopoly transport companies in many countries. In Great Britain Imperial Airways was created in April, 1924, and given a subsidy monopoly until 1934. In Germany the companies formed by previous consolidations were merged in 1926 in the Deutsche Luft Hansa, which now has the monopoly of all regular German air transport. In the Netherlands all European and colonial air transportation was brought under the control of the Koninklijke Luchtvaart Maatschappij, popularly known as the K. L. M. In France consolidation has not gone beyond the creation of four or five important companies, none of which operates over the same routes. The methods of subsidy payment have been varied, ranging from the granting of lump sums to payment on a sliding scale on the basis of mileage flown. Most contracts provide for the repayment of subsidies when total profits exceed certain fixed sums. France, in addition to granting subsidies, has participated in the capitalization and guaranteed the interest on approved loans of its companies. In many European countries, the railroads have also participated in the capitalization of new air companies, a form of indirect state aid where the railroads are government owned. The direct subsidy payments of the various countries have reached rather imposing totals. The British government has estimated that during the eight years ending March 1, 1929, it expended £1,613,380 in direct subsidies. From 1925 through 1929 France appropriated approximately $18,900,000 in subsidies, while during the same period the Luft Hansa in Germany received $17,800,000. These figures of course are exclusive of appropriations for aids to aviation. While there is no indication of a cessation of the granting of subsidies for air transport a decreasing reliance on such aid is to be expected. Thus it may be noted that in 1929 Imperial Airways of Great Britain flew 94 percent more mileage than was required in order to earn its subsidy; this meant that about half the mileage flown during 1929 was unsubsidized. In Germany the subsidy granted the Luft Hansa in 1929 was only half that for 1928. In France and Italy, on the other hand, direct subsidies are still increasing at a fairly rapid rate.

TABLE II

CIVIL AIR TRANSPORT OPERATIONS

YEAR	I MILES OF AIR LINES IN OPERATION	II ANNUAL AIRPLANE MILEAGE IN AIR TRANSPORT	III PASSENGERS CARRIED	IV PASSENGER MILES	V LBS. OF MAIL CARRIED	VI LBS. OF EXPRESS CARRIED	VII TON MILES OF MAIL AND EXPRESS TRAFFIC
UNITED STATES*							
1920	930	549,244			526,578		117,000
1921	3,509	1,554,985			1,120,852		204,000
1922	2,738	1,537,927			1,224,723		302,000
1923	2,842	1,590,637			1,696,896		326,000
1924	3,010	1,522,763			1,500,034		242,000
1925	2,813	2,076,764			232,513†		146,500
1926	8,404	4,318,087	5,782	983,000	810,855	1,733,090**	270,800
1927	9,122	5,870,489	8,679	3,400,000	1,654,165	2,263,580**	574,600
1928	16,667	10,673,450	49,713	15,350,000	4,063,173	1,848,156**	1,082,000
1929	36,000	22,000,000	150,000	48,000,000	7,700,000	2,000,000**	2,458,000
GREAT BRITAIN							
1920	691	644,000	5,799[b]	1,305,000		306,880	30,900
1921	446	225,000	5,256[b]	1,270,000		43,456	4,400
1922	958	717,000	10,393[b]	2,220,000		480,704	42,500
1923	2,096	943,000	15,552[b]	3,010,000		734,944	64,300
1924	1,906	936,000	13,601[b]	2,620,000		1,215,872	104,200
1925		862,000	11,193	2,645,000		1,232,000	147,567
1926	1,368	840,000	16,775	3,746,000	86,464	1,520,960	159,031
1927	2,355	873,000	20,015	4,028,000	114,240	1,348,480	135,882
1928	2,215	1,135,910	29,300	6,380,000	280,692	1,702,400	246,500

TABLE II

(CONTINUED)

YEAR	I MILES OF AIR LINES IN OPERATION	II ANNUAL AIRPLANE MILEAGE IN AIR TRANSPORT	III PASSENGERS CARRIED	IV PASSENGER MILES	V LBS. OF MAIL CARRIED	VI LBS. OF EXPRESS CARRIED	VII TON MILES OF MAIL AND EXPRESS TRAFFIC
FRANCE							
1920	3,487	530,309	1,379	382,000	6,449	106,042	24,980
1921	4,032	1,461,496	9,427	2,562,000	20,902	367,047	84,100
1922	6,217	1,737,785	6,799	2,165,000	88,994	856,515	192,300
1923	5,175	2,103,448	7,822	2,600,000	162,201	1,552,610	284,500
1924	4,684	3,265,300	10,758	3,338,000	242,896	1,487,146	337,500
1925	6,744	2,926,703	14,196	3,895,000	437,857‡	1,635,795	405,000
1926	7,620	3,241,983	13,634	4,090,000	339,080‡	1,692,445	389,300
1927	11,542	3,755,380	15,857	4,795,000	276,215	1,645,643	431,000
1928	14,743	4,531,439	19,698	6,160,000	287,447	2,549,437	639,000
1929	17,497	5,658,418	25,155		316,714	3,532,115	
GERMANY							
1920	894	298,113	3,975	598,000	14,110	12,566	2,000
1921	2,252	1,027,134	6,820	1,028,000		68,343***	5,030
1922	3,224	747,485	7,733	1,165,000	70,548	81,571	11,400
1923	3,606	445,780	8,507	1,282,000	11,023	85,980	7,320
1924	4,149	983,349	13,422§	2,030,000	48,502	156,528	28,410
1925	10,913	3,073,739	55,185§	6,600,000	632,726	1,148,607	122,000
1926	12,673	4,062,060	56,268§	9,090,000	1,214,417	2,329,928	213,000
1927	16,326	6,191,367	102,681	16,720,000	1,054,542	3,225,695	466,500
1928	18,540	6,345,085	111,115	17,820,000	1,057,402	4,170,205	597,500
1929		5,643,458	87,019	3,160,000§§	897,878	4,190,268	141,000§§
ITALY							
1926	2,987	324,859	3,991	657,024	3,466	90,187	10,500
1927	2,896	824,474	9,757	1,998,774	14,769	308,250	36,000
1928	5,368	1,236,913	15,629	3,485,082	46,954	502,757	70,000
1929	8,279	1,839,574	25,298	4,400,000	135,540	998,747	132,000

Source: Wherever possible figures for the respective countries have been secured from official government sources. All figures in columns IV and VII were taken from *Aviation*, vol. xxviii (1930) 602. In the case of all other columns:

For the United States, figures for years 1920 through 1925 taken from U. S., Dept. of Commerce, *Aeronautics Bulletin no. 1*, March 15, 1928, p. 5; for years 1926 through 1929 from U. S., Dept. of Commerce, *Air Commerce Bulletin no. 17*, March 1, 1930.

For Great Britain, figures taken from Great Britain, Air Ministry, Directorate of Civil Aviation, *Annual Report on the Progress of Civil Aviation*, 1927 and 1928.

For France, Germany and Italy figures supplied by the United States Bureau of Foreign and Domestic Commerce. These figures came from special reports and from the following official sources: for France, for Column I years 1920 through 1926 from Comité Français de Propagande Aéronautique, *Le développement et l'état actuel du trafic aérien français* (Paris 1928); for Column II years 1920 through 1926, and Columns III, V, and VI years 1920 through 1927 from Flandin, P. E., "International Air Convention of October 13, 1919," in International Civil Aeronautics Conference, *Papers* for 1928, p. 97–111; for 1929 from *Les ailes*, May 1, 1930. For Germany, for Column I years 1920 through 1924, and Column II years 1920 and 1921, from the Joint Committee of Civil, Aviation of the U. S. Dept. of Commerce and the American Engineering Council, *Civil Aviation, A Report* (New York 1926); for other columns years 1920 through 1926 from Germany, Reichsverkehrministerium, Luftfahrtabteilung, *Deutsche Luftverkehrsstatistik*, 1927; other figures from reports of Deutsche Luft Hansa A. G. For Italy, for 1926 through 1928 from Italy, Aviazione Civile e Traffico Aero, *Statistica della linee aeree civile italiane.*

[b] Passengers or goods carried by stages.

* Before 1926 regular air transport companies were of negligible importance. Records of their operations included in aerial service summary (Table I). Figures in this table for 1920 through 1925 represent air mail operations only.

† After 1925 only mail with postage prepaid at the higher or special air mail rate was carried.

** The bulk of this was private freight of Ford Motor Company carried in its own plane service.

‡ Air mail increased because of military operations in Morocco.

§ Deutsche Luft Hansa A. G. only.

§§ First five months of year only.

*** Mail included.

Except in the case of lines to South and Central America, which are given a guaranteed payment per mile flown irrespective of the traffic, the United States has not granted direct subsidies to aviation companies. The air mail contracts undoubtedly represent a form of concealed subsidy the size of which it is impossible to estimate. The Post Office advertises for bids on each mail route and fixes rates according to offers received; in the past two years the rates have been decreasing. On the whole, passenger transport has been developed by separate com-

panies with the emphasis on safety and comfort rather than on the regularity of service necessary for the air mail. During 1927 and the early part of 1928 there was a rapid multiplication of new companies, but a tendency to consolidation soon manifested itself, being particularly effective at the end of 1928. A brief period of outright mergers was succeeded and overshadowed in importance by the formation of "groups," holding companies and loose associations of air transport operators, aircraft or engine manufacturers and air service operators generally supported by certain financial interests. In some cases railroads interested in the establishment of combined air-rail services have participated in these groups. At present most of the aviation activities in the United States are under the control of four major groups, although there are still many small independent operating and manufacturing companies in existence. The passage of the Watres Bill at the end of April, 1930, presages a form of indirect subsidy to passenger as well as to mail operators and may be expected to establish the transport companies on a more profitable basis.

If the United States government has not fostered the growth of air transport through direct subsidy payment it has like all other governments contributed indirectly through the provisions of various "aids to aviation." Most important among the prerequisites to aviation are the marking of routes and the provision of landing fields. The first steps in this direction were taken by the Post Office and the Army and Navy departments. Under the Air Commerce Act of 1926 the secretary of commerce is responsible for the establishment and maintenance of civil airways, the operation of intermediate landing fields, the provision of signal and radio direction finding apparatus and other necessary aids. The provision of airports has been left to municipal or private enterprise, but the Department of Commerce has encouraged their construction and aided with technical advice. It has rated them according to the adequacy of their equipment but it has not given financial support. Since municipal airports are used for local and recreative as well as for business and interstate flying such an arrangement is easily justified. Several recent court decisions have upheld the use of municipal funds for this purpose. Many cities have built airports in the hope of deriving commercial advantages from them; airports have been financed also by commercial transport companies, by chambers of commerce or by promoters. In 1927, for instance, two large corporations were formed with the purpose of building long chains of modern up to date airports on a commercial basis. The progress of construction has been unsteady; it proceeded rapidly in 1924 and 1925, then slowed down, but was speeded up again by the tour of the country organized in 1927–28 by the Department of Commerce and the Guggenheim Fund. At the end of 1929 there were in the United States 453 municipal airports, 495 commercial and private airports, 285 lighted Department of Commerce intermediate fields and 235 marked auxiliary fields in operation with 1413 additional airports proposed or planned. At the end of the same year there were 36,000 miles of commercial airways in operation, 12,448 of which were lighted for night flying. Considerable progress has been made in the installation of radio communication and radio beacon stations, while the weather bureau has established a number of upper-air meteorological stations in the service of aviation.

Corresponding developments have occurred in most of the European and South American countries, and large sections of Africa and the Orient have been covered with transport routes. In general the marking and lighting of routes and the installation of radio and weather devices have been undertaken and financed by the respective governments with considerable international cooperation in the perfecting of signaling devices and in the standardizing of route indications. The sums spent on these aids to aviation have usually been far in excess of the direct subsidy payments to transport companies. Different governments vary greatly in their policy as to airports. In England the entire expense of the maintenance and operation of Croyden Field, the London airport, and other major airdromes, has been borne by the government, although there are also municipal and commercial fields. In France and Italy too the governments have undertaken the provision of the major airports. In Germany the federal government has established and maintained most of the main routes; the states devote their grants to lesser routes and control devices, and the municipalities have constructed most of the landing fields and terminals. In South America this work has been done partly by the governments, partly by commercial companies. The number and adequacy of such aids to flight have been increasing rapidly in all countries. Provisions for night flying are multiplying in Europe,

while several of the European countries have been particularly active in the development of new radio devices and, especially in the case of Germany, have made the use of radio equipment mandatory on all transport planes.

Every government has developed a more or less elaborate system of the licensing and registering of pilots and aircraft, the drawing up of specifications for craft and air devices, the inspection of planes and the formulation of air traffic rules. A considerable degree of international conformity has been achieved through the activities of the International Convention for Air Navigation set up in 1919, which meets twice each year and maintains a permanent secretariat at Paris.

The growth in all forms of aviation and the consequent increased burden of regulation have led to the establishment of separate air ministries or departments in most countries. In some cases the civil and military air authorities are combined; more frequently they are separate. Regulation has been accepted by the industry without question, indeed has been welcomed as the only source of technical standardization. The obvious public interest in the safety of air transportation makes it probable that government regulation will increase rather than decrease in scope.

The development of commercial aviation was considerably retarded in the early years by the absence or inadequacy of aviation insurance. The first aviation insurance policy was written in England by Lloyds in 1912; but there was no possible basis for real underwriting until after the war. Even then the risks to be insured were so great and unknown that insurance companies hesitated. The realization of the necessity of a distribution of losses led several of the European governments to take an active part in overcoming this objection. The French government in particular as early as 1919 exerted pressure on the aero clubs and through them on the insurance companies to develop aviation policies. A pool was formed but it met with great difficulties in establishing satisfactory rates. In England Lloyds organized an aviation department to prepare an aircraft register and a pilot register as the basis of an insurance schedule. In England too a pool of insurance companies was formed; but despite the caution with which it proceeded most of the companies became discouraged and began to withdraw from aviation insurance activities. Since 1925 it has been built up again, however, and all forms of aviation insurance are now handled by the British Aviation Insurance Group, which writes many policies for the continent as well. Germany had a somewhat similar experience, the German Aviation Pool developing into one of the strongest insurance groups. The fact that the German government requires the taking out of public liability insurance by the operators of all aircraft before granting a license has created a sure market for underwriters. While the operators of transport companies can legally escape liability to their passengers, the Luft Hansa has made an arrangement with the Stuttgart Versicherungs-Verein whereby every passenger is insured to the extent of $5955 by the purchase of his ticket, and facilities for the taking out of additional individual policies are available at the fields. The Scandinavian countries have also been active in the development of aviation insurance. The groups and pools in the different countries work in fairly close cooperation, and an added degree of safety is achieved by the almost universal practise of reinsurance.

In the United States a number of insurance companies made tentative entrance into the aviation field in the post-war years. Their difficulties were augmented by the fact that there was no pilot's register in existence until 1921 and that "gypsy fliers" were particularly numerous in the United States. Early in 1920 the National Aircraft Underwriters Association was formed to assist in the pooling of information. By 1924 and 1925 most of the members had withdrawn and only two companies were writing any aviation insurance. The rapid development of the industry on a regular commercial basis has stimulated a revival of insurance activities; in 1926 it was first possible to obtain complete coverage in one policy; but there is still a hesitancy on the part of some insurance companies to enter the field and a feeling on the part of the industry that its development is being retarded by the lack of facilities and high rates. The great need at present is for the wider development of adequate information on which to base insurance tables. With the multiplication of experience and the increased governmental activities in the licensing and recording of pilots and craft, the requisite knowledge is being rapidly acquired. Within a few years insurance companies should be serving not as checks on the development of aviation but as agencies exerting pressure for the achievement of continually greater safety and regularity.

STUART DAGGETT

AVIATION INDUSTRY. The fundamental problem confronting aeronautics as an industry is the determination of what particular type and range of transportation service it can supply at a price above cost which will attract demand, in competition with, or in addition to, other modes of transportation.

In respect to the medium in which they operate, aircraft possess several great advantages over other modes of transportation. For aircraft alone it is theoretically possible to go from a given point to any other point whatsoever on the surface of the earth without stopping. Practically, moreover, this advantage is not dependent upon the eventual development of a globe-circling cruising range for aircraft. Even in the present stage of technical development, by aircraft alone would it be possible to send goods from any of the great commercial centers of the world to every other without trans-shipment. Theoretically not only direct transit but the shortest route is always available to aircraft. While in practise deviation from the direct line may be expedient, this does not detract appreciably from the advantage of short route flight which aircraft possess as compared with all other means of transport.

Another advantage of aeronautics, its free right of way, is shared with water transportation. Aircraft like water craft may operate wherever their owners will, and can operate without investment or expense for pathways. It is true that both require for safe operation the maintenance of numerous fixed "aids to navigation"; and from the social if not from the private standpoint this constitutes a part of the cost of the service. Moreover the government expense of maintaining airways is undoubtedly now, and will probably remain, higher in proportion to the volume of traffic facilitated than the expense of maintaining waterways, exclusive of river channels. But in either case this right of way cost is far less, considered in relation to the potential traffic for which it provides, than the cost of maintaining highways or railway roadbeds for land transportation. In the social reckoning it makes slight difference that in the case of highway, water and air transportation the maintenance is at government expense, while in the case of rail transportation it is at private expense. In either case it is the source of tremendous social cost which will eventually be reflected in the relative utilization of these various modes of transport.

Offsetting these advantages of air transport are two major handicaps also arising from the peculiarities of the atmospheric medium. The first is the unreliability of the weather. Fog in particular is the nemesis of air navigators. Much research has been devoted to the problem, and advance has been made, most noticeably in the direction of increased precision of "blind flying" by the aid of radio and navigation instruments rather than in the discovery of means for piercing or dissipating the fog.

The second of these handicaps of air transport is the instability of the craft. Until technical developments insure reasonably simple and certain recovery from "stalls" and reasonably safe landing for aircraft after motor trouble, air transport will continue to forfeit a large part of the competitive advantages which its superior speed and flexibility potentially afford it. Aerodynamic research has been active in the investigation of this problem, and progress has already been made especially in the direction of devices for reducing the stalling speed without reducing the pay-load margin. The most promising development has been the invention of the automatic slotted wing, which without appreciably increasing the resistance or decreasing the speed in normal flight allows of a marked increase in the maximum lift in emergencies and at taking off and landing.

The economic possibilities of the use of aircraft as an agency of transport rather than for "stunt" or exhibition purposes or for military manoeuvres are also dependent upon the characteristics of the vehicle of carriage. Here it will be necessary to distinguish sharply between the two basic types of aircraft and their operation—aviation, or the operation of heavier-than-air craft, and aerostation, or the operation of lighter-than-air craft. For the purposes of the discussion which follows we shall disregard lighter-than-air craft because aerostation is still in the experimental stage both in Europe and in America. The airplane has one outstanding feature which gives it its prime advantage as a means of transport: its speed. With a cruising range for commercial craft of approximately 135 miles per hour already achieved and with the prospect of raising this well above 175 miles per hour within a few years, aviation can count upon a superiority over the fastest alternative mode of transport of two or even three to one. It requires no citation of figures either hypothetical or actual to show that such an acceleration in transit will be taken advantage of, on a substantial scale, if the cost is not too high. The im-

portant inquiry then becomes how much greater than the cost of alternative modes of transport the cost of air transport must be, and how much traffic may be forthcoming at this necessarily greater cost.

It will not be possible, obviously, to give exact data of the cost either of construction or of operation of airplanes. Cost varies greatly from manufacturer to manufacturer, from operator to operator and above all from one type of plane to another. Even if detailed cost figures were available, moreover, and it were certain that these represented in every respect the minimum cost thus far realized, they would be useless in the present connection for they would soon be out of date. It is much more appropriate, for present purposes, to consider why the original cost and operating cost of airplanes are comparatively high.

The fundamental reasons are two: the necessity of combining great strength with lightness in the structure and the necessity of great power consumption per pound of load. The first requirement can be met only by the use of costly materials and painstaking, skilled assembly. Neither can be provided in large volume with attendant low unit cost. Even when structural members were chiefly of wood and wings were covered with silk fabric the cost was disproportionately high in comparison with the cost of a land vehicle or water craft of like capacity. The discovery of duralumin, alclad and similar alloys combining lightness with strength has established a trend toward metal construction which has helped somewhat to speed up the manufacturing process but has not materially reduced total cost, on account of the higher cost of raw materials. Moreover the nature of the completed airplane structure necessitates continuing high cost for inspection; and depreciation, despite the utmost care, is bound to be rapid. This is true whether the airplane structure is of wood, wire and fabric, metal frame or all metal. While the advantages are by no means all on one side, the pronounced tendency in current design toward the monoplane, for which some adaptation of the principle of metal construction is particularly suitable, is believed to indicate that this type of construction affords a substantial saving in depreciation.

Table I shows the number of monoplanes and biplanes produced in the United States in 1928 and 1929 and the percentage which each formed of the total output in these years. The figures relate solely to non-military production and exclude, moreover, the output of multi-engined craft, seaplanes and amphibians, in almost all of which metals are unquestionably utilized to an extent greater than average. In partial explanation of the predominance of the biplane it should be noted that it has the prestige of tradition running back to the first successful "flying machine" demonstrated by the Wright brothers in 1903. It is unfortunate that direct figures for the comparative output of the wood, wire and fabric type and the types of planes constructed entirely or in major part of metal cannot be obtained. But in the absence of such data the trend toward the monoplane may perhaps be interpreted as evidence of the substantiality of the saving in depreciation effected by the use of metals in certain items of construction, although it is recognized that other factors have influenced this trend (on this entire question see fifteenth *Annual Report*, National Advisory Committee for Aeronautics, Washington 1929, p. 83, 84, 88).

TABLE I

Year	No. of Monoplanes	No. of Biplanes	Percent of Monoplanes	Percent of Biplanes
1928	1079	2492	30	70
1929	2060	3126	40	60

The second factor in high cost of operation is the high ratio of horse power to weight, which is indispensable to sustained flight. The lift of the craft depends entirely on the speed; high speed means high resistance and high resistance requires heavy power consumption. At very high speeds, however, say 150 miles per hour, the airplane is more efficient in the technical sense of the ratio of output to input of energy than any other vehicle of transport. Its great promise for the future lies in this fact. Nevertheless it does need much more power per pound of weight moved, dead and useful load combined, than is necessitated by, or would be economical for, any other mode of transport. It may be remarked here that, contrary to popular assumption, the ratio of useful load to total weight is not exceptionally low for airplanes; useful load factors of 50 percent are not uncommon in the best current practise—a ratio higher than that ordinarily attained in motor, rail or water transport. But relatively high power consumption per unit of weight exerts exceptional pressure on the airplane designer to keep the weight of engine and plane structure down to a minimum in order to

maximize the margin of pay load. As far as the engine is concerned, the outstanding development in this direction has been the steady improvement and constantly widening adoption of the air cooled motor, chiefly of the radial type. In 1928 no less than 93 percent of all airplane engines produced in the United States were of this type.

Despite the inescapable influence of these factors the industry has succeeded in keeping cost within limits which the superiority of airplane service in speed and flexibility justifies incurring upon a commercial basis. This general conclusion seems warranted from a survey of the development of the aviation industry in America. It is doubtful whether the same deduction could fairly be made from foreign experience. In Europe all the great powers have followed the policy of subsidizing civil aviation for the obvious benefits which it affords as a potential arm of national defense. Indirectly, moreover, by the purchase of military planes, by the lease of airport facilities free or for a nominal sum and by other means, substantial additions are made to these fiscal contributions fostering aviation. It is therefore difficult to estimate to what extent the industry in foreign countries is approaching a position of self-support.

Whatever the extent to which the aeronautical industry in the leading countries of Europe is subsidized, it is certain that in these countries the manufacturers of aircraft are dependent upon government orders, domestic or foreign, for the major portion of their sales. Estimates from reliable sources place the percentage of production for government account, i.e. destined primarily for military purposes, at upwards of 90 percent in France, for example. In this instance a substantial part of these government purchases are made by foreign governments, the major share of French aeronautical exports being destined for Czechoslovakia, Rumania, Greece, Poland and other countries closely allied politically with France. In the case of Germany such purchases for export appear to constitute the bulk of the business, since domestic sales are limited by the fact that the German Republic is prevented by the terms of the Treaty of Versailles from arming itself with military planes.

Furthermore, the dependence of the aircraft industry in Europe, and particularly in continental Europe, upon government orders is reflected in the comparative scale of output in different countries and in the close relationship between variations in budget appropriations for aviation and manufacturing output. In Table II are presented such estimates as it has been possible to assemble regarding the recent development and present extent of the aircraft manufacturing industry abroad. It should be emphasized that the pertinent facts in this matter are not published but are regarded everywhere in Europe as "official secrets" of the most confidential character. It is only through such disclosures as are made in the course of parliamentary debates on the air budget, and from the piecing together of statistics on exports and trade reports of industrial activity and employment, that approximately accurate estimates of the volume of production may be made.

TABLE II

AIRCRAFT INDUSTRY IN EUROPE

YEAR	NUMBER OF MANUFACTURERS			UNITS PRODUCED			VALUE OF AERONAUTICAL PRODUCTS *	VALUE OF AERONAUTICAL EXPORTS *		
	FRANCE	GERMANY	GT. BRIT.	FRANCE	GERMANY	GT. BRIT.	FRANCE	FRANCE	GERMANY	GT. BRIT.
1927		15		1,150	301			8,000		
1928	26			1,440	352	600	27,000	5,650	1,250	6,500
1929	22	12	24	1,900	338	800	32,000	8,577	1,340	10,000

* In thousands of dollars.

Perhaps the most striking facts brought out by the data in this table are first, the comparative extent of the industry among the several countries, which certainly does not reflect comparative technical superiority but only the influence of government support; and second, the relatively great importance of the export trade for all European producers. It is to be borne in mind in the latter connection that the "units produced" refers to complete aircraft, while the value of exports, converted here into dollar values, represents in considerable share engines

and accessories which are sold separately.

The proof that in America the aviation industry as a whole is not only self-supporting but increasingly prosperous may be found in the record of its growth from 1921 through 1929 as indicated by the figures given in Table III.

TABLE III

AIRCRAFT INDUSTRY IN THE UNITED STATES

YEAR	TOTAL VALUE OF PRODUCTS OF AIRCRAFT INDUSTRY †	TOTAL VALUE OF AIRCRAFT ENGINES	NUMBER OF WAGE EARNERS ‡	AIRCRAFT UNITS	
				NUMBER PRODUCED	PERCENT PURCHASED BY GOVERNMENT
1921	$ 9,232,538	$ 5,099,430	1,395	302	99
1923	16,813,875	9,076,806	2,901	587	53
1925	15,653,955	8,102,106	2,701	789	60
1926				1,186	45
1927	31,081,869	14,505,000	4,422	1,995	31
1928	64,662,491	19,915,624		4,346	18
1929	98,000,000 *	26,495,830	22,082	6,034	12

Source: Figures compiled from publications of various government bureaus.

† Prior to 1928 "Aircraft Industry" in common usage and as defined by the U. S. Bureau of the Census included only companies primarily engaged in the manufacture of aircraft; the specialized group manufacturing primarily aircraft engines was considered separately. In 1928 in a special census conducted by the Aeronautics Branch of the Department of Commerce, "Aircraft Industry" was used to include both manufacturers of aircraft and manufacturers of aircraft engines. Succeeding censuses will follow this practise. For this column, therefore, figures for years prior to 1928 have been recomputed from tables in U. S. Census of Manufacturers, *Aircraft Industry*, and *Machinery*, 1927, on the new basis. Figures for 1921 and 1923 do not include value of spare parts, which were not reported separately; it may be estimated that $500,000 would cover this item for either of these years.

‡ Figures for 1921 through 1927 cover employees in establishments primarily engaged in the manufacture of aircraft. Figure for 1929 from a special survey of the U. S. Department of Labor (reported in *Monthly Labor Review*, vol. xxviii, 1929, p. 62–63), made on the new basis, includes employees engaged in manufacture of airplane engines.

* Figure taken from *Aircraft Yearbook* for 1930; it includes $70,953,130, given as the value of aircraft and of aircraft engines and probably accurate, plus a sum for value of parts admittedly an overestimate.

This tremendous growth of the industry, a twentyfold increase in output and a tenfold increase in value product in nine years, could not have been appreciably influenced by other than strictly economic considerations. The government today is buying only twice as many planes as it was a decade ago. Even if it were assumed that the prices paid by the government were exceptionally liberal, even exorbitant, which there is no reason to believe, this fact could not account for the stupendous growth of sales to private purchasers.

It may be suggested that the purchases of airplanes for private use have been artificially stimulated by government aid, as is so generally the case in Europe. The sole possibility of establishing the validity of this contention lies in an analysis of the air mail contracts. That a very large portion of the existing system of commercial air transport has been established in reliance upon, and continues to depend primarily upon, the revenue from carrying the mails is unquestionable. An analysis made by the writer on the basis of computations of postal receipts from air mail poundage indicates that the contract mail payments are approximately 30 percent in excess of the postal receipts from the mail carried, a not inconsiderable indirect subsidy. The amount of this subsidy is decreasing, however, with the periodical readjustment of contract rates by the Post Office Department under the authority reserved in the original contracts.

It is also to be noted that at the outside not more than 20 percent of the total number of airplanes in civilian use at present are operated by commercial air transport enterprises. As the air mail contractors all fall into this category, which also includes many other operators who do not carry mail, it is manifest that a substantial part of the demand for airplanes comes from buyers whose purchases receive no artificial stimulus whatever. No doubt a considerable part of this purely private demand springs from a sporting interest in aviation. But many industrial enterprises have bought airplanes for business use on strictly profit and loss calculations of their serviceability. In addition it was estimated that over 25 percent of the total number of planes registered at the end of 1928 were engaged in "air service" operations, such as taxi service, crop dusting, photography, forest patrol, sight seeing and flying instruction, all on a commercial basis

The rapid expansion of airplane production shown in Table II required a corresponding inflow of capital. In the year ending December 1, 1929, alone the new financing in the United States for the aviation industry exceeded $150,000,000. A computation of the market value of outstanding stock of companies engaged in this field, including manufacturers of airplanes, engines and accessories, air transport operators, air service operators and airport operators, in September, 1928, showed a valuation of over $500,000,000. By September, 1929, this market valuation had mounted to approximately $1,000,000,000. It goes without saying that neither of these sums represents actual capital investment in the production of airplanes and the rendering of aviation services. Both include holding company stocks, and the latter, in particular, reflect the wildly inflated notions of future earning power attendant upon the speculative movement which collapsed in October, 1929. Nevertheless, these figures are indicative of the absorption of aviation securities by the general public. Their significance can be better appreciated if it is remembered that aviation as a field of business enterprise had, properly speaking, no financial status at the beginning of 1926, the entire industry being then represented by a mere score of scattered, struggling airplane manufacturing concerns.

As might have been expected, owing to the speculative risks inherent in any new industry and magnified in one like aviation, the capitalization rests entirely upon stock issues. At least in the case of the companies included in the above computations not a single bond issue was noted. The fact is eloquent testimony of the extent to which the attraction of new capital to the industry has been influenced by anticipated rather than demonstrated earning power. But this was a circumstance which no newborn industry could avoid. That the net profits of some of the enterprises which have the benefit of pioneer experience, competent technical staffs and sound management have been gratifying, even fabulous, has not escaped attention. Unfortunately many new enterprises have been started with little more than ungrounded hopes as their basis: no technical knowledge, no definite commercial prospects and no organizing capacity. Many of these have already failed and more will follow in their footsteps—this is the price of experience which each new generation, so it appears, must purchase for itself.

It is patent that the flow of capital to the industry was excessive. No competitive industry under any conceivable circumstances can justifiably be capitalized, as was this industry in 1928 and most of 1929, at from nine to ten times its gross income. This meant a capitalization of net income, as actually occurred in the case of numerous concerns in the industry, at rates of from 1.6 percent up to 3 percent. It should be noted, moreover, that this happened in a new and extremely speculative industry.

Who were the eager investors? No one knows with certainty. It is known, of course, that five or six influential investment banking houses and at least one prominent commercial banking institution sponsored the issue of a considerable part of this great mass of aviation securities. But whether, in the main, the banking interests were simply taking advantage of the profitable opportunity afforded by the popular mania for aviation stocks, particularly of aviation mergers and holding companies, or whether on the other hand they shared in that mania and so continued to hold a substantial fraction of these stocks, no outsider will ever be able to ascertain. All that can be said is that if the banking interests represent the ultimate and not simply the intermediate source of much of the capital which has flowed into the aviation industry, the industry is in a better position to weather the reaction which inevitably follows such periods of commercial exuberance and financial folly.

The rapid expansion of the industry gave rise also to somewhat similar problems in respect to the recruiting of its personnel. In some ways producers in European countries were in a better position to overcome this difficulty than were American enterprises. The maintenance there, more fully and in greater vigor than in this country, of the tradition of skilled handicraft as a basis for manufacture made readily available, particularly in the circumstances of the disruption of the older established industries following the war, an ample complement of trained artisans. American manufacturing industries, on the other hand, have characteristically and progressively displaced skilled handicraft in productive processes by specialized machinery, until competent mechanics habituated to careful workmanship constitute a comparatively small element in the laboring class. Moreover, with the general conditions of prosperity which have prevailed in the United States since 1923, the class of skilled artisans has not lacked employment opportunities.

The aviation industry has been compelled in

these circumstances to draw its working force away from other industries, and it has had to bid well for the services it desired. It has attracted its corps of machinists, welders, painters and general mechanics in large measure, probably, from the automotive industries. It has drawn upon the furniture industry for its complement of cabinet makers and skilled wood workers. The clothing trades have furnished some part of the industry's requirements for skilled needle workers in the construction of fabric covered wings. But in all of these and in other cases of diversion of employment there are reasons for believing that the organizers of aircraft production in the United States have faced a more difficult task of adaptation and training of the workers to new standards and unfamiliar processes than have European producers. The one advantage of the American as compared with the European industry in respect to recruiting a labor force has been the more migratory habits of American workmen. Both here and abroad the industry has profited in some degree from the allurement which its pioneering and adventurous nature has had for potential workers. This feature seems bound to assure it in the future, moreover, a "first call" upon the better elements of the youthful workers who enter industrial employment every year. It may be noted that this feature also tends to forestall unionization. Flying and even making machines to fly is still more than half "adventure"; and until it becomes thoroughly routine "trade" the prospects of effective labor organization will remain remote.

In substantial part, no doubt, the dependence of the industry upon skilled labor is transitory. Already there are a few manufacturers operating upon a sufficient scale to permit continuous quantity production of standardized parts either in specialized machines or by simple operations not requiring skilled craftsmen in the actual processes of production. And strenuous efforts are being made to organize production still more completely upon this model, thereby relieving the industry of high labor costs. But some standardization of product is indispensable to standardization and simplification of process. In a new industry like aviation the manufacturers are confronted with the necessity of continuous experiment upon the product in order to keep abreast of the development of the art. The constant changes in specifications and design resulting from this unremitting urge to experimentation tend to forestall the development of mechanized processes in which manual skill and careful "fitting" are unnecessary. With the gradual settling down upon the major features of airplane design, however, there seems no reason to suppose that the aviation industry may not be nearly as fully released from dependence upon skilled labor as the automobile industry has been.

The organization of the industry at the inception of its great commercial expansion, which began in 1926, was extremely specialized. For the most part the engine makers, the plane builders, the accessory manufacturers, the transport and service operators represented separate and distinct branches of the industry. Gradually at first, and latterly with accelerated momentum, the integration of these several branches has proceeded. Usually the combination has been achieved through holding companies, although in a few instances outright absorption has brought units in several branches of the industry within a single corporate structure. No single branch has been the nucleus of these mergers. Of the two largest and most comprehensive concerns in the industry one began primarily as a commercial transport business, the other sprang from airplane and more particularly airplane engine manufacture. The accessory manufacturers have apparently retained a greater degree of independence than the other branches of the industry. This is chiefly due to the fact that aircraft accessories are often produced in conjunction with automobile accessories, which constitute the bulk of their business. Despite the example of one or two successful consolidations merging airplane and even engine manufacture with commercial air transport, it cannot be said that there exists a pronounced tendency toward the integration of the manufacturing division of the industry and the operating division. More evident is a tendency toward the formation of "groups," holding companies or loan associations of companies engaged in all branches of aviation. There were four or five such dominant groups in the United States in 1929. This tendency has not manifested itself in European aviation, and even in America, according to a recent computation, there are more than sixty independent manufacturers of aircraft and aircraft engines quite outside of these groups. It is worth noting also that some of these integrated units have been far from successful. Furthermore there appears to be no theoretical likelihood of a general development in that direction, for the advantages which it

offers, especially in a closer check of performance on designing and the provision of a wider distribution of risk, are probably more than offset by the loss of the benefits of specialization.

The development of aircraft marketing agencies has shown, at least in the United States, a pronounced tendency to affiliate with the branch of the industry engaged in the operation of airports. Probably this will continue to be the line of development for some time, at least until the general public becomes better acquainted with the advantages of air travel and better assured of its safety, and until the maintenance of adequate and convenient airports becomes a recognized municipal function. Transport planes are in a special class as far as marketing is concerned; they are distributed almost entirely by direct sale from the factory. The large mergers with a variety of aircraft products to dispose of are tending to build up centralized sales organizations. Other companies have relied either upon dealers in direct touch with the factory or upon special distributors. These independent distributors have played an important part in the financing of airplane sales; and although this is bound to remain for long one of their important functions their value to the industry will probably derive in increasing measure from their other services, such as demonstration, indirectly in connection with "sight-seeir g rides" and air taxi service and directly in connection with sales, and from their inspection and repair work. In Europe up to the present independent marketing agencies have had only a minor development. Possibly the frequent requirement that subsidized air transport operators must purchase their equipment from domestic manufacturers, together with the fact that government purchases constitute such a preponderant part of the current demand, sufficiently accounts for this situation.

The organization of the export market has only recently been undertaken by American manufacturers. The comparative neglect of opportunities for expansion in this sphere is evidenced by the fact that only a minor portion of the American aeronautical production reaches foreign markets: 6 percent by value in 1927, 8 percent in 1928 and 14 percent in 1929. These figures contrast sharply with the 40 percent exportation of Germany and the 25 percent exportation of France. Again, while the United States produced approximately 65 percent of the world output of airplanes in 1928, its share in the world export trade in aeronautical products in that year amounted to only 17 percent. Latterly,

TABLE IV

AMERICAN AERONAUTICAL EXPORTS

	1928			1929		
	NUMBER OF UNITS	VALUE	PERCENT OF TOTAL VALUE	NUMBER OF UNITS	VALUE	PERCENT OF TOTAL VALUE
AIRCRAFT						
Canada	62	$ 685,712	38	80	$ 799,353	14
Mexico	20	190,133	11	85	1,624,501	29
Central & South America	45	467,433	27	113	1,869,398	34
Europe	9	121,428	7	15	252,944	4
Asia	18	238,075	14	57	1,013,730	18
Scattered	8	56,872	3	4	14,554	1
Total	162	1,759,653	100	354	5,574,480	100
ENGINES AND PARTS						
Canada		718,161	37		964,751	27
Mexico		45,935	2		227,232	6
Central & South America		189,594	10		777,041	22
Europe		685,698	36		1,159,422	32
Asia		261,416	14		448,074	12
Scattered		4,266	1		26,536	1
Total		1,905,070	100		3,603,056	100
Grand Total		3,664,723			9,177,536	

Source: Figures for 1928 taken from United States, Bureau of Foreign and Domestic Commerce, *Foreign Commerce and Navigation* for 1928, p. 172. Figures for 1929 taken from United States, Bureau of Foreign and Domestic Commerce, Aeronautics Trade Division, *Special Circular no. 17*, February 8, 1930.

however, American manufacturers have been turning their attention more and more to foreign markets and in 1929 the American share in the aeronautical export trade of the world had increased to about 29 percent. To develop this branch of the trade three fairly distinct types of organization have been evolved. The most thoroughgoing exploitation of foreign trade is achieved through cooperative exporting organizations. The larger mergers have been chiefly responsible for the formation of these sales agencies, designed to handle the varied products of all their constituent producing units. Intensive advertising campaigns and the maintenance of foreign offices, with demonstration and servicing facilities, can ordinarily be undertaken only by these cooperative export marketing agencies. A second method by which manufacturers enter the foreign field is through a traveling representative who sells directly and judges credit risks and sales possibilities as he goes. The third, and perhaps least satisfactory, method of reaching the export demand is through local resident agents. These have the advantage of knowledge of local conditions and exemption from alien prejudice, but they are handicapped severely by the lack of familiarity with the product and with the want of funds for sustaining a long and costly campaign for cultivating a spontaneous demand for aeronautical products.

By these means American aircraft manufacturers have been able recently to expand their export trade even more rapidly than their domestic trade. Table IV shows the amount and destination of American exports in 1928 and 1929. Whether upon a quantity basis or upon a value basis, it will be seen that the export trade more than doubled in these two years. At the same time, the total production of airplanes was increasing only 27 percent (Table III). Perhaps the most important facts disclosed by these figures are the predominance of the markets of the western hemisphere for American aeronautical exports, especially of airplanes; the enormous expansion of the trade with Latin American countries recently; the contrast of the comparative insignificance of the European demand for complete American aircraft with the substantial and growing European demand for American engines and accessories; and the responsiveness of the demand for engines and parts, many of which are used as replacements, to the cumulative increase of American aircraft in service abroad. Up to the present American export has been restricted by the failure of the United States to ratify the International Convention for Air Navigation and thus to secure mutual validation of its certificates of airworthiness. Arrangements for an agreement on this point are in process, and it is to be expected that this obstacle to trade will soon be removed.

It is worthy of note that the principal source of the foreign demand for aircraft is still from governments and governmental agencies. It is reported that sales abroad to private parties and business concerns are the exception. Nevertheless the steady expansion of international commercial air lines will undoubtedly tend to change this situation. The extension of the air mail routes from the United States to several Central and South American countries in recent months was one of the factors responsible for the remarkable increase in the aeronautical trade between these countries. Eventually there seems no reason to doubt that the distribution of the foreign demand between private and governmental sources will approach the distribution of the domestic demand in the United States, although the extent and rapidity of the growth of private and commercial use of aircraft will depend upon the growth of wealth and industry.

This review of the industrial and commercial organization of the aviation industry indicates clearly that it has established for itself an independent status or place in the economic structure. Without overlooking the substantial interests of three or four of the larger automobile manufacturers in certain branches of aviation, one can say definitely that it has not developed as an adjunct of the automobile industry, although it has many similar problems, has had to look to that industry for much of its trained personnel and during the experimental stage was dependent upon it for assistance in perfecting and providing suitable motors. Somewhat similar is its relationship as a transport agency to the railroads. The aviation industry is establishing its own lines, or "channels of trade," and is developing its own distinctive traffic. The experience of one or two railroads which have made attempts to develop aviation as a mere auxiliary to rail transportation lends no support to an opposite conclusion.

In all this, industrial history is repeating itself. A new industry does not generally develop as an adjunct to an old, established line of manufacturing, even though in its early stages it may borrow extensively from its predecessors. Not only does each new industry present new tech-

nical and commercial problems, but the managers and directors of older industries seem to lose their adventurous inclinations when they become absorbed in the complicated routine of their own affairs. There must then be new adventurers, adventurers with money, with skill, with labor, to found new industries. The aviation industry has been no exception. It illustrates again the resourcefulness and ingenuity of human kind in "outwitting" nature and still more in escaping from the dead hand of social custom and inertia.

MYRON W. WATKINS

AVIATION LAW. The invention and successful operation of navigable airships at the beginning of the present century promptly called for new rules of law to govern the unusual conditions thus created. In the early days of the airship it was natural that the absence of statute and treaty should be met by recourse to the general principles of common and civil law and of customary international law. Within the past decade, however, there has been a rapid growth of regulatory legislation in both fields; and the adoption of a body of specialized rules governing every phase of the use of aircraft, private and commercial, as well as domestic and international, may be expected.

International Regulations. The regulation of aerial navigation was first attempted at a congress of European nations which met at Paris in 1910 at the invitation of the French government. An elaborate code of air law was drafted, but it failed of adoption because of disagreement among the leading powers as to the use of the air space over national territory by foreign aircraft. Nine years later, during the deliberations of the Peace Conference, the Supreme Council appointed a commission of seventeen members to study the problem and to prepare a draft of an international convention. On October 13, 1919, the Convention for the Regulation of Aerial Navigation, or International Flying Convention, providing a uniform rule for the navigation of aircraft across national lines, was signed at Paris by twenty-six states, including the United States. The convention, which has become the basis of the law of aviation in most countries, has not yet been ratified by the United States; it had, however, been ratified by nineteen countries by March, 1929, and seven others had adhered to it.

Article 1 of this convention recognizes that "every Power has complete and exclusive sovereignty over the air space above its territory," including adjacent territorial waters. Article 2 provides that each state undertakes in time of peace to accord freedom of innocent passage above its territory to the aircraft of the contracting states without distinction of nationality, provided the conditions laid down in the convention are observed. Succeeding articles contain provisions with respect to the courses to be followed by foreign airships, the determination of the nationality of aircraft by their ownership and registration, a minimum standard of competence of the officers and crew of the airship and the restriction of the right of passage to the aircraft of the contracting states. The convention further creates an International Commission for Air Navigation, organized so as to secure predominant voting power to the Five Great Powers and placed under the direction of the League of Nations. The duty of the commission is to consider proposals for amending the convention, to collect information concerning air navigation, to publish official maps and to prepare opinions. Customs fraud is prevented by a provision that aircraft must depart from and alight in specially designated "customs aerodromes" exclusively and that frontiers may be crossed only at points indicated on aeronautical maps. The papers of the aircraft are to be examined at the customs aerodromes after the manner of the examination in port of the papers of a marine vessel. Two protocols amending the convention have been adopted under date of October 27, 1922, and June 30, 1923, both coming into force on December 14, 1926; the effect of these amendments has been to permit states, parties to the convention, to enter into separate agreements with other states not parties and also to change the composition of the International Commission so as to substitute for the control of the five powers a single vote for each of the states represented. On June 15, 1929, a conference of forty-three states called by the International Commission for Air Navigation adopted resolutions embodying a draft protocol of amendments to Articles 3, 5, 7, 15, 34, 37, 41 and 42 of the convention of 1919, the primary object of which was to facilitate the ratification of the convention by the signatory states which had not yet ratified it and the adhesion of non-contracting states. The presence at the conference of seventeen states, including the United States, not then parties to the convention would indicate the probability of their becoming parties in due time.

Because of its failure to ratify the International Convention it has become necessary for the United States to obtain special permission from foreign governments when American airmen undertake flights into or across foreign territory, unless such flights are covered by the terms of existing treaties. The Air Commerce Act of 1926, section 6, makes provision for reciprocity of treatment in accordance with which the secretary of commerce may authorize aircraft registered under the law of a foreign nation and not a part of its armed forces to be navigated in the United States if the foreign nation grants a similar privilege in respect to aircraft of the United States. The act provides further that ports of entry be designated for civil aircraft from abroad and that the customs and public health laws be applied to civil air navigation to such extent and under such conditions as the secretary of the treasury shall deem necessary. Similar provisions cover the admission of aliens arriving in the country by aircraft under the terms of the immigration laws. Navigation by foreign military aircraft is specifically forbidden, and the general principle is laid down that the United States has complete sovereignty of the air space over its territory.

More recently, at the Sixth International Conference of American States held at Havana, the United States signed on February 20, 1928, the Pan-American Convention on Commercial Aviation. The provisions of this convention follow in general the lines of the International Convention of 1919. Without setting up a commission corresponding to that created by the convention of 1919 the parties obligate themselves to cooperate in the distribution of meteorological information, in the establishment of a uniform system of signals and in the promotion through the agency of the Pan-American Union of uniform laws and regulations governing aerial navigation.

The rules of law governing aerial navigation in peace time give way in time of war to the complete sovereignty of each belligerent over the air space over its territory. In pursuance of a resolution of the Washington Conference, February 4, 1922, a commission of jurists met at The Hague from December 11, 1922, to February 19, 1923, and adopted a draft code of sixty-two articles dealing with the classification of marks of aircraft, the rights of neutral powers to forbid or to regulate the entrance of belligerent aircraft within their jurisdiction, the lawfulness of the position of airmen as combatants, the instruments and methods of aerial warfare, including bombardment, and with visit and search, capture and condemnation. Pending the adoption of this draft code the older law of war, which is in part customary and in part embodied in The Hague Conventions of 1907, still prevails; but because of the controversies concerning the application of the old law to aircraft the whole question of the law of aerial warfare is still debatable.

National Regulations. Before 1914 a number of European countries had passed laws regulating aviation. Since the war these laws have in most cases been considerably modified. The comprehensive French law of 1913, for instance, has been supplemented by later decrees, one of June 6, 1919, providing for elaborate administrative control over and coordination of commerce and manufacture. In like manner the legislation of Germany, Italy, Holland and other countries, which antedates the International Convention of 1919, has been modified to bring it into accord with that agreement. In countries where there was no prior legislation the provisions of the convention of 1919 have in general formed the basis of national legislation. Thus the British Air Navigation Act of 1920 carries with it the ratification of the International Convention of 1919 and gives the government power to carry out the convention by issuing orders in council covering the details of licensing, inspection, commerce and traffic regulations. Absolute liability for damage is imposed, and penalties are prescribed for dangerous flying.

In the United States the separate states have in the exercise of their police powers the right to regulate the use and operation of aircraft to the extent necessary to protect the lives and property of their citizens, provided only that such regulation does not encroach upon the power of Congress to regulate interstate and foreign commerce and that the state statutes are not in violation of the due process of law required by the Fourteenth Amendment. The individual states were thus called upon to determine rights of jurisdiction and property in the air, the former on the part of the state itself as against the United States, the latter on the part of the owner of the particular area of land as against those who might seek to fly over such land. It was also necessary to adjust the ordinary law of torts to meet the special condition of injury caused by aircraft to persons or property on the land beneath. Again special provisions were required to make clear the jurisdiction of the state over crimes or torts committed by aircraft in passage

as well as provisions fixing the criminal liability of aircraft. Lastly there were the problems of the registration of aircraft, the licensing of pilots and the prescription of special "rules of the road."

The problems thus presented to the individual states were at first solved, if solved at all, by each state without reference to the action of others. The resulting confusion created a demand for uniform state legislation; and by 1929 twenty states had adopted the Uniform State Law of Aeronautics drafted by the Committee on Air Law of the American Bar Association. According to this law the sovereignty in the space above the lands and waters of a particular state is declared to rest in the state except where granted to and assumed by the United States pursuant to a constitutional grant from the people of the state. On the other hand the ownership of the space above the lands and waters of the state is declared to be vested in the several owners of the surface beneath, subject to a right of flight by others which is held to be lawful unless it is conducted at such low altitude as to interfere with the then existing use to which the land or water or the space above it is put by the owner, or unless the flight is so conducted as to involve imminent danger to persons or property on the land or water beneath. The landing of aircraft is unlawful without consent of the owner except in the case of a forced landing. The owner of the aircraft is made absolutely liable, irrespective of negligence, for injuries to persons or property on the land or water beneath, unless the injury is caused in whole or in part by the negligence of the person injured or of the owner of the property injured. Considerable objection to this section of the law has developed; it was omitted by three of the twenty states which have adopted the Uniform Law, and the American Bar Association is considering this objection in preparing its code of aeronautical law. Under the existing Uniform Law liability in cases of collision of one aircraft with another is determined by the rules of law applicable to torts on land. Crimes and torts committed during flight and contracts and other legal relations entered into are to be governed by the laws of the state as if committed or entered into on land. It is made a misdemeanor to engage in trick or acrobatic flying or to fly at dangerously low levels over a thickly inhabited area or over a public gathering, and it is also a misdemeanor while in flight to kill or to attempt to kill birds or animals.

Since the Uniform Law contains no provision for the licensing of pilots or the registration of aircraft, further drafts of proposed legislation have been submitted. These suggest either that a federal license be required for all pilots and all aircraft operating within the state or, where state constitutional requirements prevent this, that a state or a federal license be required, leaving it to the state to arrange that its license requirements be made identical with the federal requirements. At the end of 1929 eighteen states had adopted a law requiring a federal license for all pilots, seven had required either federal or state license and only nine states had no license requirements.

The federal government has the power to regulate all aircraft operating in interstate commerce and thus has control over most commercial aviation. Since 1926, when the Bingham-Parker bill, known by title as the Air Commerce Act of 1926, was passed, the federal government has taken an active part in the regulation of aviation. The act makes it the duty of the secretary of commerce to foster air navigation; he is also authorized to determine upon regulations for the registration of aircraft and for the issuance of registration, aircraft and airman certificates. Penalties are imposed upon the navigation of aircraft in violation of the rules thus issued. Pursuant to the provisions of this act the Department of Commerce has issued a series of "Air Commerce Regulations" setting forth in detail such matters as the conditions of the licensing and registration of aircraft. These regulations also restrict acrobatic flying, prescribe fixed minimum heights over congested areas and set forth other similar air traffic rules which apply to all civil and commercial aircraft licensed or unlicensed, whether flown privately or engaged in interstate or intrastate commerce. Finally it may be noted that the powers of the secretary of commerce are sufficiently broad to enable him to impose the necessary restrictions upon civil aircraft in the event of war between the United States and another state.

CHARLES G. FENWICK

See: TRANSPORTATION; INVENTION; INDUSTRIAL REVOLUTION; ECONOMIC ORGANIZATION; SUBSIDIES; RAILROADS; AUTOMOBILE INDUSTRY; RADIO; SPORTS; WARFARE; ARMAMENTS; DISARMAMENT; WORLD WAR.

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AVOIDANCE. In virtually every primitive society behavior toward certain relatives by blood or marriage follows prescribed patterns A male Crow Indian, for example, is friendly to a brother-in-law but circumspect in discussing sexual matters before him; he indulges in ribaldry with his sister-in-law and offers presents to his father's kin whenever he secures booty. Since such terms as "brother" and "sister" are generally extended to more remote kin, all one's relatives may thus be treated according to fixed standards. Such predetermined conduct falls largely into two categories, which have been labeled respectively "avoidance" and "privileged familiarity."

Of the avoidance rules affecting blood relatives, that regarding the relation between brother and sister is most interesting. In some Melanesian groups they never utter each other's name, and neither may enter a hut occupied by the other; in Lepers' Island the separation occurs about the time of the girl's puberty, when she leaves the parental roof to forestall contact with her brother. "If after the separation brother and sister meet on a path, the girl will get out of the way and both will look down so as to avoid seeing one another. . . . The avoidance continues even after death, for if one dies the other will not enter the house where the corpse is lying but will mourn outside" (Rivers, W. H. R., *The History of Melanesian Society*, 2 vols., Cambridge, Eng. 1914, vol. i, p. 213). Such rigor has not been noted in America, but several Plains tribes, such as the Crow and Arapaho,

forbid adult siblings of opposite sex to converse freely. It is likely that this rule occurs more commonly than printed evidence suggests and has merely eluded the attention of observers.

Parent-in-law tabus are instances of avoidance most commonly recorded. That between son-in-law and mother-in-law is especially intense and widespread. It may be accompanied by avoidance between a man and his wife's father, but this obligation is almost uniformly less rigorous. On the other hand a woman and her husband's father (or elder kinsmen) have social relations strictly tabued in certain areas (Siberia), but the distribution of this rule does not approximate that of the mother-in-law and son-in-law tabu, which is found in many parts of America, Africa and Australia. A Crow Indian never speaks to his wife's mother nor she to him; neither is supposed to utter the other's name; and any word forming part of the name of one is superseded in the other's speech by a roundabout phrase. Among the Lango Negroes of the Upper Nile a man will go so far as to send messages to prevent his wife's mother from getting into his way when he has to pass through her village.

Because of their striking character these customs, especially of the last mentioned type, have elicited various interpretations. Freud tries to solve the problem in psychoanalytic terms, but insuperable difficulties arise from the fact that even the most widespread avoidance rules are capriciously distributed. In North America, where alone systematic inquiries have been instituted, large groups of tribes lack avoidance rules and sometimes neighboring and kindred peoples present striking differences. Thus the Navajo strictly forbid speech between mother-in-law and son-in-law, but the Hopi next door to them have no such custom; and of the vast Shoshonean family the Lemhi in central Idaho seem to be the solitary member to recognize the tabu. It is therefore inadmissible to suppose that the relationship between these affinities intrinsically precipitates a tabu. Tylor proposed a correlation with rules of residence: when the young couple took up their abode with the wife's kin he assumed that there would be a tabu between son-in-law and mother-in-law; while the contrary rule of residence would be linked with a tabu between daughter-in-law and father-in-law. Tylor attempted a statistical proof, which fails partly because he assumes gratuitously that all occurrences are due to independent development, partly from the deficiency of his empirical data. His idea, however, is suggestive and should be tested in the light of present knowledge and with proper regard to the influence of diffusion. One psychological interpretation, while by no means covering the whole range of avoidance, seems valid for many relevant phenomena. Avoidance rules apply largely to persons of opposite sex who by the tribal rules are forbidden to mate, while licensed familiarity obtains between potential mates.

ROBERT H. LOWIE

See: TABU; KINSHIP; INCEST.

Consult: Thurnwald, Richard, "Meidung" in *Real-lexikon der Vorgeschichte*, vol. viii, p. 121–31; Goldenweiser, A. A., "Totemism" in *Journal of American Folk-Lore*, vol. xxiii (1910) 179–293; Tylor, E. B., "On a Method of Investigating the Development of Institutions" in Anthropological Institute of Great Britain and Ireland, *Journal*, vol. xviii (1888) 245–72; Frazer, J. G., *Psyche's Task* (2nd ed. London 1913) p. 75–91; Freud, Sigmund, *Totem und Tabu* (Leipsic 1913), tr. by A. A. Brill (London 1919) p. 16–28; Lowie, R. H., *Primitive Society* (New York 1920) p. 91–97.

AXELROD, PAVEL BORISSOVICH (1850–1928), Russian social democrat. The son of a Jewish innkeeper, he was strongly influenced in early life by the writings of Lassalle. Originally he was a follower of Bakunin, but in 1880, when "Land and Freedom," the organization of the *Narodniki*, split into a faction advocating political struggle and the terror and a faction opposed to them, he joined the latter. He soon became a Marxist, however, and with Plekhanov and three others founded the first Russian social democratic organization, "The Emancipation of Labor" (1883). Throughout the eighties and nineties Axelrod was active in the Marxist propaganda in Russia and participated in the controversies which the Marxians waged with the *Narodniki*. In the late nineties he strongly opposed that Marxian group which represented the antipolitical tendency called "economism." He was one of the six founders and first editors of the famous social democratic organ *Iskra* (The Spark). At the second party congress of the Russian social democrats at London in 1903 he sided against Lenin with the minority which afterward became the Menshevik faction and party. Throughout the rest of his life he played a prominent role in developing the policies of the Mensheviks. In the Revolution of 1905 Axelrod advocated collaboration with the bourgeois liberals, and in 1908 was prominent in the movement to reorganize the Russian party along western European lines. It was hoped that

after this reconstruction the party would be in a position to supplement its underground operations with a range of activities tolerated by the law. During the World War he attended the internationalist congress at Zimmerwald and signed its manifesto. He did not return to Russia in 1917 and denounced the seizure of power by the Bolsheviks. In the last years of his life Axelrod was a member of the executive committee of the Second International. Together with Plekhanov he was regarded as personifying "westernist" elements in Russian Marxism. While Plekhanov's talents lay in the field of theory, Axelrod was chiefly concerned with problems of organization and tactics.

MAX EASTMAN

Consult: Kautsky, Karl, "Was uns Axelrod gab" in *Die Gesellschaft*, vol. ii (1925) pt. ii, 117–25; Dan, Theodor, "Paul Axelrod" in *Die Gesellschaft*, vol. v (1928) pt. i, 485–96; Martow, J., and Dan, Theodor, *Geschichte der russischen Sozialdemokratie*, tr. from the Russian by Alexander Stein (Berlin 1926).

AYALA, BALTASAR (1548–84), Spanish jurist and political theorist. He was born in Antwerp, educated at Louvain and served under the Prince of Parma as the advocate general of the armies of Philip II in the Netherlands. He was a devout Catholic and had some influence in the royalist party opposed to the Prince of Orange, in whom the Flemish party of independence saw a symbol of political and religious liberty. In 1582 he published the famous *De jure et officiis bellicis et disciplina militari* (Douai; tr. by J. P. Bate, with an introduction on the life and work of Ayala by John Westlake, 2 vols., in Classics of International Law series, Washington 1912), to which Grotius often refers in his *De jure belli*. Although he was strongly influenced by the Spanish juristic school of Franciscus of Victoria, for political reasons Ayala differed from it on a number of important issues.

Ayala recognized several legitimate objectives of war, such as the avenging of injustice, national defense, the suppression of infidels who oppose the spread of the Gospel, and the punishment of rebellious subjects. Ayala maintained that the punishment of rebels is not subject to the laws of war and that the principle *fides servanda hostis* need not be observed in this connection. The prince as a divine representative is endowed with absolute power and has the right to resort even to cruelty in the treatment of a rebellious subject: *legitimus enim princeps quamvis crudelis et iniquus*. The people cannot judge the prince; only the pope can force him to conform to the laws of justice. Regicide is impious. There is no religious objection to the execution of a subject who rises against the king.

FERNANDO DE LOS RÍOS

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AYCOCK, CHARLES BRANTLEY (1859–1912), American political leader and educational reformer. He was born in North Carolina and graduated from the university of that state in 1880. As the Democratic nominee for governor in 1900 Aycock led a notable campaign to secure an amendment to the state constitution, requiring literacy as a qualification for suffrage. It was largely through his influence as governor (1901–04) that North Carolina committed itself to a program of universal education.

Although eminent as lawyer and orator it was as leader of the movement for public education that Aycock rendered his most effective service to his state and to the South as a whole. He organized and led campaigns to arouse the people on the subject of better schools. Larger legislative appropriations for schools, a lengthened term, increased local school taxes, facilities for training teachers, increases in teachers' salaries, the reduction of illiteracy, the establishment of rural high schools, the enactment of compulsory school laws—these improvements and others resulted from the revival movement which he inspired and led. Much of the progress in schools for both whites and blacks which North Carolina has made since 1900 and the present friendly race relations in that state are due to the work of Aycock and of those who followed his leadership.

EDGAR W. KNIGHT

Consult: Connor, R. D. W., and Poe, Clarence, *The Life and Speeches of Charles Brantley Aycock* (New York 1912); Knight, Edgar W., *Public School Education in North Carolina* (Boston 1916); Alderman, E. A., "Charles Brantley Aycock" in *Southern Pioneers in Social Interpretation*, ed. by H. W. Odum (Chapel Hill, N. C. 1925).

AZCÁRATE, GUMERSINDO DE (1840–1917), Spanish jurist, sociologist and social reformer. He was professor of comparative law at the University of Madrid. His works on law include: *Constitución inglesa y la política del continente* (Madrid 1878), *El régimen parla-*

mentario en la práctica (Madrid 1885, 2nd ed. Madrid 1892), in which he analyzed and advocated the English parliamentary system, and *Ensayo sobre la historia del derecho de propriedad* (3 vols., Madrid 1879–83), which included a study of the Irish agrarian law of 1881. In *Estudios económicos y sociales* (Madrid 1876) and *El problema social* (Madrid 1881) he espoused state intervention and social reform. The theoretical foundation of his work is to be found in *Concepto de la sociología y un estudio sobre los deberes de la riqueza* (Madrid 1904). Deriving his ideas from the organismic-spiritualistic school represented by Krause, he concluded that "the laws of the evolution of society," the study of which he understood to be the peculiar object of sociology, could not resemble the laws of physics, since they governed a spiritual organism.

In 1903 the Spanish government founded the Instituto de Reformas Sociales to formulate programs for social legislation. Azcárate was appointed a member of this organization and soon became president, an office which he held until his death. He participated in the initiation and elaboration of projects, later approved by parliament, concerning the labor of women and children, apprenticeship contracts, industrial accidents, Sunday rest, councils of industrial conciliation and arbitration, cheap housing and factory inspection. Azcárate enjoyed a personal prestige great enough to make him virtually a final arbitrator between employees and employers.

FERNANDO DE LOS RÍOS

Consult: Posada, Adolfo, *España en crisis; la política* (Madrid 1923); Worms, René, "Gumersindo de Azcárate" in *Revue internationale de sociologie*, vol. xxvi (1918) 113–16.

AZEGLIO, MASSIMO D' (1798–1866), author, statesman and one of the most prominent leaders of the Italian national movement. D'Azeglio's political writings, especially his *Degli ultimi casi di Romagna* (Florence 1846), made him famous throughout Italy. He had no faith in the power of the papacy to regenerate the Italian people and vigorously opposed Mazzini's republican revolutionary propaganda which was carried on in secret and resulted merely in sporadic local revolts. D'Azeglio believed that the restoration and independence of Italy were to be achieved by instituting conservative constitutional reforms in the various Italian principalities and by forming a united front of all the Italian states against foreign domination. He rendered his greatest service to the national cause as prime minister of Piedmont under Victor Emanuel II (1849–52). He assured the maintenance of the constitution, paved Cavour's path to power, restored credit after the depression of 1848–49 and in general prepared Piedmont to become the center of the victorious national movement. He retired from the government with a position of great authority, remained one of the foremost figures in the national, constitutionalist movement and was often consulted by Cavour. After Italian unity had been achieved in 1861, D'Azeglio in his senate speeches, his political monographs and in the pages of his *I miei ricordi* (2 vols., Florence 1867; tr. by Count Maffei as *Recollections of Massimo d'Azeglio*, London 1868) emphasized the necessity for the reconstruction of national education.

PIETRO SILVA

Works: *Scritti postumi*, ed. by Matteo Ricci (Florence 1871, 2nd ed. 1872); *Scritti politici e letterari*, ed. by Marco Tabarrini, 2 vols. (Florence 1872).

Consult: Vaccalluzzo, Nunzio, *Massimo d'Azeglio* (Rome 1925); Rubris, Marco de, *L'araldo della vigilia*, Biblioteca Storica series, vol. cxxi (Turin 1929); Battesti, D., *Un patriote Italien: Massimo d'Azeglio, sa vie, ses écrits, son rôle politique* (Bourges 1913); King, Bolton, *History of Italian Unity, 1814–71*, 2 vols. (London 1899).

AZO, mediaeval jurist. He studied Roman law in his native Bologna under Johannes Bassianus and became the leading teacher in the law school which was then—toward the end of the twelfth century—at its zenith. Azo had many famous pupils, and business records in the years 1190–1220 indicate that he also participated to some extent in public life. His known writings consist of glosses, tending to expand into proper apparatus, on various parts of the *Corpus juris civilis*; dogmatic expositions, title by title (*Summae*), written before 1211, of *Cod.* i–ix and of the *Institutes*; *Brocardica*, a collection of legal maxims with commentaries; *Distinctiones* and possibly *Quaestiones*. To these must be added his *Lectura in codicem* preserved by a pupil from a course Azo delivered between 1229 and 1235. By far the most influential are the two *Summae*, which with supplements from other hands formed for centuries the civilian's textbook, as is evidenced by the saying *Chi non ha Azzo, non vada a Palazzo*. Striking proof of their influence outside Italy is found in Bracton's treatise as well as in the numerous manuscripts

of an early French translation, *La somme Ace.*

Azo's work must be judged as the culmination of the school of Glossators who carried the exegesis of Justinian to the furthest point attainable by pure dialectic. How much he took over from predecessors and whether he made due acknowledgment are minor questions. His work superseded the older literature and survived in spite of Accursius. His style is clear, his thought logical and his knowledge of the texts profound. Less purely academic than the earliest Glossators he refers often to customary and feudal law, canon law and the *Lombarda.*

F. DE ZULUETA

Consult: Savigny, F. C. von, *Geschichte des römischen Rechts im Mittelalter*, 7 vols. (2nd ed. Heidelberg 1834–51) vol. v, p. 1–44; Maitland, F. W., *Select Passages from the Works of Bracton and Azo*, Selden Society Publications, vol. viii (London 1894); Vinogradoff, Paul, *Roman Law in Medieval Europe* (2nd ed. Oxford 1929).

AZUNI, DOMENICO ALBERTO (1749–1827), Sardinian jurist and writer on the history of the international law of the sea. His first considerable work was on mercantile law, the *Dizionario universale ragionato della giurisprudenza mercantile* (Nice 1786). In 1795 appeared his *Sistema universale dei principi del diritto marittimo dell' Europa* (2 vols., Florence 1795–96), a work more important in the two French versions of 1798 (translated, with Azuni's additions, by J. M. Digeon) and 1805, which were accepted as authoritative commentaries by the French tribunals of prize and secured for Azuni the presidency of the Imperial (Napoleonic) Court of Genoa. From the angle of scholarship Azuni's discussions of the history of the Rhodian laws and the Consolato were important. Politically he voiced the moderate continental opposition to many aspects of the British naval policies of his day, especially in regard to "paper blockades," exaggerated definitions of contraband and the treatment of neutral commerce. When discussing French practise Azuni showed indulgence and even subservience.

S. MACCOBY

Consult: Manno, Giuseppe, "Azuni" in *Biografia degli Italiani illustri nelle scienze, lettere ed arti del secolo XVIII*, ed. by Emilio de Tipaldo, 8 vols. (Venice 1834) vol. i, p. 26–33.

BAADER, FRANZ XAVER VON (1765–1841), German Catholic theologian and social philosopher. He practised medicine for a short while and later devoted himself to science. In the years 1792 to 1796 he studied mineralogy in England, where he became acquainted with English rationalism, particularly with that of Godwin. The clash of these rationalist ideas with his own mystic bent involved Baader in a spiritual conflict which is described in his diaries for this period. Upon his return to Germany he delved into the mystic writings of St. Martin, Böhme and the Jewish Kabbala. In 1826 he was appointed professor of philosophy and speculative theology at the University of Munich, a position which he held until his death.

Baader's mysticism is of the late romantic period. Like Adam Müller, Clemens Brentano and Friedrich Schlegel he reacted to the individualistic rationalism of the eighteenth century by accepting Catholic politics and the Christian social doctrine. According to Baader society must possess organic unity and every part forego its individuality for the sake of the whole. Such unity cannot be achieved by social contract, but must be based upon the principle of love. "Natural" society necessarily implies general voluntary submission to a highest authority. Authority and faith, the fundamental elements of such society, are found only in the universal church. Civil and political societies governed by law and force are merely temporary empirical arrangements. By making the individual independent and by establishing a direct relation between him and the government, modern states undermine genuine communal life. It is unwise to replace *Stände* and guilds, the intermediary organs between the government and the individual, with the unsubstantial makeshift of representative assemblies.

Although Baader was a reactionary in politics his views on social problems were rather advanced for his age. He maintained that revolutionary sentiments are due not to the shortcomings of the government but to the impoverishment of the masses. This condition is a result of the system of economic liberalism and machine production which, while increasing the national product, has nevertheless materially reduced the welfare of the greater part of the people. "An adequate wage should surely be the care of a well managed estate quite as much as good, cheap production." The worker is enslaved by money power and the constitutional system founded on property. Moreover his growing indifference to religion robs him of spiritual security. The social problem may be solved by granting the proletariat a system of

representation similar to that enjoyed by the serfs in the Middle Ages. This involves government by estates to the assemblies of which elected delegates of the workers would present their petitions and grievances. As an immediate measure Baader advocated the revival of the old clerical office of deacon with its function of extending relief to the poor; this would protect them from the influence of wrangling lawyers and materialistic demagogues.

GOTTFRIED SALOMON

Works: *Sämtliche Werke*, ed. by Franz Hoffman and others, 16 vols. (Leipsic 1850–60); *Franz von Baaders Schriften zur Gesellschaftsphilosophie*, ed. by Johannes Sauter, Herdflamme series, vol. xiv (Jena 1925), containing also a biographical sketch of Baader.

Consult: Baumgardt, David, *Franz von Baader und die philosophische Romantik* (Halle 1927).

BAAL SHEM TOB, ISRAEL. *See* CHASSIDISM.

BABBAGE, CHARLES (1792–1871), English mathematician, mechanician and economist. He graduated from the University of Cambridge in 1814, held the Lucasian chair of mathematics at this university in 1828–39 and was cofounder of the Analytical, Astronomical and Statistical societies and of the British Association for the Advancement of Science. As the result of years of experimentation he devised a great calculating "engine" which won almost universal acclaim from the scientists of his day.

Babbage's work on machinery and manufactures is perhaps the first adequate exposition of the economic bearings of machine industry. Although characterized by J. A. Blanqui as a "hymn in honor of the machine" it is a far more critical analysis of the factory system than is Andrew Ure's *Philosophy of Manufactures* (London 1835). The book is distinguished by the wide range and accuracy of the concrete material used as well as by keen analysis. His observations on the advantages of division of labor improved upon those of Adam Smith, and his distinctions between machine and tool were later adopted by Karl Marx.

W. H. DAWSON

Important works: *On the Economy of Machinery and Manufactures* (London 1832, 4th ed. London 1835); *Reflections on the Decline of Science in England and on Some of Its Causes* (London 1830); *A Comparative View of the Various Institutions for the Assurance of Lives* (London 1826); *Thoughts on the Principles of Taxation, with reference to a Property Tax and Its Exceptions* (London 1848, 3rd ed. London 1853); *The Exposition of 1851, or Views of the Industry, the Science and the Government of England* (London 1851). His last work, *Passages from the Life of a Philosopher* (London 1864), is autobiographical.

BABELON, ERNEST (1854–1924), French numismatist. He endeavored, by consolidating the results of past numismatic research and by interpretative studies, to rescue his subject from a sterile, though dignified, isolation and to induce the fuller exploitation of its resources by historians, archaeologists and economists. His *Traité des monnaies grecques et romaines* (8 vols., Paris 1901–28), left incomplete at his death, unfortunately lacked those volumes in which he intended to give a generalized account of early media of exchange, the evolution of money and coins, the weight units used for coins and the monetary laws of the Greek and Roman world. His study, *Les origines de la monnaie considerées au point de vue économique et historique* (Paris 1897), covers most of this ground and also includes a discussion of the quantity and value of precious metals in ancient times. Babelon made the novel suggestion, well supported by evidence, that where social organization was not strongly developed, coining was permitted to individuals without restriction; he traced the rise of the state monopoly of coining and found that it was contemporaneous with the concentration of political power. In *La théorie féodale de la monnaie* (Paris 1908) he made a study of the shift of the coinage prerogative from the time of the fall of the Roman Empire in western Europe to the end of the fourteenth century, and of the monetary policy of the period. The right of coinage granted to the lords, lay and ecclesiastic, was exploited by them for profit in the same spirit as their monopoly of milling corn, and public opinion was aroused only when it was felt that the right had been immoderately used. Reduction of the bullion content of the coins was preferred to direct imposts as a method of raising public funds: it was more speedy, less clear in its incidence and less open to partiality in administration.

ARTHUR ROBERT BURNS

Consult: Julian, Camille, "L'oeuvre d'Ernest Babelon" in *Revue de deux mondes*, vol. xix, période 7 (1924) 795–806; Cagnat, René, "La vie et les travaux d' Ernest Babelon" in *Revue internationale de l'enseignement*, vol. lxxx (1926) 321–33, and vol. lxxxi (1926) 18–23.

BABEUF, FRANÇOIS NOEL. *See* BABOUVISM.

BABOUVISM. The conspiracy of the Equals or Babouvists was the last episode in the French Revolution and the first in the history of socialism in France if not in the world. Its leaders were Babeuf, Buonarroti, Darthé, Sylvain Maréchal, Clémence, Germain, Bertrand and Didier.

François Noel Babeuf (1760–97) spent an impoverished youth in the service of the landed aristocracy and in 1789 ardently embraced the principles of the revolution. He published first the *Correspondant Picard*, which attacked the wealthy, then the *Journal de la liberté de la presse* (or the *Tribun du peuple*, as it was later called), in which he attacked both Robespierre and the enemies of the revolution. After being imprisoned several times he organized the club of the Panthéon enlisting those who subscribed to complete equality. When this society was dissolved by Bonaparte under order of the Directory, February 27, 1796, Babeuf, Buonarroti and others formed a plot to overthrow the government by violence. Their purpose was to enforce the constitution of 1793 and to introduce community of property. The leaders of the plot, which first took root among the troops and found strong support in the Parisian workshops, expected to profit by the general misery and by the hatred inspired by the profiteers, but they were betrayed by one of the soldiers who had joined their ranks. After a trial that lasted three months Babeuf and Darthé were condemned to death and executed; seven others were exiled.

The tenets of the Babouvists are contained in several documents. The *Manifeste des égaux* proclaimed that "the French Revolution is only the precursor of another, far greater revolution which will be the last" and stated that the Babouvists were "striving toward something more sublime, more equitable, than the agrarian law: common property." The *Analyse de la doctrine de Babeuf* imposed upon all men the obligation to work and assigned them equal rights in the enjoyment of property. The *Acte d'insurrection* furnished the plan for the uprising. After the victory society was to be reorganized according to the *décrets*, which provided for the reversion of all property to the community through the suppression of inheritance rights and prohibited private individuals from trading with foreign countries.

In short the Babouvists would have instituted by force a communistic regime based on an extension, in the economic sphere, of the principles of the constitution of 1793. The French Revolution established merely political equality; socially it represented the triumph of small scale private property, which had been achieved in the beginning by the parceling out of the feudal estates. Thus, while the Babouvists took as their point of departure the principles of the Revolution, their communism was actually an innovation.

Babouvism had a profound influence on the ideology of the secret societies in France during the first half of the nineteenth century. Its connection with Blanquism is obvious. The only important survivor of the plot, Filippo Michele Buonarroti (1761–1837), was the connecting link between the Babouvists and the socialists of the July monarchy. He carried on propaganda in Belgium and in Switzerland, and his *Conspiration pour l'égalité* furnished a popularization of the doctrines of the *Manifeste*. Babouvist ideas cropped up again in the Revolution of 1848 and in the Paris Commune of 1871. An authoritative judgment on Babouvism was pronounced by Marx and Engels, who attributed the "necessary failure of these early attempts at direct action to the embryonic state of the proletariat and to the absence of the material conditions for its emancipation."

PAUL LOUIS

See: FRENCH REVOLUTION; SOCIALISM; COMMUNISM; DIRECT ACTION.

Consult: Babeuf, F. N., *La doctrine des égaux* (Paris 1906), reprints of excerpts ed. by Albert Thomas; Buonarroti, Filippo, *Conspiration pour l'égalité*, 2 vols. (Brussels 1828, last printing Paris 1850), tr. by Bronterre O'Brien as *Buonarroti's History of Babeuf's Conspiracy for Equality* (London 1838), containing reprints of many documents; Advielle, Victor, *Histoire de Gracchus Babeuf et du babouvisme*, 2 vols. (Paris 1884); Dommanget, Maurice, *Babeuf et la conjuration des égaux* (Paris 1922); Robiquet, Paul Pierre, *Buonarroti et la secte des égaux* (Paris 1910); Espinas, Alfred, *La philosophie sociale du XVIIIe siècle et la révolution* (Paris 1898) p. 195–401; Sencier, G., *Le babouvisme après Babeuf* (Paris 1912); Weatherly, U. G., "Babeuf's Place in the History of Socialism" in American Economic Association, *Publications*, 3rd ser., vol. viii (1907) 113–24.

BABY FARMING. *See* CHILD, NEGLECTED.

BACALAN, ANDRÉ TIMOTHÉE ISAAC DE (1736–69), French writer on economic subjects. He was counselor to the *parlement* of Bordeaux, intendant for commerce and professor at the University of Bordeaux. He wrote several short works, of which none was published except *Paradoxes philosophiques sur la*

liberté du commerce entre les nations (written 1764, printed Paris 1903). Probably the first clear formulation of the doctrines of the liberal school, it furnishes the essential elements of the theory of international trade and the theoretical basis of free trade policy. Bacalan states that international trade is an exchange of commodities, money having only an instrumental and regulative function. If at any moment the balance of trade is favorable, the influx of money raises prices and automatically restores equilibrium. The prosperity of one country is never dangerous to other countries because the economic interests of all nations are harmonious. He urges therefore the immediate adoption of unlimited free trade, without waiting for the simultaneous action of other countries.

These ideas of Bacalan may have been inspired by the liberal tendencies of the intellectual circles of Bordeaux, where Montesquieu had a large following, and by the Bordeaux commercial traditions, which favored unrestricted foreign trade. Bacalan was also familiar with Hume's essays on commercial jealousy and balance of trade. He was original, however, in taking a clearer position than that of Hume and in resolutely proclaiming the wisdom of a free trade policy even if it be only unilateral.

ROGER PICARD

Consult: Sauvaire-Jourdan, F., *Isaac de Bacalan et les ideés libre-échangistes en France* (Paris 1903).

BACH, ALEXANDER (1813–93), Austrian statesman. A brilliant Viennese lawyer, Bach was closely connected with the democratic revolution of 1848, but after its collapse he made common cause with the absolutist and reactionary forces. As minister of justice and later of the interior he became the most active force in the renewed absolutism of the Emperor Francis Joseph and was made a baron in 1854. His leadership was uncontested and the whole system came to be known as the "Bach system." It was characterized by three outstanding measures. The Germanization of the entire empire was undertaken and was now extended without any check even into Hungary; a real army of German and Germanized Czech officials, popularly known as the "Bach Hussars," flooded the country. The former police and spy system was extended, strengthened and ultimately carried so far that the chief of the system, Bach himself, came under police control. By the Concordat of 1855, a "printed Canossa," the empire was practically surrendered to Catholicism and especially to the Jesuits. Some of the economic measures of the Bach system, however, were progressive. The liberation of the serfs was carried on with great energy, and although the land reforms freeing the peasants from their feudal obligations were incomplete the newly created free peasantry gave fresh vitality to the state. Communication and commerce were also developed and protected. On the whole, however, the system was felt to be an anachronistic burden. The defeats of the imperial army on the Italian battlefields put an end to it, and the period of constitutional experimentation began. Bach was compelled to resign (1859) and was later appointed Austrian ambassador to the Holy See.

OSCAR JÁSZI

Consult: Redlich, Josef, *Das österreichische Staats- und Reichsproblem*, 2 vols. (Leipsic 1920–26) vol. i, sect. iv, and *Emperor Francis Joseph of Austria* (London 1929).

BACHEM, JOSEF and JULIUS, German journalists. Josef Bachem (1821–93) entered his father's publishing house in 1840, where he manifested inflexible determination and unusual skill in business. He soon succeeded in setting a definite Catholic stamp upon all the publications of the house and under his purposeful leadership the concern became a veritable center for cultural and political propaganda. After acquiring sole ownership of the business Bachem was able to assume the risk of founding a newspaper. The *Kölnische Blätter* (1860–69), known since 1869 as the *Kölnische Volkszeitung*, was from the very beginning the leading organ of the Catholic movement and later of the Center party in the Rhineland. Although Bachem edited the paper only through the first decade of its existence he is justly known as the *Altmeister* of the Catholic press.

Julius Bachem (1845–1918) succeeded his uncle Josef as editor of the *Kölnische Volkszeitung* in 1869. He had studied law in preparation for a commercial career, but turned to journalism and politics, giving himself unreservedly to the Catholic cause. He devoted his life to "the spread of the Center idea and the advocacy of Center policies" and was particularly important at the time of the Kulturkampf. In his work on the newspaper he endeavored to preserve a consistent editorial policy despite confiscations, adverse court judgments and financial difficulties (during the Franco-Prussian War). His reports in the paper constitute a

primary source for the day to day history of the Center party. Julius Bachem was a member of the municipal assembly of Cologne (1875–1901) and of the Prussian Diet (1876–91). In 1906 he supported the view that the Center party should not limit its political activity to the defense of the interests of Catholicism. Some years after his death the newspaper passed into the hands of the Center party of the Rhineland.

HANS TRAUB

Consult: Bachem, Karl, *Josef Bachem, die Geschichte der katholischen Presse und ein Beitrag zur Entwicklung der katholischen Bewegung in Deutschland*, 2 vols. (Cologne 1912), and *Vorgeschichte, Geschichte und Politik der deutschen Zentrumspartei*, vols. i–vi (Cologne 1927–29); Hölscher, Georg, *Hundert Jahre J. P. Bachem* (Cologne 1918).

BACHILLER Y MORALES, ANTONIO (1812–89), Cuban social scientist and public figure. He was professor of philosophy and law, and dean of the faculty of philosophy at Havana. The range of Bachiller's scholarly interests was truly encyclopaedic, but he was best known for his *Cuba primitiva* (2nd ed. Havana 1883) which deals with the language, customs and history of the West Indian aborigines. His preoccupation with the early history of the American continent was reflected also in his treatise on the Maya language, and in *Antigüedades americanas* (Havana 1845), concerned with the European discoveries of America before Columbus. Bachiller studied also the evolution of landed property in Cuba and adjoining countries, and enriched the cultural history of his country with a three-volume collection of data and observations on public education and university reform (*Apuntes para la historia de las letras y de la instrucción pública de la isla de Cuba*, Havana 1859–61). In connection with his university courses he published *Elementos de la filosofía del derecho* (Havana 1857), in which he displayed an unusual familiarity with German philosophy; Bachiller's views in this field were closely akin to those of Krause.

JORGE ROA

Consult: Montoro, R., *Elogio del Sr. D. A. Bachiller y Morales* (Havana 1889); Heredias, N., in University of Havana, Faculty of Letters and Science, *Discoursos leídos* (Havana 1901) p. 47–59.

BACHOFEN, JOHANN JAKOB (1815–87), Swiss anthropologist and cultural historian. He was intended by his father for mercantile pursuits but managed to enter on classical and philological studies instead. He studied law and legal history at Basel, Berlin (where he came under the influence of Savigny), Oxford, Cambridge and Paris. Upon his return to Basel he was appointed to the chair of Roman law at the university, but he resigned in 1844 to devote himself to the history of art, in which his interest had been aroused by his visits to the museums in Italy during his travels. Soon thereafter he accepted a judgeship in the criminal court at Basel, a position which he held until 1877, fulfilling his duties conscientiously.

Bachofen's major interests, however, were his researches in ancient Roman law and Greek antiquity. His most important works belong to these fields: *Ausgewählte Lehren des römischen Civilrechts* (Bonn 1848); *Versuch über die Gräbersymbolik der Alten* (Basel 1859, 2nd ed. 1925); *Das lykische Volk und seine Bedeutung für die Entwicklung des Altertums* (Freiburg 1862); *Die Sage von Tanaquil, eine Untersuchung über den Orientalismus in Rom und Italien* (Freiburg 1870). But the work upon which his reputation chiefly rests is *Das Mutterrecht: eine Untersuchung über die Gynaikokratie der alten Welt nach ihrer religiösen und rechtlichen Natur* (Stuttgart 1861, 2nd ed. 1897), which was followed by the two-volume study, *Antiquarische Briefe, vornehmlich zur Kenntnis der ältesten Verwandtschaftsbegriffe* (Strasbourg 1880–86). In his investigations Bachofen found numerous myths and reports of a very early matriarchate, especially of the descent of name and property in the maternal line. Attempting to explain its origin he collected and compared with amazing persistence all the relevant material in the writings of the ancients. The existence of a matriarchate among many of the ancient peoples had been noted as early as Herodotus; and the reports of travelers and missionaries indicated a similar social organization among the American Indians. While this had been previously regarded as an aberration from the social norm and as a cultural freak, Bachofen considered that it had probably been common among all primitive peoples at a certain stage in their development. He concluded that mankind had once lived in a state of unregulated promiscuity and that the difficulty of establishing paternity in such a society had led to the tracing of descent through the mother and to her dominant role in the community.

More recent anthropological investigations have partially disproved this theory. Regardless of the validity of his thesis, however, Bachofen

must be given credit for having pointed out the existence of a historical sequence among the various marriage and family forms and for having thereby stimulated present day interest and research in the family customs of primitive peoples.

HEINRICH CUNOW

Consult: For selections from Bachofen's works, *Der Mythus von Orient und Occident*, edited by Manfred Schroeter (Munich 1926), with an introduction by Alfred Bäumler containing a bibliography; and *Johann Jakob Bachofen, Mutterrecht und Urreligion*, ed. by Rudolf Marx (Leipsic 1927). See also Andler, C., "J. J. Bachofen, son oeuvre et sa méthode" in *Revue de l'histoire des religions*, vol. xciii (1926) 224–41; Deubel, W., "Der Kampf um Johann Jakob Bachofen" in *Preussiche Jahrbücher*, vol. ccix (1926) 66–75; Fehrle, Eugen, "Johann Jakob Bachofen und das Mutterrecht" in *Neue Heidelberger Jahrbücher* (1927) 1–18; Winter, Karl Ernst, "Bachofen-Renaissance" in *Zeitschrift für die gesamte Staatswissenschaft*, vol. lxxxv (1928) 316–42.

BACK-TO-THE-LAND MOVEMENTS. The movement of population from the cities to the country has been a feature of almost every period of society. Although it has not been so marked as the movement from the country to the city it has been a continuous phenomenon which has taken many forms. Back-to-the-land movements include both the return to agriculture as an occupation and the return to the country as a place in which to live. This drift to the country has usually represented a trend toward social decentralization. Unlike migrations from the country to the city, back-to-the-land movements have frequently been organized and actively promoted by governments and by other groups.

Diverse as the forms of these movements have been, certain main types can be distinguished. Most outstanding is the continual migration from other occupations to agriculture, which is just as constant as the migration from agriculture to other occupations, although it has rarely been as widespread. The individuals who make up this movement may be former agriculturists or their children; men who have left agriculture in order to earn money to buy farms and who return when they have saved a sum sufficient for a first payment. Another group consists of those who have acquired wealth in cities and desire to become manorial lords, plantation owners and large landlords. There are also the aged, the failures or misfits in city life and the sick, as well as those who return to the country in search of an occupation during years of agricultural prosperity.

A second type of back-to-the-land movement is characterized by measures adopted by various governments to encourage settlers to take up land holdings. The homestead acts and the soldier settlement acts were laws of this kind. The settlement of military *coloni*, the Licinian laws, the works of the Gracchi in ancient Rome and the policy of the Tokugawa administration in Japan (1600–1850) are other examples of such measures. Movements of this nature are apt to arise in a number of situations. They occur when countries are undeveloped, menaced by enemies or laid waste by war; when agricultural lands are ravaged by invaders who capture large numbers of former agriculturists; or when a nation tries to make terms with invaders by offering certain agricultural settlements or farms. Occasionally such movements arise when a large urban proletariat forces the confiscation of lands from landlords. This last situation may be observed in land settlements following confiscations by the Gracchi in the Roman Republic or in certain back-to-the-land movements in contemporary Russia.

Closely associated with this type of movement is a third, in which governments also participate. Following conspicuous periods of over-urbanization, of numerous civil and foreign wars, or in general periods of high social mobility which exhaust the nervous energy of a population, governments often force their peoples back to the land and require those on the land to stay. This type of back-to-the-land movement is always connected with other measures designed to reduce the mobility of the population and to secure peace and social stability. Such measures contributed to the development of the colonate in the latter days of the Roman Empire in the West, and similar aims inspired the drastic measures to preserve caste distinctions taken by the Tokugawa administration in Japan after 1600. In this form back-to-the-land movements are followed and accompanied by an extreme regimentation of society, low mobility and a type of military civil social organization in which every individual has his recognized place and a responsibility to some superior, whether a house father, village head, manorial lord or king.

A fourth type of back-to-the-land movement develops with the scattering of thousands of urbanites in catastrophes which make a previous complex urban society impossible. The population of the city of Rome decreased from a million to fifty thousand with the decline of

the empire in the West. In a similar manner the revolutions and the pauperization after the World War caused thousands, where circumstances allowed, to leave the cities.

In recent years two other trends in the back-to-the-land movement have become apparent: the movement of urban populations to the residential suburbs and the removal of industry to the smaller cities. According to H. P. Douglass, between 1910 and 1920, while New York City grew 17.9 percent in population and all suburbs 24.2 percent, suburbs of New York City with a population numbering less than 10,000 grew 43.5 percent and those with 10,000 to 25,000 inhabitants grew 31.6 percent. This movement has been going on rapidly since 1900, principally as a result of improvements in transportation. Similar tendencies exist in other large cities in the United States and Europe. The decentralization of industry has resulted in the development of industrial suburbs, and the location of small factories in cities near sources of power or raw materials. Heavy industries, which require considerable ground space and are not readily adapted to many storied factories, lead the way in the formation of industrial suburbs. The increased cost of transportation is causing some refining of the heavy raw materials, especially minerals, at the centers of production.

The break up of the agricultural village and the greater development of the geographically isolated family farm may be considered still another type of back-to-the-land movement. Interesting examples of such movements are found in New England in the seventeenth and eighteenth centuries and in Russia in the period 1905–17; Mormon villages in Utah are undergoing a similar break up at the present time. The transformation of the English countryside as a result of the enclosures may well serve as another illustration. Developments of this kind are conditioned by a variety of factors such as changes in methods of agricultural production which make profitable larger farms. Favorable governmental policies are also important in the development of these movements.

With the advance in modern means of transportation and communication the cultural differences between city and country tend to disappear. In the western hemisphere the "rurban" town is developing, with its chain stores, syndicated newspapers and metropolitan amusements. The country town itself is beginning to assume some of the characteristics of the city. Urban standards and ideals are gradually invading even the isolated farm. These considerations affect the general significance of back-to-the-land movements.

CARLE C. ZIMMERMAN

See: MOBILITY, SOCIAL; MIGRATION; URBANIZATION; RURAL EXODUS; LAND SETTLEMENT; ALLOTMENTS; SMALL HOLDINGS; COUNTRY LIFE MOVEMENT; RURAL SOCIETY; VILLAGE; FARM; LOCALIZATION OF INDUSTRY.

Consult: Laur, E., Konig, R., and Nater, H., *Mesures à lutter contre la dépopulation des communes montagnardes et rurales*, Bulletin of the secretariat of the Union Suisse des Paysans (Brougg 1919); Vandervelde, Émile, *L'exode rural et le retour aux champs* (Paris 1903) pt. ii; Zimmerman, C. C., and others, "The Migration to Towns and Cities" in *American Journal of Sociology*, vol. xxxii (1926–27) 450–55, and vol. xxxiii (1927–28) 105–09 and 237–41; Middle West Utilities Company, *America's New Frontier* (Chicago 1929); Douglass, H. P., *The Suburban Trend* (New York 1925).

BACKWARD COUNTRIES. Backwardness is a relative term as applied to peoples and regions and commonly implies the assumption that the standards of comparison are ourselves, that is, in the present time, a small but dominant group of western European states and others sprung from, or modeled after, them. Language difficulties have always been prominent in these composite judgments, as indicated by the words *barbaros* and *barbarus* in the classic tongues, signifying unintelligible speech. It is interesting to note, however, that most of those who were "barbarians" to the Greeks and Romans were tribesmen bound together by kinship rather than by political government in the strict territorial sense. As in subsequent times, the "barbarous" language was in such cases the symbol as well as the vehicle of an inconvenient type of social organization which did not lend itself to the introduction of the conquerors' ideas and ways, including a system of taxation and the economic basis for it.

A new historic barrier and basis of judgment became important with the rise of the two great proselytizing religions, Christianity and Mohammedanism. This figured largely in the Arab conquests and also in the advance of Christendom into the two thirds of Europe never held by ancient Rome. Most of the oversea ventures which ushered in the modern era had as one of their aims the carrying of true religion to those who sat in darkness. From the beginning, however, the means if not the ends of religious proselytism have been largely economic. Thus the mediaeval monks spread agriculture and

industry in order to create favorable conditions for their religious propaganda, and the Spanish missions in the Americas owed their success in large measure to the attack upon the cultural differences as a whole, including the material ones. In the contemporary world the missionary among backward peoples is likewise as much an evangelist of our mode of life in general, including our political ideas and habits of consumption, as he is of any set of theological beliefs or religious practises. How well integrated the notions of advancement and backwardness have become is suggested by the word progress.

Backwardness has a tangible economic basis in the fact that each well defined region has its own measurable possibilities for the maintenance of human numbers, standards of living and fixed property. From an economic standpoint a backward people might be defined as one which makes ineffective use of its resources. For example, in Tunis before the French occupation large areas of perfectly good agricultural land were used to maintain a sparse, disorderly and illiterate herding population whose property was small per person and almost negligible per square mile. Effective territorial specialization was impossible in the absence of suitable means of communication, and these could not be provided by the loose central framework of government superimposed upon the tribes. Even the frontiers were vague, as many of the outlying nomadic and semi-nomadic tribes did not occupy exactly the same lands from year to year. The great phosphate beds of southern Tunis, now bringing in millions in profits annually for a product which rejuvenates the fields of Europe, lay untouched.

Considered from this practical angle of neglected opportunities, the connection of backwardness with imperialism becomes clear. Remote peoples—even those living under primitive conditions—are not backward in the context of their own culture. It is only when these regions are brought into the circle of economic imperialism that their neglected economic possibilities take on significance.

The improvement of deep sea navigation on the eve of modern times gradually brought the important geographic areas of the world into direct contact for the first time. Europe's political influence upon the more remote parts of Asia and Africa had been sporadic or absent, and there had been little pressure to reorganize distant areas as either markets or sources of goods. Early modern trading companies and colonizing groups attempted this reorganization on a large scale, changing fauna, flora and political and social organization where the old conditions stood in the way of profitable commerce. The slave trade even transported populations and with them social and sanitation problems as well as more strictly economic ones. The development of the latest phase of this process was coincident with the age of cheap steel, which got well under way during the final third of the nineteenth century. Together with an expansion of the exchanges of consumers' goods there has grown up an export of capital itself in its related aspects of investments and instruments of production. Factories have sprung up in India and China to turn out such products as the coarser textiles in competition with Europe, forcing home manufacturers to shift constantly to finer grades or entirely new lines. New tariff walls have arisen to protect home markets, the search for privileged markets farther away has revived and the customs barriers have even been extended to these distant possessions. A constantly increasing demand in industrialized countries for metals, fuels, fertilizers and raw materials, like rubber, which cannot be produced economically in the north temperate zone, has led trained agriculturists, scientists and engineers as well as traders to attempt a reorganization of backward regions to meet these opportunities and pay profits.

There is more than the technical competency of occidental society back of this expansion of capitalism. From the standpoint of the backward peoples it is important to note that the now inevitable direct contact with more elaborate standards of living furnishes an answering demand which is the other side of sales pressure. Forcible occupation—even the mildest form of protectorate—tends to grow increasingly unpopular through the rise of local nationalism and the resentment of natives at seeing outsiders in the best paid and most honorific positions. Nevertheless it is rare for a people once thoroughly exposed to what Europeans call progress to wish for the return of the old conditions. For example, the native opposition in French Indo-China is disconcertingly French in its premises and logic and faultlessly French in its expressions by leaders.

But transformations of backward regions to produce goods for one set of Europeans or Americans and profits for another have not been an unmixed benefit for the natives. The con-

solidation of grazing lands, small farms or primitive village systems into huge plantations to raise sugar, rubber, fruits, etc., for export often reduces the earlier holders to wage labor for a livelihood. If they have sold their land at prices based on the previous type of exploitation they reap nothing from the later rise in values. Temporarily, at least, there is likely to be no active competition for their labor, with the result that wage scales fall below the European subsistence level and tend to shut out the native by poverty from the supposed blessings of "progress." The "White Man's Burden" is a noble idea; but it needs to be borne with some disinterestedness and not too much prejudice. That profit seeking individuals and corporations with influence at home in the ministries and parliaments are not the ideal instruments is rather obvious. This is particularly clear where European property law has been set up suddenly by force, fraud or misunderstanding of customary rights, and the natives are then accused of the want of a foresight they have never had any chance to acquire because they sell their land and sink into indigence.

This same general type of reasoning applies to the political as well as to the economic organization of backward states. Neglected resources are opportunities for profit only under conditions of tolerable political stability. Men who risk their capital, time or persons in these situations try to restrict the hazards as far as possible to the natural ones. A government like that of old Tunis borrows money or grants a concession in return for real or promised advantages to itself or its people. In either case capital, protected by agreement, goes into the backward country to stay for a period of years before recovery is possible. As often as not these loans and concessions are solicited by the native government itself for application to public improvements which will make economic effort more effective. If the government then acts in bad faith or fails through incompetency to meet the stipulated conditions, there is trouble —in the end perhaps intervention by the government of the lenders or concessionaires. The people of the backward country, as taxpayers or otherwise, can usually get the benefits of such capital at lower rates if the transaction is somehow underwritten by the more powerful government as a guaranty that the terms of the agreement will be lived up to; but this creates a direct menace of intervention in case of non-fulfilment. On the other hand the high rates necessary to cover the risk, if the possible trickery of irresponsible statesmen enters as a factor, are a direct burden on the investment and a threat to its success. Since enterprise is attracted to these undeveloped regions in any case, this question of control and guaranties is an important one. Thus we get the political problem of the "White Man's Burden," which is theoretically one of bringing all governments up to certain standards of honesty, competency and responsibility. In practise, pressure from lenders, concessionaires and foreign business people is likely to stress the responsibility of a weak government to outsiders rather than to its own citizens and taxpayers.

The practical solutions proposed for this group of problems may be summarized as follows: first, the gradual improvement and standardization of human organization in its various technical aspects in different parts of the world; second, the propagation of a keener ethical sense which will prevent the exploitation of millions of people under the more or less honest pretense of improving or punishing their irresponsible governments; and third, the growth of international administrative machinery which will provide more disinterested agencies of control, both to prevent unfortunate incidents from arising through the clash of cultures and to see that justice is done in cases where these have occurred in spite of such precautions.

MELVIN M. KNIGHT

See: CIVILIZATION; COLONIES; IMPERIALISM; RAW MATERIALS; CONCESSIONS; SPHERES OF INFLUENCE; PROTECTORATE; MANDATE; FORCED LABOR; FOREIGN INVESTMENT; MISSIONS; INTERVENTION; DIPLOMATIC PROTECTION.

Consult: Bryce, James, *The Relations of the Advanced and the Backward Races of Mankind* (Oxford 1902); Johnston, H. H., *The Backward Peoples and our Relations with Them* (London 1920); Reinsch, P. S., *Colonial Government* (New York 1902); Cromer, Evelyn Baring, *Ancient and Modern Imperialism* (London 1910); Seillière, Ernest, *L'impérialisme démocratique*, La Philosophie de L'Impérialisme series, vol. iii (Paris 1907); Buell, R. L., *International Relations* (rev. ed. New York 1929) pt. ii; Lindley, M. F., *The Acquisition and Government of Backward Territory in International Law* (London 1926).

BACON, FRANCIS (1561–1626), English philosopher and statesman. Bacon's preeminence in natural science and philosophy has always raised the presumption that he had ideas of equal value upon the social sciences, if only they could be found. The world has been slow to reach the modern conclusion that in the social

sciences his contribution has been indirect rather than direct—a method of thinking necessarily applicable to the social sciences rather than a system of thought. He left no extended treatise on political science, law, statesmanship, history or political economy. Nevertheless if it is true, as Spinoza held, that Bacon advanced what we call the social sciences further than all the scholars who preceded him because by putting himself to "the school of experience" he transformed these disciplines from explanations of conditions into investigations of them, his indirect influence upon the development of modern political and economic thought has been far reaching and fundamental.

Only three of the social sciences seem today to reckon his direct influence important. To the theory of education Bacon's *New Atlantis* and the "Arts of Teaching" (*Advancement of Learning*, bk. vi, ch. iv) contributed vitally. The former treated education as the main prop of the ideal state, the link binding man to man and man to God. The latter was a strong plea for organized teaching in schools and colleges and laid down the modern idea that instead of insisting on a uniform curriculum these institutions should permit a choice of studies adapted to the needs of the pupil. To Bacon many attribute the liberalization of English and even of continental education in the seventeenth century. He was influential in widening the scope of learning and his insistence upon the importance of the natural sciences was the entering wedge making possible their inclusion in the normal curriculum. Many sociologists look upon the *New Atlantis* as an important step in the growth of a broader conception of human relations. Finally the historians have long found Bacon's *Life of Henry VII* a model biography in style and design, and this work has even been called the first attempt at philosophical history in the language. To all these views there has been much dissent.

The direct influence of Bacon upon economics has been generally regarded as slight, if not negligible; nevertheless statements scattered through his works prove that he appreciated the fallacy of the mercantilistic notions on gold and that he recognized the necessity of encouraging agriculture as a means of increasing national wealth; he was also one of the first modern writers to defend the legitimacy of interest charges. It has been thought that the *Essays* and a speech delivered in 1620 show that Bacon appreciated the future of the British Empire. Certainly his plan for the conciliation of Ireland, his scheme for the effecting of a gradual but complete union with Scotland and his attitude toward colonial expansion indicate considerable political vision.

Bacon's career in legal office has been the subject of much dispute. He was made solicitor general in 1607 and attorney general in 1013. From this date until 1621 (in 1618 he was appointed lord chancellor) he was one of the first public men in the kingdom, but his record during these years—particularly in connection with the Peachams trial and the Commendams case and in his conflicts with Coke—has been generally regarded as characterized by servility to the crown. In 1621 he was charged with corruption and deprived of office. Bacon's ability as a lawyer is unquestioned but his influence on English legal thinking has been held inconsiderable. His legal career has, however, not been fully known or understood. As a political thinker Bacon has been regarded by modern liberal and democratic thinkers as the champion of monarchy and of benevolent despotism and the enemy of parliaments. It has been charged that while he sought to free the mind from the "idols" of the past, he wished to preserve in the state and in society the rule of the many by the few, to establish the supremacy in social relations of the educated over the ignorant. Thus he became a refuge of the conservatives in the nineteenth century and to the twentieth merely an anachronism. It seems probable, however, that the concept of the state ordinarily ascribed to him has been based on unauthentic documents and that the authentic material has been misunderstood by modern liberal and democratic thinkers. Bacon was not advocating absolute power in the king, opposing the liberties of Parliament or approving of a subservient judiciary. Rather he was attempting to state in the semi-feudal language then in use that the executive rather than the legislature must administer the state, that the tyranny of the legislature was as possible as that of the executive. The judiciary should administer not make the law, uphold and not direct the policy of the state. "Let them be Lions but yet Lions under the throne."

ROLAND G. USHER

Works: The chief edition of Bacon's works is by J. Spedding, R. L. Ellis and D. D. Heath, 14 vols. (London 1857–74). The *New Atlantis* has been edited by G. C. M. Smith (London 1900), and *The Advancement of Learning* by W. A. Wright (5th ed. Oxford 1900).

Consult: FOR BACON'S CAREER: Spedding, J., *The*

Letters and the Life of Francis Bacon, 7 vols. (London 1861–74); important additional material is in Usher, R. G., *Reconstruction of the English Church*, 2 vols. (New York 1910).

FOR BACON'S PLACE IN SOCIAL THOUGHT: Heussler, H., *Francis Bacon und seine geschichtliche Stellung* (Breslau 1889); Hearnshaw, F. J. C., "Bacon as an Historian" in *Contemporary Review*, vol. cxxiii (1923) 606–14; Roscher, W., "Zur Geschichte der englischen Volkswirtschaftslehre in 16. und 17. Jahrhundert" in Sächsische Akademie der Wissenschaften zu Leipzig, *Abhandlungen*, Philologisch-Historische Classe, vol. ii (1857) 1–146; Robertson, J. M., "Bacon as a Politician" in *Contemporary Review*, vol. cii (1912) 338–49; Cockburn, J., "Bacon as Empire Builder" in *United Empire*, n.s., vol. xiv (1923) 272–80.

BACON, ROGER (*c.* 1214–*c.* 1292), early scientist. Bacon was born in England, became a Franciscan friar and lectured at the universities of both Oxford and Paris. Bacon was once regarded as "a voice crying in the wilderness" of Gothic barbarism, a persecuted forerunner and martyr of modern science and a marvelous phenomenon centuries ahead of his period. More careful study of his own writings and of his contemporaries and surroundings convinces us that he was rather a leading representative of the learning and scientific activity of his time. He reveals its encyclopaedic tendencies, writing on all fields of knowledge then recognized, from theology and philology to mathematics and medicine. Bacon's works were not buried in oblivion until modern times, as it has been supposed, but were repeatedly cited in detail during the fourteenth and fifteenth centuries. His occupation with Greek and Hebrew and his recognition of the need for calendar reform were shared by others, and a sizable group of writers was concerned with his favorite subjects of perspective or optics, astrology, alchemy, "experimental science"—although its connotation then was scarcely that of today—and natural magic. He did not invent gunpowder but shows that it was already known. He was somewhat more individualistic in his outspoken criticism of methods and even of individuals in contemporary learning and education, but he had no intention of condemning scholasticism or thirteenth century learning as a whole. He was, however, interested in tracing the causes of error, as was Francis Bacon later.

LYNN THORNDIKE

Works: The most informing is the triad written for Pope Clement IV, *Opus maius* (1266–68), *Opus minus* (1267) and *Opus tertium* (1267–68). The *Opus maius* was edited by J. H. Bridges, 3 vols. (Oxford 1897–1900), tr. by R. B. Burke, 2 vols. (Philadelphia 1928). Bacon's writings, a number of which are still unprinted, are more suggestive than complete. The most significant of the fragments which have been published are *Fr. Rogeri Bacon opera quaedam hactenus inedita*, ed. by J. S. Brewer (London 1859) and *Opera hactenus inedita Rogeri Baconi*, ed. by Robert Steele, vols. i–ix (Oxford 1905–28).

Consult: *Roger Bacon Essays*, ed. by A. G. Little (Oxford 1914); Carton, Raoul, *L'expérience physique chez Roger Bacon*, and *L'expérience mystique de l'illumination intérieure chez Roger Bacon*, and *La synthèse doctrinale de Roger Bacon*, Études de Philosophie Médiévale series, vols. ii, iii and v (Paris 1924); Thorndike, Lynn, *A History of Magic and Experimental Science*, 2 vols. (New York 1923; second printing with corrections, New York 1929) vol. ii, p. 616–91; Steele, Robert, "Roger Bacon and the State of Science in the Thirteenth Century" in *Studies in the History and Method of Science*, ed. by Charles Singer, 2 vols. (Oxford 1917–21) vol. ii, ch. iii; Little, A. G., *Roger Bacon* (London 1928).

BAER, ABRAHAM ADOLF (1834–1908), German prison physician and criminologist. In 1871 he published a work on prison hygiene which after some revision took final form in *Die Hygiene des Gefängniswesens* (Jena 1897). A first hand study of prisoners convinced him that, contrary to the theories of Lombroso, crime is produced by the interplay of social factors. This conviction was forcibly stated in *Der Verbrecher in anthropologischer Beziehung* (Leipsic 1893). Like Lombroso he found in recidivists, in particular, a number of "stigmata," but unlike his famous opponent he considered that they were symptoms of physical or mental degeneration rather than characteristics of an anthropological "criminal type." Baer believed that living conditions among the poor provoked and perpetuated such inferiorities, and in *Der Alkoholismus* (Berlin 1878), a standard work in its day and perhaps his most important contribution to science, he studied what to him seemed the most sinister of all degenerative agents.

THORSTEN SELLIN

Consult: Hoppe, Hugo, in *Münchner medizinische Wochenschrift*, vol. lv (1908) 1026–28; Pagel, J., *Biographisches Lexikon hervorragender Ärzte des neunzehnten Jahrhunderts* (Berlin 1901) cols. 73–75.

BAER, GEORGE FREDERICK (1842–1914), American corporation director. After thirty years of law practise in Reading, Pennsylvania, during most of which time he was counsel for the Reading railroad as well as Morgan's local attorney, Baer became in 1901, through the influence of Morgan, president of the Reading

railroad and of the Reading Coal and Iron Company. In the anthracite strike of 1902 Baer acted as leader of the coal operators in refusing to deal with the United Mine Workers. When appealed to as a notably religious man he was reputed to have answered that labor "will be protected and cared for, not by the labor agitators, but by the Christian men to whom God in His infinite wisdom has given the control of the property interests of the country." This exposition of the "divine right" of property was given sensational display in the newspapers and helped to win popular approval for the strikers. Baer subsequently disowned the letter as well as another statement attributed to him that "the strike was a private affair which did not concern the public." He maintained that he merely opposed "unreasonable" interference with the ordinary management of business, and arbitration of the demands for higher wages and a uniform anthracite wage scale. When in September Senator Hanna, acting on behalf of the administration, reached a tentative agreement with John Mitchell, president of the union, and J. P. Morgan, Baer "absolutely refused to entertain it." The strike was ended in October after further administration pressure led to the establishment of an arbitration commission.

PAUL WEBBINK

Consult: Lloyd, Caro, *Henry Demarest Lloyd*, 2 vols. (New York 1912) vol. ii, chs. xxii–xxiv; Mitchell, John, *Organized Labor* (Philadelphia 1903) chs. xl–xlv; Glück, Elsie, *John Mitchell, Miner* (New York 1929) chs. vi–vii.

BAGEHOT, WALTER (1826–77), English social scientist and literary critic. Largely because his Unitarian father objected to the doctrinal tests at Oxford, Bagehot escaped its conventional literary-religious atmosphere. At Bristol College he came under the influence of the ethnologist Prichard and at University College, London, he was deeply attracted by the skeptical and introspective mind of Clough. After some dabbling with economics he studied law and was called to the bar, but a breakdown caused by his mother's insanity sent him to France in 1851, and from there he sent back articles on Napoleon's coup d'état which show a germinating cynicism and a realistic sense of the political scene. On his return to England he entered his father's banking firm. To these early years, restless because of Bagehot's impatience with what seemed an arid business technique, belong those essays on English literary figures (collected by R. H. Hutton as *Literary Studies*, 2 vols., London 1879) which have given Bagehot's criticism an importance comparable to that of Matthew Arnold. In these critical essays the approach is chiefly that of a penetrating psychological analysis of the relation of the writer's mind and personality to his work.

The insight into creative individuals and the literary charm manifested in these studies were later carried over to Bagehot's work in the field of social science. His marriage to the daughter of James Wilson, editor of the *Economist*, and a maturing interest in the banking profession led him to turn his interests to a continuous commentary on economic affairs in the weekly columns of the *Economist*, and on Wilson's death he took over the editorship. He strengthened its already considerable influence and his counsel was sought by Treasury officials on matters of national banking policy. The most permanent result of Bagehot's interest in banking was his *Lombard Street* (London 1873; new ed. by Hartley Withers, London 1927), which has become classic for its realistic description of the English banking system and its analysis of the logic of its functioning. The importance of this work is that it shifted the emphasis in banking literature from a discussion of banking legislation and mechanics to an examination of the body of working rules and their effect. It resulted also in a new understanding of the function of the Bank of England in keeping the banking reserves of the whole community. In his *Economic Studies* (collected by R. H. Hutton, London 1880) several essays are devoted to an analysis of the two fundamental postulates of English economic theory—the transferability of labor and of capital—and an examination of their validity in the changed contemporary economic world. In these and in a series of essays on Smith, Ricardo and Malthus he effectively refuted any notion of the eternal validity of the economic theory of the founders and showed its necessary context in the England of their own time. Coming at a period when criticism of classical economics was maturing in England, these essays were influential for the cogency with which they called for a revision of the classical body of theory within the limits of its own logical premises.

Much the same approach had far reaching results in the political field. In the *English Constitution* (London 1867) Bagehot abandoned the contemporary preoccupation with political forms and a set of preconceptions derived from

physics, and sought to substitute a discussion of the actual functioning of a political institution in its cultural and traditional setting. His exposition of the theory of cabinet government, the survival value of such political institutions as the English monarchy and House of Lords and the function of the House of Commons as an organ of administrative control has been formative for all subsequent discussions. This book has indeed attained so complete an acceptance as representing the reality of English government that, looking back at it now, it seems difficult to decide which was the reality and which the representation. Resting its ultimate explanations of British political institutions on the nature of the British mind it takes its place as a pioneer essay in national political psychology. Bagehot's essays on particular British statesmen such as Peel, Gladstone, Disraeli and Brougham (collected by R. H. Hutton as *Biographical Studies*, London 1881) show him at his best in his delineation of that political leadership of which he held political institutions to be the shadows. Aristocrat at heart and brilliant in his domestication of Carlyle's *o altitudo* concept of leadership, Bagehot showed the myopic spots in his political vision mainly in his underestimation of the democratic masses as a creative political force. The masses were to him, as to Carlyle, merely so much material to be governed well.

Bagehot's most original and ambitious writing in social science is his *Physics and Politics* (London 1872), in which "physics" is metonymy for natural science and "politics" for social science. It is the first important attempt to bring out whatever implications Victorian science, especially Darwinism and the new ethnographic writings of Tylor and Lubbock, possessed for the study of the political community. Although its principal premises are thus those of biology—evolution and natural selection—and its material largely anthropological it is in its essence a brilliant essay in social psychology, mapping the significance for human history of such forces as custom and revolt, innovation and imitation, conflict and discussion. Modern social psychology has for the most part followed in the wake of these leads. The range of Bagehot's interests in this and his other works gave him a versatility which almost conceals the unity of his approach. He had that rare combination of balance and daring which makes him one of the few first rate minds in social science.

MAX LERNER

Works: *The Works and Life of Walter Bagehot*, ed. by Mrs. Russell Barrington, 10 vols. (London 1915), containing a biographical volume.

Consult: Stephen, Leslie, in *National Review*, vol. xxxv (1900) 936–50; Wilson, Woodrow, "A Literary Politician" in *Atlantic Monthly*, vol. lxxvi (1895) 668–80, and "A Wit and a Seer" in *Atlantic Monthly*, vol. lxxxii (1898) 527–40; Laski, H. J., in *New Republic* vol. v (1916) 313–14; Barnes, H. E., in *American Journal of Sociology*, vol. xxvii (1922) 573–81; Murray, R. H., *Studies in the English Social and Political Thinkers of the Nineteenth Century*, 2 vols. (London 1929) vol. ii, ch. vi; Read, Herbert, *The Sense of Glory* (Cambridge, Eng. 1929) ch. viii.

BAGLEY, SARAH (dates of birth and death unknown), nineteenth century American labor leader. Sarah Bagley, who called herself "a common-schooled New England female factory operative," was the first woman to rise from the ranks to leadership in the American labor movement. Under her direction the women textile operatives of Lowell, Massachusetts, formed the Female Labor Reform Association in 1845 after the agitation among wage earners in New England which followed the depression of 1837–42. The Association took over the *Voice of Industry*, the longest lived labor paper of the period, and Sarah Bagley became its editor in 1845. She took part in the numerous conventions of the New England Workingmen's Association (1845–47) and held throughout to a strictly working class program of trade union organization and agitation for the ten-hour day. Through petitions and public meetings she carried on a vigorous campaign which resulted in the appointment by the Massachusetts legislature of the first commission to investigate labor conditions in the textile mills. Her influence was felt also in local politics and in the defeat of legislators unfriendly to labor, but no legislation controlling the hours of women was enacted in Massachusetts until the seventies. The changing character of the mill operatives destroyed her following and, after fifteen years of mill work, combined with the teaching of evening classes for operatives and a vigorous political-industrial campaign, she retired in 1848. By 1850 a new group of workers had entered the mills and the Female Labor Reform Association disappeared.

NORMAN J. WARE

Consult: Andrews, J. B., and Bliss, W. D. P., "History of Women in Trade Unions" in United States, Department of Labor, *Report on Condition of Woman and Child Wage-Earners in the United States*, 19 vols. (Washington 1910–13) vol. x, p. 54–56, 71–78; Ware, Norman, *The Industrial Worker, 1840–60* (Boston 1924).

BÄHR, OTTO (1817–95), German jurist, parliamentarian and publicist. In 1848 Bähr was appointed member of a commission engaged in drafting a code of civil procedure for the electorate of Hesse. Later he held high judicial offices in Hesse, in Prussia and finally under the empire. As coeditor and contributor to Ihering's *Jahrbücher für die Dogmatik des heutigen römischen und deutschen Privatrechts* from 1873 to 1887 he was a relentless critic of German judicial procedure. His experience as member of the Reichsjustizkommission, of the Bundestag and later of the Reichstag led him into the controversy over the draft of the new federal civil code. His opposition, which caused him to submit a counterdraft, was based on the belief that the aim of the theorists to provide for all possible legal emergencies left too much to the interpretation of the litigants and of the courts.

Although Bähr's work was not entirely unrelated to that of the historical school it was based essentially on scientific positivism. History and Roman law interested him as approaches to a free and living law, for the sake of which he abandoned theory and form in his exposition of the law of obligation. His later critical commentaries on the decisions of the Reichsgericht show his growing conservatism and increasing leaning toward Roman law. In his *Rechtsstaat* Bähr shares with Gneist the distinction of first developing among German writers a realistic conception of constitutionalism and of a system of administrative jurisdiction as the foundation of constitutional government.

JOHANNES MATTERN

Important works: *Die Anerkennung als Verpflichtungsgrund* (Cassel 1854, 3rd ed. Leipsic 1894); *Der Rechtsstaat* (Göttingen 1864); *Urtheile des Reichsgerichts mit Besprechungen* (Munich 1883).

Consult: Teichmann, A., in *Allgemeine deutsche Biographie*, vol. xlvii, p. 747–48; reviews of Bähr's books in *Zeitschrift für das Privat- und öffentliche Recht der Gegenwart*, vol. xii (1885) 513–18, and in *Zeitschrift für vergleichende Rechtswissenschaft*, vol. x (1891–92) 474–76; Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–98) vol. iii, pt. ii, p. 639–47.

BAIL, as applied to the administration of criminal law, is the delivery (bailment) of a person who has been arrested to a surety or sureties who join with the person bailed in giving security for his appearance at trial or at some other step in the criminal process. It is thus a device to secure the release of accused persons pending their trial. The term recognizance is also frequently used to describe bail, although the latter is generally applied to an act including the drawing up of an instrument which is filed with the court, while recognizance may merely consist of the making of an acknowledgment before a magistrate or judge by a surety whose obligation is not signed but appears in the court record.

The genesis of bail is according to Holdsworth to be found in the mediaeval frank pledge system but according to Hazeltine in certain pledges presented for the payment of the wergild. In England there were apparently two sorts of surety, bail and mainprise, of which the former was the more stringent. Under bail the surety was usually liable to suffer the punishment hanging over the head of the released prisoner. Under mainprise those who offered themselves as sureties were not bound *corpus pro corpore*, but in case of default were liable only for amercement. Bail was first allowed not by magistrates, but by sheriffs who were subject to control by special writs. The early history of bail makes it clear that the origins and early growth of the device had little to do with civil liberties. It was used because it was safer to turn men over to their friends than to entrust their custody to the inefficient jails of the time. Abuses finally led to the formulation of a demand against excessive bail in the Bill of Rights of 1689.

Elsewhere the history of bail was not dissimilar. For instance, French practise with regard to bail (*sou caution*) developed largely under feudal forms. It is interesting to note that as long as appeal by battle existed the accuser as well as the accused had to furnish bail or remain incarcerated. Esmein concludes that in feudal times "liberty on bail was a matter of right except when an offense had been committed which might entail the loss of life or limb." After the French Revolution the first impulse toward law reform embodied a determination to extend the right of bail, but the liberality of the first revolutionary proposals was greatly limited by the restrictions of the Napoleonic period.

The appearance of guaranties of bail in the American constitutional fabric indicates that by the eighteenth century it had become a part of the system of protection of those accused of crime, which was so important a factor in constitutional civil liberty. In the federal constitution and in those of Alabama, Georgia, Maryland, Massachusetts, New Hampshire, New York, North Carolina, Virginia and West Vir-

ginia there is a negative type of guaranty, expressed in the federal constitution in the terms of the Petition of Right that "excessive bail shall not be required." In the other states the constitutional guaranty of bail is clear and unequivocal. The Missouri provision is typical: "All persons shall be bailable by sufficient sureties except for capital offenses when the proof is evident or the presumption great." The question of what is meant by excessive bail has been variously interpreted. The best opinion seems to be that the standards should rest upon the seriousness of the offense, the ability of the prisoner to give bail and the probability of the appearance at trial of the accused. It has of course been much easier to curb the present abuses of bail practise by legislative enactment in states where the constitutional guaranty is negative rather than positive.

There is no valid evidence that bail ever worked as an effective factor in the administration of criminal justice and the present state of its administration in most of the states and in the federal courts is very unsatisfactory. This is particularly true in the large cities. Under present law and practise the unwilling surety is not adequately bound. It is true that sureties are allowed wide power in dealing with the accused; indeed they may at any time seize and surrender the accused to the court and be discharged from the obligation of suretyship. But they are not particularly encouraged to do so. The obligation of bail does not rest specifically upon a stated piece of property, and although it is customary to require that the surety provide a statement or schedule of his property it may be listed at such an exaggerated valuation that its real worth is inadequate to cover the liability. If the surety desires to divest himself of responsibility he may in many jurisdictions divest himself of the ownership of the property listed. Only in a few jurisdictions is a bail bond a lien upon it. This results naturally in the collection of very few judgments upon forfeited bonds and is one of the primary reasons for the failure of the bail system to operate effectively.

Moreover the system works a great injustice because those defendants who have friends of property or who themselves have property (frequently acquired by criminal methods) can obtain their release while the poor and the friendless remain in jail. The injustice of this condition is augmented by the fact that those who are in jail are usually tried first, which gives the great advantage of delay to those out on bail. When professional criminals are involved, bail even in large amounts can be furnished and the period of liberty is marked by increased efforts to acquire by new crimes material compensation for the approaching trial and possible prison sentence. Finally the present administration of bail provides innumerable possibilities for official corruption. Political and sometimes economic pressure can be used to induce a judge or other official to accept unsatisfactory surety. In order to gain the advantages of official favor professional bondsmen are likely to establish exceedingly questionable relationships with public officials.

Indeed much of the criticism of the bail system as it now operates in large American cities centers upon the so-called professional bondsmen. These persons are available for service as sureties and for such service they exact a fee, the size of which is determined roughly upon the basis of the amount of the bond which they sign. Some of them do a very considerable business from which they apparently derive a large income. There is nothing particularly objectionable in a professional bondsman *per se;* presumably he performs as socially useful a service as a criminal lawyer. It is the way in which his business is transacted that brings him into ill repute. He usually gives bail for amounts far beyond the value of his property and establishes with public officials relationships which are contrary to the public interest. Often he is so closely related to the underworld that he is practically a partner in crime with his clients.

Professional bail is also provided in a number of cities, notably New York, by surety companies which are usually established and incorporated for the specific purpose of furnishing bail bonds. While these companies are often guilty of the same practises as individual professional bondsmen they are more easily regulated and are accordingly more responsible.

Many measures have been brought forward for the reform of the bail system. Legislation making a bond a lien upon the property of the surety has been frequently proposed. Other proposals include a centralization of administrative responsibility (in cities), a more strict examination and regulation of bondsmen by state banking and insurance departments, the making of bail jumping a crime, insistence upon cash bail only and the bonding of professional bondsmen themselves. There is in addition the important suggestion that a proper study of the

jail population would make it possible to release many of those unable to get sureties upon their own recognizance. It is obvious, however, that the bail problem is involved to such an extent in the whole question of increasing the promptness of criminal trials that its ultimate solution must depend upon the improvement in efficiency and promptness of court administration generally.

In Europe criminal procedure in general provides forms of release not radically different from those in practise in the United States and in England although there is perhaps somewhat more formal variety and flexibility. Four conditions of release are practised: first, a mere private promise entered into between the judge and the accused which is frequently reduced to writing and kept from the public in order to protect the person accused from unfair influences; second, the release of an accused person without definite security under the surveillance of the police; third, a pledge by sureties of things of value to secure the presence of the accused; and finally, the deposit of cash bail to be forfeited in case of non-appearance.

RAYMOND MOLEY

See: CRIMINAL LAW; JUSTICE, ADMINISTRATION OF; PROCEDURE, LEGAL; ARREST; PENAL INSTITUTIONS; SURETY AND GUARANTY; BILLS OF RIGHTS; CIVIL LIBERTIES; CORRUPTION, POLITICAL.

Consult: Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. iv, p. 525–29; Hazeltine, H. D., "The Formal Contract of Early English Law" in *Columbia Law Review*, vol. x (1910) 608–17; Esmein, Adhémar, *Histoire de la procédure criminelle en France* (Paris 1882), tr. by J. Simpson as *A History of Continental Criminal Procedure*, Continental Legal History series, vol. v (Boston 1913); Stephen, J. F., *A History of the Criminal Law of England*, 3 vols. (London 1883) vol. i, p. 233–43; Harris, S. F., *Principles and Practice of the Criminal Law* (14th ed. London 1926) p. 301–05; Moley, Raymond, *Our Criminal Courts* (New York 1930) ch. iii, and "Bail Bonds" in Missouri Association for Criminal Justice, Survey Committee, *The Missouri Crime Survey* (New York 1926) pt. v; Beeley, A. L., *The Bail System in Chicago* (Chicago 1927); Chicago Crime Commission, *Bulletin* (1923–26), and *Criminal Justice* (1927–28); New York State, Crime Commission, *Report of the Crime Commission Submitted February 28, 1927* (Albany 1927); American Law Institute, *Code of Criminal Procedure: Tentative Draft*, vols. i–ii (Philadelphia 1928–29) vol. i, ch. iii.

BAILEY, SAMUEL (1791–1870), English economist. He was the son of a Sheffield artisan who rose to be master cutler in 1801. Himself an active man of business, Bailey became in the course of time chairman of the Sheffield Banking Company. His interest in active politics lapsed after an unsuccessful attempt to enter Parliament. He wrote a number of economic and philosophical works, which earned him the title of "the Hallamshire Bentham." The most important of these is the anonymous *A Critical Dissertation on the Nature, Measure, and Causes of Value; Chiefly in Reference to the Writings of Mr. Ricardo and His Followers* (London 1825), described by Macleod as "one of the most able little volumes on Political Economy in the language" (*A Dictionary of Political Economy*, London 1863, vol. i, p. 59). Bailey denied the existence of intrinsic value and the possibility of equating values by reference merely to the quantities of labor embodied in commodities. A typical example of his criticism, which is in general negative rather than constructive, is his tabulation of seven different senses in which Ricardo used the term value. The *Westminster Review* (vol. v, 1826, p. 157–72) contains a fierce attack (probably by James Mill) upon the book; Bailey replied with *A Letter to a Political Economist* (London 1826).

HENRY HIGGS

Other works: *Money and its Vicissitudes in Value* (London 1837); *A Defence of Joint Stock Banks and Country Issues* (London 1840); *The Theory of Reasoning* (London 1851, 2nd ed. 1852); *Letters on the Philosophy of the Human Mind*, 3 vols. (London 1855–63).

Consult: Seligman, Edwin R. A., *Essays in Economics* (New York 1925) p. 83–86.

BAILMENT, from the French word *bailler*, to deliver, is a legal term which denotes the transaction between the owner of an article and the person into whose possession he has put it for safe keeping or for some other temporary purpose. The extent to which legal recognition is given to the right to possess property, as distinguished from absolute ownership thereof, is the extent of the existing law of bailments. Broadly speaking, the more advanced the commercial development of a community, the more important is the institution of bailment.

In primitive communities possession and ownership are coextensive, since there is very little occasion for relinquishing possession except to transfer the entire ownership of the property. Accordingly in early times we have no law of bailments. Whatever rights are given to the possessor by custom or by law are against thieves. However, as soon as people begin to travel it is necessary for them either to dispose of their property by sale or to entrust it to another for safe keeping. It may be conjectured

that the earliest travelers combined both transactions into one; the transfer was regarded as a sale if the owner did not return and as a bailment if he did.

Of necessity the development of commerce increases the number of occasions upon which an owner must part with possession of his property for a temporary purpose. Innkeepers, warehousemen, carriers and pledgees have an origin coincident with the rise of travel and commerce. The law must thereupon begin to recognize the relations between bailor and bailee and to afford rights to each as against the other.

In most early systems of law the rights of the bailor against the bailee are absolute. One who has been entrusted with an object of value must hold it safely and return it on demand. There are no extenuating circumstances. It was so at the very early common law; it is so provided in the Twelve Tables; and even the book of *Exodus* contains the provision that a bailee is responsible to a bailor for the safe return of an object even "if it is stolen from him." We are told that the absolute liability of a bailee at common law is a procedural accident arising from the failure of the common law in its early stages to differentiate ownership from possession. An action against a wrongdoer who has stolen the object from, or injured it in, the possession of the bailee could not be brought by the bailor. Consequently the bailee, who alone could claim the protection of the law for the object in his possession, was answerable to the bailor. However, the presence of this liability in earlier systems of law would seem to throw some doubt upon this hypothesis.

The absolute liability of the bailee continued even after the bailor acquired the right to bring an action on his own behalf, largely because in law it frequently happens that rights and duties continue long after their causes have disappeared. Again, the rights of the bailee to sue the wrongdoer, which were originally the cause of his absolute liability to the bailor, have survived because of the argument that the bailee, being answerable to the bailor, must be entitled to an action against the wrongdoer.

Refinements of procedure, however, as well as absolute liability regardless of fault, are not appropriate to a later age when many types of bailments begin to make their appearance. In Roman law we soon see the original *depositum* (deposit for safe keeping) differentiated into several types: the *commodatum* (gratuitous loan), the *mandatum* (delivery to an agent) and the *pignus* (pledge).

In modern times even this somewhat extended classification is too simple to fit the new needs of an increasingly commercial society. As a result many new types of bailments are recognized. When a railroad company receives an object for transportation there is a point at which its position changes from that of a safekeeper to that of a common carrier. The bill of lading or the baggage check is now the emblem of the relation between the carrier and its customer. While the innkeeper is a bailee of very ancient origin, the warehouseman is a more modern one. In modern commerce one is constantly entrusting articles to others: to consignees; to carriers, private and public; to pledgees for security; to banks for special purposes; to agents, servants and employees; to executors, administrators and trustees; and so on through the whole gamut of modern commercial life. While the problems raised by these increasing types of bailment are to a large extent new, their solution could not help being affected by the history of the law. It was Lord Holt, in whose opinions we see the first traces of the fusion of the Law Merchant with the common law, who crystallized the common law of bailments in the celebrated decision of Coggs *v.* Bernard (2 Lord Raymond 909), by introducing many of the notions of Roman law. In Rome this crystallization is an achievement of the *jus gentium*.

It is obvious that a modern bailee, be he borrower, pledgee or simply a safekeeper, should not be charged with liability beyond his culpability for loss or damage. Whether the primitive absolute liability of the bailee be explained as an accident of procedure or as a usual concept of early law, it has no place in a system of jurisprudence which aims to protect "the reasonable man" and surrounds his conduct with immunity. It was this new requirement which Lord Holt attempted to meet. He made negligent conduct the essential ingredient of the bailee's liability. To be sure, there are various degrees of negligence. Thus a gratuitous bailee is liable only in the event that he commits gross negligence and the borrower is liable for the "least neglect." In Roman law the *depositum* (our gratuitous bailment) imposed upon the bailee only the duty of answering for extreme negligence and in the case of the *commodatum* (our gratuitous loan) the *commodatarius* (borrower) must exert all the care of a prudent

paterfamilias. The same rules are to be found in the modern continental civil codes.

To some extent, however, the absolute liability of a bailee still lingers in the law. This is so in the case of special bailees whose business is said to be charged with a public interest and which had a very early origin in the law—common carriers and innkeepers. Lord Holt gives the reason for the rule in these words: " . . . this is a politick establishment, contrived by the policy of the law, for the safety of all persons, . . . that they may be safe in their ways of dealing; for else the carriers might have ways and opportunity of undoing all persons that had any dealings with them, by combining with thieves. . . ." The common carrier and the innkeeper were not important in Justinian's day and no such absolute liability is found in the *Digest* or the *Pandects*, but modern continental codes have recognized the rule as stated in Coggs *v.* Barnard.

In modern times most of the relations of bailment have been treated by statutes which have tempered the liability of the various bailees as well as that of innkeepers and carriers. The tendency has been to give greater effect to the agreement actually existing between the parties. Limitations of liability of the bailee are thus effectively created by contract, and even the carrier and the innkeeper are permitted to escape absolute liability by judicious provisions looking to the safeguard of individuals dealing with them.

MAURICE FINKELSTEIN

See: OWNERSHIP; POSSESSION; PROPERTY; AGENCY; NEGLIGENCE; LIABILITY; PAWNBROKING; HOTELS AND RESTAURANTS; BANK DEPOSITS; WAREHOUSING; COMMON CARRIER.

Consult: Pollock, F., and Maitland, F. W., *History of English Law*, 2 vols. (2nd ed. Cambridge, Eng. 1905) vol. ii, p. 151–83; Holmes, O. W., *The Common Law* (Boston 1881) ch. v; Story, Joseph, *Commentaries on the Law of Bailments* (9th ed. Boston 1878); Jones, William, *An Essay on the Law of Bailments* (4th ed. London 1833); Hübner, Rudolf, *Grundzüge des deutschen Privatrechts* (4th ed. Leipsic 1922), tr. by F. S. Philbrick as *A History of Germanic Private Law*, Continental Legal History series, vol. iv (Boston 1918) §§58, 77.

BAILY, FRANCIS (1774–1844), English astronomer and actuary. He developed an interest in life insurance and astronomy while he was a broker on the London Stock Exchange. In 1825, having amassed a considerable fortune, he retired from business and devoted the remainder of his life to his scientific interests.

Baily made important contributions to the study of life contingencies. His monumental treatise, *The Doctrine of Life-Annuities and Assurances Analytically Investigated*, served for many years as an authoritative text of actuarial essentials. He was the first to give the subject a symmetrical form of treatment and to introduce a uniform system of notation. He furnished extensive life tables based on those of Deparcieux and on the experience of Sweden. Moreover he attracted wide attention to the work of George Barrett who, independently of J. N. Tetens, invented the method of "commutation columns," a labor saving device in the preparation of life insurance and annuity tables from original mortality data. On several occasions Baily was consulted by parliamentary committees on questions of insurance, friendly societies and related subjects.

EDWIN W. KOPF

Important works: *Tables for the Purchasing and Renewing of Leases* (London 1802, 3rd ed. London 1812); *The Doctrine of Interest and Annuities* (London 1805, 2nd ed. London 1808); *The Doctrine of Life-Annuities and Assurances Analytically Investigated* (London 1810; enlarged ed. by H. Filipowski, 2 vols. London 1864–66), French tr. by Alfred de Courcy, 2 vols. (Paris 1836), German tr. by C. H. Schnuse (Weimar 1839); *Account of the Several Life-Assurance Companies in London* (London 1810, 2nd ed. London 1811).

BAIN, ALEXANDER (1818–1903), Scottish psychologist, logician and educator. He began his academic career by filling successively various lectureships in several British institutions. From 1860 to 1880 he was professor of logic at the University of Aberdeen, of which he was later twice elected rector. He was a founder of the journal, *Mind*, and until 1894 one of its frequent contributors.

Bain's work in psychology is generally considered the culmination of the English association school. He followed Hartley in emphasizing the role of the nervous system in mental activity and James Mill in employing the analytic method in dealing with mental phenomena, making full use of the advances in these branches of science since their times. He also revised the earlier statements of the laws of association, which he applied systematically to all mental phenomena. His most effective contribution to later psychology is his demonstration of the importance of motor phenomena and effort in mental life. Although he was a contemporary of Darwin and Spencer he did not incorporate their evolutionary doctrine into his work. On

this account his system of psychology had less influence upon later texts; but his general plan of treatment and special contributions had a marked influence upon William James and other subsequent writers.

Bain was early interested in the elaboration of the practise and philosophy of education and was widely influential in the adoption of new methods of teaching grammar and composition and in the raising of educational standards in north Scotland. Actively interested also in many social movements he wrote numerous pamphlets on political and social subjects.

HOWARD C. WARREN

Important works: *The Senses and the Intellect* (London 1855, 4th ed. 1894); *The Emotions and the Will* (London 1859, 4th ed. 1899); *Mental and Moral Science* (London 1868, 3rd ed. 1872), an abridgement of the two preceding works; *Logic* (London 1870); *Mind and Body* (London 1872, 11th ed. 1910); *Education as a Science* (London 1879, 4th ed. 1880). Bain also contributed many important notes to J. S. Mill's edition of James Mill's *Analysis of the Phenomena of the Human Mind* (London 1869).

Consult: Bain, Alexander, *Autobiography* (London 1904); Davidson, W. L., "Professor Bain's Philosophy" in *Mind*, n. s., vol. xiii (1904) 161–79; Warren, Howard C., *A History of the Association Psychology* (New York 1921) p. 104–17.

BAINES, EDWARD (1774–1848) and his son of the same name (1800–90), English journalists. The elder Baines was apprenticed to a printer in Preston at the age of sixteen and emulated the life of Benjamin Franklin. Settling in Leeds in 1795 he joined the Independents and in 1801 became proprietor of the Leeds *Mercury*, which, with the assistance of his son Edward, he raised to eminent influence in the political thought of northern England. In 1834, on Macaulay's departure to India, he was elected Liberal member of Parliament for Leeds and held the seat until 1841. An authoritative account of his career, *Life of Edward Baines* (London 1851, 2nd ed. London 1859), was prepared by his son.

The younger Baines at the age of eighteen assumed the editorship of his father's paper. Later he studied social questions both at home and on the continent. In a letter to the unemployed in 1826 he tried to discourage destruction of looms in Yorkshire and Lancashire by pointing out that the French competitors of the English textile industry were improving their machinery instead of destroying it. In his *History of the Cotton Manufacture in Great Britain* (London 1835), a temperate, well documented book, he admitted the evils of urban industry, but emphasized the national importance of the cotton manufacture and placed the hope for relief in the public spirit of the mill owners. In 1837 he founded the West Riding Union of Mechanics' Institutes and thereafter was a prominent leader in adult education in Yorkshire. He advocated total abstinence from alcohol, but did not propose prohibition of the liquor trade. He represented Leeds in Parliament as a Liberal, 1859–74. In later years he was chairman of Yorkshire College, now the University of Leeds.

Both father and son were representative of nonconformist liberal opinion in the north of England. They took an active part in the movement for the removal of civil disabilities of nonconformity. They supported Cobden and the Anti-Corn Law League because they identified the industrial prosperity of Britain with hopes of world peace. Like their contemporary, Samuel Smiles of Leeds, they prized individual initiative in self-culture. Both acknowledged, however reluctantly, the need for some degree of state action in the encouragement of education, but they regarded voluntary effort as essential to its permanent success; they were apprehensive of the ultimate effects of governmental restraints on courses of study and on the appointment of teachers. Both resented legislation which was likely in their day to reenforce the influence of the Church of England. Their writings show the curve of opinion in English individualistic philanthropy between 1820 and 1870: assent to the beginnings of parliamentary aid to popular education, extreme alarm in 1846 at Kay Shuttleworth's design for the enlargement of the educational responsibilities of the state, and later acquiescence in the inevitable extension of state action. The *Crosby Hall Lectures on Education* (London 1848) by the younger Baines, embodying the opinions of father and son, are a statement of the theory of extreme voluntaryism in the political philosophy of education. In 1868, however, Baines signed the recommendations of the Schools Inquiry Commission in favor of governmental inspection of endowed secondary schools and of powers of local taxation for secondary education for boys and girls in town and country.

MICHAEL E. SADLER

BAINES, JERVOISE ATHELSTANE (1847–1925), statistician of British India. Baines was educated at Rugby and at Trinity College, Cambridge, and in 1869 entered the Indian

Civil Service, in which he remained until 1895. In 1894–95 as secretary of Lord Brassey's opium commission he drafted its report. After returning to England to live in 1895 he devoted his time to various public activities, especially education. In 1909 he was elected president of the Royal Statistical Society. The numerous papers which he contributed to its journal during the last thirty years of his life reveal his wide interest in the social problems not only of India but of the empire as a whole.

Baines was preeminently a census maker. In the first synchronous census of India in 1881 he acted as superintendent for Bombay, achieving thereby a reputation which ten years later at the time of the second census led to his appointment as commissioner for the whole country. In this capacity he introduced an elaborate occupational census. According to the methods previously employed a Brahman might have been classified as a priest although he had never exercised a priestly function, and a member of the barber caste might have gone into the records as a barber even if he had derived his income from agriculture. Baines distinguished clearly between traditional occupation, as connoted by caste, and actual means of livelihood, and succeeded in enumerating for the first time all those who subsisted by each occupation. This work paved the way for the differentiation of dependents from actual workers, accomplished by the census of 1901.

G. FINDLAY SHIRRAS

Consult: Royal Statistical Society, *Journal*, vol. lxxxix (1926) 182–84.

BAIRD, HENRY CAREY (1825–1912), American publisher and economist. He was a disciple of his uncle, H. C. Carey, and most of his writings were devoted to the exposition of Carey's doctrines. Baird contended that material progress is achieved to the extent that men associate more intensively to complement each other's labors, and that the "unit of association" ought to be the nation. Accordingly he vigorously supported the protective tariff and urged the adoption of a currency system suited to national needs rather than to international standards. He was one of the founders of the Greenback party in 1874, argued against demonetization of silver and opposed the resumption of specie payments in 1879.

He wrote more than one hundred magazine articles and books on economic subjects. Perhaps the two most important of these are *Political Economy* (New York 1875), and *Carey and Two of His Recent Critics, Eugen v. Böhm-Bawerk and Alfred Marshall* (Philadelphia 1891).

A. D. H. KAPLAN

BAKER, GEORGE (1722–1809), British epidemiologist. Baker was the son of a Devonshire vicar and received his education at Cambridge. In 1761 he settled in London and began to practise medicine. In 1767 he read before the Royal College of Physicians his classic *Essay concerning the Cause of the Endemical Colic of Devonshire*, published in the same year in London (2nd ed. 1814). This is the first recorded instance in Britain of an epidemiological investigation carried out on strictly scientific lines, and is the more remarkable because it came at a time when the progress of medicine was hampered by tenaciously held prejudices. Cider drinking in the west of England had long been associated with the occurrence of abdominal colic. In 1703 Musgrave had attributed the colic to the effect of sharp cider and Huxham had noted its excessive incidence in 1724, when apples were particularly abundant. Baker observed that Huxham's description of the disease coincided with the symptomatology of painter's colic brought on by lead poisoning. It seemed to him unlikely that two causes so different in character should "make similar impressions on the human body." He noted further that the cider drinking counties bordering on Devonshire did not suffer from colic. This led to his preliminary conclusion that the cause of Devonshire colic was to be found "not in the pure cider but in some either fraudulent or accidental adulteration" which he suspected was lead. By a careful investigation of the methods of manufacture supplemented by chemical analysis of Devonshire cider Baker proved the presence of lead in the cider and traced its source to the action of the cider upon the lead fillings of the stone troughs in which the apples were ground. This condition of manufacture obtained in Devonshire and not in the surrounding counties. The presence in the cider of a sufficient amount of lead to cause the symptoms, together with the similarity of the disease to plumbism, led to the conclusion that Devonshire colic was lead poisoning. His contribution to science was recognized during his lifetime; he was made a Fellow of the Royal Society and was nine times elected president of the College of Physicians.

ARTHUR NEWSHOLME

BAKER, HARVEY HUMPHREY (1869–1915), pioneer in the adoption of modern procedure in the American juvenile court. As a college student he had interested himself in the problems of children, and in 1895, a year after his graduation from Harvard Law School, he became secretary of a Conference of the Child Helping Societies of Boston. In this capacity he edited a manual for use in cases of juvenile offenders. He was also an early president of the National Probation Association and of the Massachusetts State Conference of Charities and Corrections.

In 1906 Baker, who had for eleven years been successively clerk and special justice of the Municipal Court of Brookline, was appointed the first judge of the Boston Juvenile Court and served in this capacity until his death. Although he was not a creator in theory or in method, his achievement is remarkable in that he modified the traditional common law jurisprudence of Massachusetts to serve as a new instrumentality toward social justice. His administration was characterized by a dignified informality which made the child, not the offense, the core of the inquiry, but which did not preclude his bringing a profound legal knowledge to the solution of the problem; by his development of cooperation with private and public agencies in his treatment of both the child and his family; and by his scientific attitude in seeking out the causes for the offender's misbehavior. In his judicial capacity Baker never departed from the idea of parental responsibility for the child's conduct and for this reason he held evening sessions for the convenience of working parents. He visited institutions and, to a degree rare among judges, knew the facts and conditions of the life from which his cases came. He was among the first of the children's judges to turn to science for aid and was a supporter of the newly created Boston Psychopathic Hospital. Genuine ability in research is shown in his *Review of the First Five Years of the Boston Juvenile Court* (included, with other material on Baker and the court, in *Harvey Humphrey Baker, Upbuilder of the Juvenile Court*, publication no. 1 of the Judge Baker Foundation, Boston 1920). The ideal which he sought was the creation of a clinic for the scientific study of the problems of child delinquency; after his death the Judge Baker Foundation was established for the purpose of carrying out this ideal on a large scale.

MIRIAM VAN WATERS

BAKEWELL, ROBERT (1725–95), English agricultural innovator who revolutionized the art of stock breeding. Bakewell, a practical farmer, had been in virtual control for five years before succeeding his father as occupant of the farm in Leicestershire in 1760. Before his day cattle were valued as draft oxen or as milkers, and sheep were kept for their wool or as manure carriers. Length of limb and largeness of bone were prized in animals that drew the plow through stiff clay or roamed for miles in search of food. Tall, wall sided cattle and lean, leggy sheep were the unpromising material on which Bakewell began his work. His object was to perpetuate a breed of animals which weighed heaviest in the best joints and most quickly repaid the cost of the food that they consumed. For this purpose he concentrated on compactness of form, smallness of bone, propensity to fatten and early maturity. Hitherto breeding had been understood to mean the mixture of two breeds one of which was relatively inferior. Bakewell adopted the new principle of breeding in-and-in, using animals not merely of the same native type but of the same family. The singular success of his experiments drew the praise of Arthur Young and of important visitors from the continent, although he himself was most secretive about his methods. The effect of his innovations was to provide better and more abundant meat for millions at a time when no foreign country could supply the means of feeding the vast new centers of industry and commerce. His improvements in the grazier's art, applied both to the "New Leicesters" sheep and to cattle, added a new impulse to the progress of enclosures. Together with the other four great figures of the agricultural revolution in the eighteenth century he paved the way for the industrial revolution which followed.

ERNLE

Consult: Ernle, Lord (Prothero, R. E.), *English Farming, Past and Present* (4th ed. London 1927).

BAKING INDUSTRY. *See* FOOD INDUSTRIES.

BAKUNIN, MICHAEL (1814–76), anarchist, thinker and propagandist. He was the son of a Russian aristocrat of eighteenth century liberal culture, and early renounced a military career in favor of philosophical studies at the universities of Moscow and Berlin. In the years 1841–46 he was much impressed by Arnold Ruge's radical Hegelianism and Feuerbach's philosophical humanism as well as by Weitling's com-

munism, by early Marxism and Proudhon's anarchism. In the next phase of his career, covering the period 1847–63, he was preoccupied with the plan of an anti-czarist federation of various Slavic nations designed to effect their national emancipation. Implicated in the Dresden uprising of 1849 he was sentenced to death by the Saxon government, turned over to the Austrian government, and coming finally into the hands of the Russian authorities, suffered imprisonment in a fortress dungeon and exile in Siberia, whence he escaped in 1861. Making his way to Italy, Bakunin organized in 1864 a secret international brotherhood known later as the International Alliance of Social Democracy; it gathered adherents in Italy, Spain, Russia and, through the Jura Federation, Switzerland. In 1868 he joined the First International, but the followers of Marx and the moderates opposed Bakunin's revolutionary doctrines and from time to time expressed lack of confidence in his character. After the resulting split in the International (1872) the Bakuninists continued as a separate organization; Bakunin retired from the movement in 1874 after the abortive Bologna insurrection.

Bakunin's forceful personality developed first in the family circle, where he rebelled against parental authority, and later in the society of radical youth. His stormy career, which brought him into contact with militant activist individuals, further accentuated his early traits. Throughout his life he was the center of many controversies, in some of which even his personal integrity was questioned. At present, however, so many personal records, memoirs of his contemporaries and official documents (including the "confession" made by Bakunin during his Russian imprisonment) are available that almost all details and disputed points are cleared up.

Recent investigations show that Bakunin was a thinker of wide range and lasting influence. The central elements of his thought were aspiration for complete freedom in all spheres—intellectual, political, social, moral—and belief in the natural solidarity of men. At first he sought the realization of these ideals in religious fervor, in spiritual union with God. He shifted later to the ideal of brotherhood of man based on philosophical enlightenment. After the forties he felt that his aims could be achieved only by complete destruction of the present social and political order and of the mentality which it upheld, and by the substitution of "federalism, socialism and anti-theologism" or, in the later phrase, of "anarchism, collectivism and atheism." According to Bakunin, in place of the state which would be destroyed there would arise a free federation of autonomous associations enjoying the right of secession. The new order would guarantee complete personal freedom and would provide equal opportunities for all to enjoy free secular education and the full product of their labor. This transformation would be accomplished by means of a universal rebellion inspired and initiated by small secret groups with a coordinating center. Bakunin, who could always dominate small circles by the sheer force of his personality, did not perceive that the last proposition was a rationalization of the method of agitation natural to him and was open to criticism as wanting in respect for the freedom of others. In practise, however, it led to the establishment for the first time of organized anarchist propaganda.

MAX NETTLAU

Works: No complete edition of Bakunin's works is available. There exist selected editions in French (*Oeuvres*, 6 vols., ed. by James Guillaume, Paris 1895–1913), German (*Gesammelte Werke*, 3 vols., ed. by Max Nettlau, Berlin 1921–24) and Spanish (*Obras completas*, 5 vols., Buenos Aires 1924–29); they overlap only in part.

Consult: Nettlau, Max, *Michael Bakunin*, 3 vols. (reproduced by autocopyist, London 1896–1900), and *Der Anarchismus von Proudhon zu Kropotkin*, Beiträge zur Geschichte des Sozialismus, Syndikalismus, Anarchismus series, vol. iii (Berlin 1927) chs. ii–xii; Kornilov, A. A., *Molodie godi Mikhaila Bakunina* (The youth of Michael Bakunin) (Moscow 1915), and *Godi stranstviya Mikhaila Bakunina* (The wander years of Michael Bakunin) (Leningrad 1925); Polonsky, Vyacheslav, *M. A. Bakunin*, vol. i (2nd ed. Moscow 1925), in Russian, covering the period to 1861; Brupbacher, Fritz, *Marx und Bakunin* (Munich 1913); Guillaume, James, *L'internationale*, 4 vols. (Paris 1905–10).

BALAKSHIN, ALEXANDER NIKOLAYEVICH (1844–1921), pioneer in dairy cooperation in Siberia. He was the son of a merchant in Tomsk and studied for a time at the University of Kazan. In 1902 he was appointed president of a commission established by the Witte-Ermolov government to study the possibilities of cooperation as a means of developing the dairy industry. Interest in this field had been stimulated by the completion of the Trans-Siberian railway, which made feasible the transportation of Siberian dairy products to European Russia and other countries. Balakshin encouraged the organization of new cooperatives and assisted

them in the early stages of their development. Within five years nearly three hundred cooperative societies were established, with a combined membership of over fifty thousand. In 1907 Balakshin established the Union of Siberian Creamery Associations in Kurgan, which replaced the government commission and thus achieved cooperative autonomy. This organization included not only the dairy cooperatives but also purchasing societies and consumers' societies. In the following decade, 1908–18, the number of affiliated dairy cooperatives increased to 2000, the exports were multiplied thirty-six fold and export agencies were established in Boston, New York and London. Balakshin remained at the head of the union throughout this entire period. The success of his enterprise made him an important figure not only in the field of dairy cooperation but in the general cooperative movement in Russia as well.

V. TOTOMIANZ

Consult: Kayden, E. M., and Antsiferov, A. N., *Cooperative Movement in Russia during the War*, Carnegie Endowment for International Peace, Division of Economics and History, Economic and Social History of the World War, Russian series (New Haven 1929) p. 385–91.

BALANCE OF POWER is a phrase current in discussions of international relations. It means such a "just equilibrium" in power among the members of the family of nations as will prevent any one of them from becoming sufficiently strong to enforce its will upon the others. As an obvious maxim of common sense in politics it was advocated and applied among the ancients and again in modern times during the past four centuries.

As Hume pointed out in his essay "On the Balance of Power" (*Essays*, vol. ii, no. 7) the principle was familiar to both the political theorists and the practical statesmen among the ancients. It inspired the league which was formed against the growing domination of Athens and which produced the Peloponnesian War. After the decline of Athens, when the Thebans and the Lacedaemonians disputed for hegemony, the Athenians in turn always threw themselves into the lighter scale in their endeavor to preserve the balance. Upon the rise of Macedon, Demosthenes exhorted the other Greek states to join together for their own self-preservation against the imperial ambitions of Philip and Alexander.

Similarly Hiero of Syracuse sought to maintain a balance and check against the rising power of Rome by sending assistance to the Carthaginians. He rightly concluded, as Polybius points out (lib. i, cap. 83), that to retain his own power in Sicily, Carthage must be supported, "lest by its fall the remaining [Roman] Power should be able, without let or hindrance, to execute every purpose and undertaking. And here he acted with great wisdom and prudence, for that is never on any account to be overlooked; nor ought such a force ever to be thrown into one hand, as to incapacitate the neighbouring States from defending their rights against it" (as quoted by Phillimore, vol. i, p. 576). This is the classical statement of the essential principle of balance of power.

With the establishment of overwhelming dominion successively by Macedon, Rome, Charlemagne and the Holy Roman Empire, balance of power vanished from Europe as a practical principle. It did not reappear until the Renaissance and the rise of modern national states. The Medici and the other Italian princes sought to secure an equilibrium between themselves, and between the Spanish, French and German kings who attempted to interfere in Italian politics.

In the sixteenth century the enormous territorial possessions of the Emperor Charles V rendered him so powerful that a natural apprehension was felt by the other states of Europe. Francis I therefore took upon himself the task of adjusting the equilibrium of power in Europe by making a treaty of alliance with the infidel Turk—to the great scandal of Christian Europe—and by constituting himself the friend or protector of the minor German states. In this enterprise he was assisted by Henry VIII of England. The preservation of this balance against the danger of Hapsburg hegemony was later one of the main motives which caused so many states to take part in the Thirty Years' War. By the Treaty of Westphalia at its close (1648), arrangements were made which were intended to interpose an effectual barrier against the undue preponderance of the House of Hapsburg, and thereby to secure the equilibrium and peace of Europe.

During the next half century France in turn was lifted to a position of threatening preponderance through the ruthless ambitions of Louis XIV. There resulted a new series of wars and treaties in which her apprehensive neighbors, led by Holland and England, sought to establish a new balance of power. Many writers, like Fénelon, and practical statesmen generally

were becoming more strongly convinced of the need of establishing firmly in Europe a true balance of power (*équilibre européen* or *europäisches Gleichgewicht*). Accordingly in the Peace of Utrecht (1713) various arrangements were made, including the division of the Spanish inheritance between the Hapsburg and Bourbon dynasties, with the expressly stated purpose *ad conservandum in Europa equilibrium*. During the next two hundred years, from the Peace of Utrecht until the World War, many of the most important treaties, as has been pointed out at length by Phillimore (vol. i, pt. iv, §§403–06), were likewise designed to set up or preserve the balance of power against the overwhelming domination of any one state or combination of states.

The prevailing view of this concept was ably set forth by Fénelon in his "Supplément à l'examen de conscience sur les devoirs de la royauté," written toward the close of Louis XIV's reign for the instruction of the king's grandson, the Duke of Burgundy. Neighboring states, in their own interest as well as for their common good, ought to form a kind of family of nations. The strongest will in the long run tend to prevail over the others and overthrow them, unless they unite to establish a balance. "To hinder one's neighbor from becoming too strong is not to do harm; it is to guarantee one's self and one's neighbors from subjection; in a word, it is to work for liberty, tranquillity, and public safety; because the aggrandizement of one nation beyond a certain limit changes the general system of all nations connected with it. . . . The excessive aggrandizement of one may mean the ruin and subjection of all the other neighbors. . . . This attention to the maintenance of a kind of equality and equilibrium between neighboring states is what assures peace for all" (*Oeuvres*, vol. iii, Paris 1835, p. 361). Hence the necessity for defensive alliances, and also under certain circumstances for offensive alliances.

The principle of the balance of power as stated by Fénelon remained popular until the World War. Not only was it frequently cited by writers on international law as "an indispensable condition of the very existence of International Law" (Oppenheim, L. F., *International Law*, vol. i, sect. 2, §136), inasmuch as there were no superjudges, superpolice or superstate to declare and enforce international justice otherwise, but rulers and statesmen also pointed to it as justification for their actions. Nicholas II on August 2, 1914, justifying the Russian general mobilization and referring to the German declaration of war on Russia, telegraphed to George V: "Object of that action [the Austrian ultimatum] to Servia was to crush Servia and make her a vassal of Austria. Effect of this would have been to upset balance of power in Balkans, which is of such vital interest to my Empire as well as to those Powers who desire maintenance of the balance of power in Europe. . . . I trust your country will not fail to support France and Russia in fighting to maintain balance of power in Europe" (*British Documents*, vol. xi, p. 276).

The most important British foreign secretary of the past half century has declared, curiously enough: "I have never, so far as I recollect, used the phrase 'Balance of Power.' I have often deliberately avoided the use of it, and I have never consciously set it before me as something to be pursued, attained and preserved" (Grey, Edward, *Twenty-five Years, (1892–1916)*, 2 vols., London 1925, vol. i, p. 5). This post-war declaration of Sir Edward Grey's may be taken as foreshadowing the better view at present prevailing among the ablest statesmen, rather than as expressing England's actual policy in the past. England as a matter of fact, perhaps more than any other European state, has been deeply concerned with the preservation of the balance of power. She has formed the backbone of the successive coalitions which prevented in turn excessive domination by Charles V, Philip II, Louis XIV, Napoleon and Wilhelm II. As was correctly stated in an influential secret memorandum of January 1, 1907, by Sir Edward Grey's senior clerk, Mr. Eyre Crowe: "History shows that the danger threatening the independence of this or that nation has generally arisen, at least in part, out of the momentary predominance of a neighbouring State at once militarily powerful, economically efficient, and ambitious to extend its frontiers or spread its influence, the danger being directly proportionate to the degree of its power and efficiency, and to the spontaneity or 'inevitableness' of its ambitions. The only check on the abuse of political predominance derived from such a position has always consisted in the opposition of an equally formidable rival, or of a combination of several countries forming leagues of defense. The equilibrium established by such a grouping of forces is technically known as the Balance of Power, and it has become almost a historical truism to identify England's secular policy with the maintenance of this balance by throwing her weight now in this scale and now in that, but

ever on the side opposed to the political dictatorship of the strongest single State or group at a given time" (*British Documents*, vol. iii, p. 403).

A balance of power aims primarily to preserve peace and the status quo. It presupposes for its success a static condition in nations. But herein lies its fundamental weakness. Nations are almost never static; some are growing, others declining. Equilibrium between them is therefore unstable and is affected by a great variety of factors.

Perhaps the most important factor influencing the balance of power is the possession of territory, implying as it does a definite area in the division of the world, the possession of certain natural resources and a population more or less capable of self-defense or aggression. Changes may take place in the political organization of a definite territorial area which may greatly alter its influence on the international equilibrium. The Italian peninsula, formerly divided into a dozen small political units, counted for little in the European balance of power before 1870, but political unification into the Kingdom of Italy made of this same territorial area a strong factor in the *équilibre européen*. The same is even more true of the transformation of Germany from a loose confederation of some three hundred heterogeneous political units, weakened by the rivalry between Prussia and Austria-Hungary, into a strong German Empire from which Austria-Hungary had been excluded

Armaments are another important factor. In the eighteenth century, when armies were largely professional or mercenary, a small state might have an army so efficient and so large in proportion to its territory as to secure to it an altogether disproportionately large influence in the European balance. This, for example, was the case of Prussia under Frederick the Great. But in the nineteenth century, with the general adoption in continental Europe of the system of universal military service, the military weight of a state in the European balance was necessarily more nearly proportioned to the size of the population. Yet it was by no means directly so proportioned. It is estimated that France, in the two decades before 1914, trained approximately 82 percent of her young men liable for military service, Germany approximately 55 percent and Russia a very much smaller percentage (Montgelas, M., *The Case for the Central Powers*, New York 1925, p. 107). Armament strength, however, depends not merely on man power but also on efficiency, equipment, natural resources, morale—factors in which Germany excelled. Moreover a country may adopt or develop a new form of armament, greatly altering thereby its weight in the international balance, as when Germany, for instance, created a strong navy in addition to her strong army.

Population is an important factor because it forms the essential basis of the fighting force of a country and of its economic productivity. But the rate of increase of population varies greatly from country to country and from generation to generation even within the same country. It is to be remembered also that in estimating armament strength this population factor lags a quarter of a century or so behindhand; that is, the theoretical proportion between the men capable of military service in France and in Germany, for instance, immediately prior to the World War is not the proportion between 39,000,000 people in France and 66,000,000 in Germany in 1914, but that between the respective populations in the 1890's (roughly 38,500,000 and 55,000,000) when the men were born who would be of an age to bear arms in 1914.

Economic expansion and colonial power must also be reckoned as considerably affecting the balance of power. In modern times colonies furnish no small part of the food, rubber, oil, copper and other resources for war, as well as much of the economic strength of the mother country. They may also furnish some of the actual fighting forces in case of war, as did the British and French colonial troops in the World War. This was not nearly so patent or important in the age of Louis XIV as at the opening of the twentieth century. Consequently it is not surprising that when the balance of power was fixed in the Peace of Utrecht, England's great economic expansion and colonial preponderance were rather neglected. But in the half century before 1914 such factors were more clearly recognized. With the diminution of unappropriated colonial areas and with the entrance of Germany and Italy into the colonial race after the completion of their political unification at home, the realization of the importance of colonial possessions gave a new intensity to economic and colonial rivalry. Even in these matters the Great Powers sought to bring about a certain balance, as in the treaties for the partition of Africa, for spheres of influence in China and the Middle East and in agreements to maintain the "open door" policy.

The element of chance involved in the uncertain and unforeseeable character of monarchs must also be taken into account, although it has been less important during the last century, with the general introduction of parliamentary government. A timid Frederick William I of Prussia may be followed by a Frederick the Great, a well meaning but incompetent Louis XVI by an adventurous and exceedingly competent Napoleon I, a Bismarck and Wilhelm I by a Wilhelm II with Bülow and Bethmann-Hollweg. Dynastic somersaults such as these may deeply affect the international equilibrium.

Because of the wide variability of all these forces the balance of power policy, based on the false premise of static conditions, has never achieved a satisfactory equilibrium for any long period of years and has signally failed in its purpose of preserving peace and the status quo or even of preventing states or groups of states from imposing their will upon others. Any international system to be successful in the long run must take cognizance of the inevitable factor of growth and change. In fact Lecky, in his *History of England in the Eighteenth Century*, goes so far as to say: "The belief that no State should be suffered to add anything to its territory without a corresponding adjustment of the frontier of its neighbours, or even of distant States, has done much more to subvert than to promote the security of Europe, and it has produced far more warfare than it has prevented" (vol. vi, 1893, p. 95–96). Temporarily a balance of power, buttressed by a system of alliances, may succeed in keeping the world in a nervous state of armed "peace," in which one group of powers not only is afraid to attack another group but also stands in constant fear of being itself attacked. But it is a principle based not upon justice but upon expediency and force. It creates universal fears and jealousies and there is no satisfactory way of determining when a real equilibrium has been reached; each group is likely to fear that the opposing group weighs heavier in the balance and therefore to look for the first opportunity to redress the balance in its own favor. If it occasionally prevents small wars it makes war more general and devastating when it does come.

In the eighteenth century the four Great Powers and their satellites were relatively well balanced, but this did not prevent wars over the Polish, Austrian and Bavarian successions. In fact the principle of balance was rather a contributing cause of these wars. It was also responsible to some extent for the partitions of Poland—flagrant violations of international justice designed to give equivalent compensation to the interested parties. The coalitions of Old Europe were unable to effect a successful balance for a quarter of a century against revolutionary France and the genius of Napoleon. The settlements of the Congress of Vienna were dictated mainly by the old doctrine of the balance of power and the policy of erecting barriers against a new French outbreak. But they were made in blind oblivion of the dynamic nationalism of the new post-revolutionary age, which caused wars in Italy, Germany and the Balkans and completely upset the settlements of the Congress of Vienna. After 1894 the Franco-Russian Alliance established a sufficiently satisfactory balance against the Triple Alliance to prevent either group from risking a decision by war. But the close friendship of England with France after 1904 and with Russia after 1907 caused Germany and Austria to fear that the Triple Entente overbalanced the Triple Alliance. Yet at the same time there were men in the Triple Entente who feared that the balance inclined in favor of the Central Powers; a good deal depended on which group should secure a dominant influence in Turkey and the Balkans, where unsuccessful attempts had been made to establish a little local balance between the minor powers. This uncertainty as to which nations the European balance really favored kept Europe in a perpetual state of suspicion and nervousness, caused alarming increases of armaments and made it very likely that a local war would develop into a general European or even a world war.

With the realization of these difficulties the old balance of power doctrine, which tended to group states in hostile combinations and rested on force rather than on justice, has now fallen into general discredit. The League of Nations, on the other hand, tends to group all states in a position of theoretical equality (with due allowance for the Great Powers) and at the same time to provide a machinery which will unite the great majority in checking aggression against any one of the League members. This theory is not perfectly executed in practise, nor has the "League idea" wholly supplanted the old doctrine. The League itself for some years was to a certain extent a continuation of the combination formed to prevent German hegemony. The Treaty of Versailles was accompanied by the Treaty of Guarantee by which England and the

United States undertook to come to the assistance of France. France, by opposing the union of Austria with Germany and by making treaties with states on the far side of Germany, has sought to build up a strong balance against her late enemy. But on the whole, especially since the Locarno pacts, it may be said that the League idea has gone a long way toward displacing the principle of the balance of power as a means of preserving peace and the status quo.

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See: CONCERT OF POWERS; ALLIANCE; AGGRESSION, INTERNATIONAL; IMPERIALISM; WAR; AGREEMENTS, INTERNATIONAL; LEAGUE OF NATIONS; OUTLAWRY OF WAR.

Consult: Dupuis, Charles, *Le principe d'équilibre et le concert européen* (Paris 1909); Donnadieu, Léonce, *La théorie de l'équilibre* (Paris 1900); Stieglitz, Alexandre de, *De l'équilibre politique du légitimisme et du principe des nationalités*, 3 vols. (Paris 1894) pt. i; Hoijer, Olof, *La théorie de l'équilibre et le droit des gens* (Paris 1917); Nys, Ernest, "La théorie de l'équilibre européen" in *Revue de droit international et de législation comparée*, vol. xxv (1893) 34–57; Kaeber, E., *Die Idee des europaischen Gleichgewichts in der publizistischen Literatur vom 16. bis zur Mitte des 18. Jahrhunderts* (Berlin 1907); Phillimore, Robert, *Commentaries upon International Law*, 4 vols. (3rd ed. London 1879–89) vol. i, p. 574–614; Fay, S. B., *The Origins of the World War*, 2 vols. (New York 1928).

BALANCE OF TRADE.

HISTORY OF DOCTRINE. Until early in the seventeenth century the main economic objective of English commercial policy was to maintain English currency at the proclaimed rates of exchange with foreign coins and to augment the national stock of coin and bullion. In pursuit of this policy there was developed, beginning with the thirteenth century, a complex system of regulations, the "bullionist" system. It attempted to prevent an excess of English purchase of foreign goods over the sale of English goods to foreigners by regulating each individual transaction. Richard Jones called it the "balance-of-bargain system," to distinguish it from the later emphasis on the general or total balance of trade ("Primitive Political Economy of England" in *Edinburgh Review*, vol. lxxxv, 1847, p. 426–52; reprinted in Jones, Richard, *Literary Remains*, London 1859, p. 293–335).

During the sixteenth century the pressure of the growing commercial interests especially of the Merchant Adventurers, against the restrictions which hampered their activities forced the repeal or non-enforcement of much of the bullionist legislation. By 1600 only the prohibitions of the export of coin and bullion remained, and even they were being nullified by extensive smuggling. However, the old system continued to have strong supporters. They charged the Merchant Adventurers with draining England of its bullion through their operations in bills of exchange, and urged the revival of the office of King's Exchanger to regulate such transactions. They attacked even more vigorously the East India Company, which had been given by its charter in 1600 the right to export substantial amounts of bullion. To meet these criticisms the spokesmen of the Merchant Adventurers, such as Misselden (*The Circle of Commerce: or the Balance of Trade*, London 1623), and of the East India Company, such as Mun (*A Discourse of Trade*, London 1621; *England's Treasure by Forraign Trade*, written about 1628, published posthumously, London 1664), developed the general balance of trade theory. They were the first to insist that commercial policy should be concerned primarily with the promotion of an export surplus by regulations which would encourage exports in the mass and restrict imports in the mass. They maintained that this was preferable to the bullionist policy of direct interference with the individual transactions and of arbitrary control over exchange rates. They did much to give the balance of trade concept general currency as the measure of a vital aspect of the country's economic status.

Mun's *England's Treasure by Forraign Trade* contains the fullest and best statement of the early balance of trade doctrine. A country without mines can ordinarily secure coin and bullion (i.e. "treasure") only through foreign trade by having an excess of exports over imports. The king must accumulate treasure against emergencies, and the annual excess of exports over imports sets the maximum limit to the additions which the king can make to his treasure without encroaching on the amount available for his subjects. Trade with a particular country is not to be condemned if it results directly in an excess of imports over exports, provided it gives rise indirectly to a profitable reexport trade with other countries. The restrictions on the export of bullion are futile where the balance would be directly or indirectly favorable, and otherwise are harmful through their injury to trade. The proper method of promoting a favorable balance of trade is to place restrictions on the consumption of foreign goods and to encourage frugality in the consumption of exportable domestic goods.

Later writers, with rare exceptions, followed

Misselden and Mun in their criticism of bullionist restrictions. However, it was not until 1663 that the restrictions on the export of bullion and foreign coin were finally repealed and not until 1819 that English coin could be freely exported.

Following Mun the exponents of the balance of trade theory endeavored to strengthen the argument for the importance of an indefinite accumulation of coin and bullion, because it had lost some of its axiomatic character as a result of the development of clearer notions regarding the nature and functions of money. Their principal argument was based on an analogy with personal finance: since an individual could get rich only by spending less than his income, so also a nation could get rich only if it spent (imported) less than it sold (exported). This analogy, dating from Elizabeth's time and used by Mun and later writers, was criticized by Barbon and was first effectively exposed as fallacious by Adam Smith. Closely related was the argument that internal production and domestic commerce add nothing to a country's wealth unless they result in an excess of exports over imports.

Still another argument for the importance of a favorable balance of trade was the need of accumulating state treasure for war emergencies. But when the establishment of the Bank of England, the general improvement in credit facilities and the development of a more productive and elastic taxation system were making England's reliance upon state treasure less necessary, this argument appeared in a new form. This was the belief in the mutual dependence of the political and military "balance of power" and the economic balance of trade. This notion was based on the realization of the importance of economic strength for success in expensive warfare and on the confusion between national wealth and national monetary stock. It was first clearly formulated by Harrington (*Commonwealth of Oceana*, London 1656) but was stressed by many other writers.

"Scarcity of money" was a recurrent complaint, for which a favorable balance of trade was regarded as the only adequate remedy. But as even Mun had pointed out, complaint of this "evil" is chronic. To some of the writers scarcity of money signified low prices; to others high prices, since money is scarce in relation to prices demanded for goods. Most of the later writers, however, were really complaining about the scarcity of capital as shown by the high rate of interest. Many others, assuming that more money meant more trade, had also stressed the importance of increasing the amount of money in circulation in order to stimulate trade, although Mun had stated, without apparently seeing its significance for the rest of his argument, that more money meant higher prices and therefore less trade.

It was not until a late stage in its development that the balance of trade doctrine became closely associated with the doctrine of protection of domestic industry against foreign competition. During the bullionist period the customs duties were levied primarily for fiscal and sumptuary purposes or for reasons of foreign policy. Protection of domestic industries first became a prominent objective of customs policy in the customs reorganization of 1608–16, and the customs were not systematically overhauled so as to eliminate all provisions in drastic conflict with the protectionist principle until Walpole's "reform" of 1721. The early balance of trade writers, like Misselden and Mun, and many of the later ones were merchants more interested in freeing commerce from restrictions than in supporting a new type of restriction in the interests of other economic groups. In the second half of the seventeenth century, however, many of the writers who urged the importance of a favorable balance of trade payable in money also supported protectionist measures in the interest of domestic industries. In most cases they did not explicitly connect the two doctrines, and where such connection was made it was simply by arguing that restrictions on imports of manufactures in the interest of domestic industries would also operate to make the trade balance favorable. Instances are to be found of adherence to the balance of trade theory together with attacks upon all restraints of trade for protectionist or other reasons and, on the other hand, of the acceptance of protectionist measures by writers who rejected the balance of trade doctrine. But during the first half of the eighteenth century these two doctrines were definitely associated through the doctrine of a favorable "balance of employment." An excess of exports over imports was desirable because it indicated an excess of employment of English labor as represented by the exports over loss of employment of English labor resulting from the imports. Duties on, and prohibitions of, importation of manufactured goods and restriction of the export of raw materials were justified, therefore, because they tended to produce a favorable balance of employment. Decker (*Essay*

on the Causes of Decline of the Foreign Trade, London 1744), however, used the balance of trade theory as an argument for freer trade, on the ground that free trade would promote a favorable balance of trade. In general the more enlightened writers from about 1675 to 1750 approached the free trade position without abandoning the balance of trade doctrine.

On its monetary side the balance of trade theory received its definite refutation at the hands of Hume (*Political Discourses*, Edinburgh 1752). He employed the doctrine, enunciated previously by others, that an automatic and self-regulating mechanism effects a distribution of the precious metals throughout the world in response to changes in price levels. Reasoning from it he was the first to demonstrate the futility of attempts to maintain a continuously favorable balance of trade.

Adam Smith completed the refutation of the theory by systematizing and presenting more effectively most of the arguments of his predecessors. He ridiculed the identification of money and wealth, which he attributed with some exaggeration to the mercantilists; money had no importance except as an instrument of commerce; every country automatically got the amount of money it needed and could not retain more than that amount; treasure was no longer adequate or important for the financing of a costly war; and most important of all, whether a country is growing richer or poorer does not depend upon the balance of trade but upon "the balance of annual produce and consumption." A favorable balance of production over consumption can exist in a country entirely separated from the rest of the world and "may be constantly in favor of a nation, though what is called the balance of trade be generally against it."

Before Hume and Smith demolished the whole balance of trade doctrine, writers had continued to examine separately England's trade with each country and to condemn particular trades which resulted in unfavorable balances. The only criticism raised against this emphasis on particular balances, especially by the spokesmen for the East India Company, was along the lines of Mun's argument that if a particular trade resulted directly in an unfavorable balance it should nevertheless not be condemned if it was instrumental in bringing about a reexport trade sufficient to offset this balance. Until the establishment of free trade in the nineteenth century, government policy continued to discriminate between the various trading interests within the country and between the trade with different countries, according to the character of the balances in which they resulted.

The theory was imported into the continent from England and passed through a similar development there. It was largely through the influence of Hume and the physiocrats that the theory was first seriously questioned. While in England no important writer after the publication of the *Wealth of Nations* continued to adhere to the doctrine, it survived much longer on the continent and has not yet been as thoroughly eradicated from continental as from English economic thought. Among nineteenth century economists of some repute it was an American, Henry Carey (*Principles of Social Science*, 3 vols., Philadelphia 1858–59, especially vol. ii, chs. xxxi–xxxii), who adhered most stubbornly to the doctrine and who most emphatically and explicitly rejected the criticisms of Hume and Smith. It still has a strong hold on popular thought and on official policy, especially as an argument for protection. Most economic historians who have dealt with the mercantilist period have shown tendencies to minimize the extent of its error and to find justification for its popularity during its period of predominance, largely on the basis of sympathy with its protectionist implications, failing fully to realize the extent of its inconsistency with modern monetary and international trade theories.

COMPUTATION OF THE BALANCES. The first statistical sources for foreign trade, the early English customs house rolls, recorded only the physical quantities of exports and imports. Beginning with 1615, estimates of the trade balance were made by government officials on the basis of these records, the duties collected and the rates. Mun and Misselden accepted this method although they recognized that it was subject to error. Later writers, however, maintained that the customs data were too inaccurate and incomplete to provide an adequate basis for computing the trade balance. Proposals to use exchange rates as a test of the state of balance were also criticized. It was pointed out that they were subject to temporary fluctuations and that the range of fluctuations set by the gold points varied with exchange rates of different countries. The use of figures for English mintage of coin as a test was found inadequate because this method failed to take account of the free circulation of foreign coin in England

and of the melting of coin for export. It was the moderate mercantilists who threw doubt on the adequacy of the current tests of the state of the balance in order to meet the arguments of the extremists who, on the basis of pessimistic estimates of the balance, were urging a stricter regulation of foreign trade.

In England annual statistics of the total quantities of exports and imports were first presented to Parliament in 1663 and statistics of the trade with particular countries in 1697. On the continent such information was kept secret as a matter of policy until much later. In England reliable trade statistics, computed from actual valuations of the exports and imports, were not compiled until late in the nineteenth century; they are of recent origin in most countries. Even today official trade statistics must be employed with caution because of the use of arbitrary official values, undervaluations by importers, smuggling, omissions of certain items, variation between countries in the use of foreign or of delivered values for imports, and similar factors.

The primary objective of the mercantilists in computing the balance of trade was to ascertain the net movement of specie, which could not be measured directly because of the prevalence of smuggling. A computation of the commodity balance of trade was obviously insufficient for this purpose. Although they are often charged with failure to realize this, they were well aware of the incompleteness of these computations. Thus Misselden mentioned gains from the fisheries and shipping freights and Mun listed freights, military expenditures abroad, remittances to Rome, travelers' expenses abroad and similar items which he thought necessary to include in computing the balance. Later writers added other items not accounted for in the trade returns. The general balance of transactions, including what later came to be known as the "invisible items," was called by Sir James Stewart (1767) the "balance of payments" and by Adam Smith the "state of debt and credit."

As Goschen pointed out, the balance useful in explaining the causes, direction and extent of specie movements is really a balance of immediate liabilities to payment, or a balance of matured indebtedness; this Goschen proposed to call the "balance of indebtedness." The computation should include only current and past transactions involving immediate and honored liabilities to pay or claims to receive payment; specie transactions themselves were excluded or included as the balancing item. This is the only balance to which the term balance of payments can be appropriately applied. With the growth of international movements of capital in recent years interest has centered largely on the computation of balances which would show the net changes from year to year in a country's outstanding indebtedness to or from the outside world. This balance is most appropriately called the balance of indebtedness, although it is now commonly termed balance of payments.

To ascertain the annual balance of payments or the net movement inward or outward of specie it is necessary to set the debit or outward items against the credit or inward items. All transactions, past or current, which gave rise to honored obligations to make outward cash payments during the unit year should be listed as debits. These include imports payable during the unit period; cash purchases of foreign securities or loans abroad; transfers abroad of bank funds for deposit; tourist expenditures abroad; cash purchases of foreign shipping, insurance or banking services; interest payable on borrowings from abroad; gifts sent abroad. Conversely all transactions, past or current, which gave rise to honored claims to receive payment from abroad during the year should be listed as credits. To the extent that the honored liabilities to pay and claims to receive during the year do not balance, and therefore cannot be offset against each other through exchange transactions or otherwise, the balance or remainder would have been paid in coin or bullion and would be the true balance of payments for the year. If there were no errors or omissions, a balance calculated in this way would correspond exactly to the actual net movement of coin and monetary bullion.

To compute the net annual balance of indebtedness there should be included as debits all transactions originating in the unit year which have given rise to obligations to foreign countries regardless of their maturity date, or which have liquidated past or current claims to receive payment from abroad; and there should also be included as credits all transactions originating in that year which have created claims to receive payment from abroad regardless of their maturity date, or which have liquidated past or current liabilities to make payment abroad. The net balance between these items would be the true balance of indebtedness for that year or the net change in the course of the year in the country's outstanding indebtedness to, or claims on, the outside world. If there were no errors

or omissions a balance calculated in this way would correspond exactly with the "balance" between loans and credits received from abroad plus payments received in liquidation of loans due from abroad on the one hand, and loans and credits granted abroad plus payments made in liquidation of debts due to foreigners on the other hand. Strictly, however, allowance should also be made for the wiping out of claims to receive or obligations to pay through delinquencies, bankruptcies and compositions with creditors.

The current official computations, although generally labeled "balances of payments," are often "general purpose" computations, intended to provide estimates of both types of balances, and are more appropriately given such a non-committal title as "balances of international transactions." All items involving debits or credits are included to the extent that they can be computed or estimated. On the assumption that current items are paid currently the balance of payments is obtained by including long and short term loans and liquidations of loans and by excluding specie movements or including them as a balancing item. By including specie movements and excluding loans granted or liquidated or including them as balancing items the balance of indebtedness is obtained.

Before the war official computations of the general balances were made only occasionally, as special investigations. During the present post-war period many countries regularly estimate their annual international balances, with varying degrees of completeness and accuracy. The United States and Canada publish the most complete and probably the most carefully compiled and estimated balances. Under the auspices of the Economic and Financial Section of the League of Nations there has been some progress toward the adoption of a uniform method of presentation of the balances, and the League of Nations now publishes annually a compilation of the estimates of all the reporting countries (twenty-five in 1927).

ECONOMIC SIGNIFICANCE OF THE BALANCES. Since the balance of payments ordinarily forms a very small fraction of the total volume of international commodity, service and capital transactions, it is not safe to infer the state of the balance of payments from the state of the commodity balance of trade. But a moderate amount of information about the extent and direction of the balances of service transactions and of capital movements generally suffices to explain approximately the state of the commodity balance of trade. A debtor country tends to pass through several stages with respect to its commodity trade balance. In the period of "immature" borrowing imports tend to exceed exports. The period of "mature" borrowing sets in when foreign capital is still coming in, but the annual interest payments on the old indebtedness have grown to exceed the annual net increment of new indebtedness. During this stage the exports tend to be in excess of the imports. The next period is that of repayment, when in addition to the annual interest payments on the outstanding indebtedness some of the principal is also being repaid. During this stage there is likely to be a substantial excess of exports over imports. We may distinguish also a fourth stage, in which a country that was formerly a debtor becomes a creditor country. Similar stages can be defined for the creditor country. In the first, initial loans are made to foreign countries and the commodity balance is characterized by an export surplus. The next stage represents an excess of interest receipts on old loans over the granting of new loans. There appears a moderate import surplus. In the final stage capital is withdrawn from abroad and interest receipts on outstanding foreign assets tend to result in a substantial import surplus.

Table I presents the commodity balances of trade of a number of important countries for the last pre-war year. Assuming that the debit

TABLE I

COMMODITY BALANCES OF TRADE, 1913
(Millions of dollars)

COUNTRY	IMPORTS	EXPORTS	BALANCE*
Argentina	407	467	+ 60
Australia	388	365	− 23
Canada†	634	432	−202
France	1642	1327	−315
Germany	2563	2403	−160
Italy	702	483	−219
Japan	363	315	− 48
Netherlands	1575	1239	−336
New Zealand	108	112	+ 4
Russia	708	783	+ 75
Switzerland	371	266	−105
Union of South Africa	187	317	+130
United Kingdom	3208	2556	−652
United States‡	1894	2330	+436

Source: *Statistical Abstract of the United States*, for the year 1914, p. 688, and for the year 1915, p. 716.

* A debit balance or import surplus is indicated by a minus, while a credit balance or export surplus is given a plus.

† Year ending March 31, 1914.

‡ Year ending June 30, 1914.

and credit items in the balance of indebtedness not specifically accounted for in the following discussion approximately offset each other, certain inferences can be made from this table. Of the debtor countries Canada and Japan were still in the first stage of new borrowings exceeding interest payments on old indebtedness. Argentina and Russia were definitely in, and Australia and New Zealand were in or were approaching the second stage, in which the indebtedness continues to increase, although annual interest payments on old indebtedness exceed the net inflow of new capital. The United States and apparently also South Africa were in the third stage, where annual reduction of outstanding indebtedness plus interest payments were operating to produce a substantial export surplus. Soon after 1913 the United States was to reach the stage of transfer from the debtor to the creditor status, during which an export surplus to pay principal and interest on indebtedness became an export surplus representing additions to net investments abroad. It has at present (1929) reached the second creditor stage, where annual interest receipts on outstanding investments abroad exceed the annual net increments to investments abroad. Nevertheless, a large debit balance on tourist services, remittances to relatives abroad and other non-commodity items still leave the United States with a credit commodity balance. Italy was probably a debtor country in the first stage, but the receipts of remittances from Italian emigrants abroad were also an important factor in explaining the large debit balance on commodity account. The other five countries were all creditor countries, and since all had import surpluses the inference is that they were all lending less new capital abroad than they were receiving as interest on their outstanding foreign investments. England and Switzerland, however, had probably not yet reached this stage. In the case of England new investments abroad and interest receipts on old investments were approximately equal in amount and the commodity import surplus was to be accounted for mainly by the earnings from British shipping services to foreigners. In the case of Switzerland services to tourists were an important factor in the large import surplus.

Table II presents the partial balances and the total balances of indebtedness for twelve coun-

TABLE II

INTERNATIONAL BALANCES OF INDEBTEDNESS *

COUNTRY AND UNIT	YEAR	COMMODITY BALANCE	COIN AND BULLION BALANCE (BALANCE OF PAYMENTS)	INTEREST AND DIVIDENDS BALANCE	BALANCE OF OTHER SERVICE AND REMITTANCE ITEMS	BALANCE OF INDEBTEDNESS
Argentina 1,000,000 Pesos	1925–26	−52.2	−1.65	−153.35	−37.0	−244.2
Canada 1,000,000 Dollars	1926	+279.6	+32.5	−214.0	+93.0	+191.1
Denmark 1,000,000 Kroner	1927	−109	+30	−50	+118	−11
Germany 1,000,000 Reichsmark	1927	−2,827	−189	−430	−1,181	−4,627
India 100,000 Rupees	1926–27	+35.82	−20.17	−29.78	−34.72	−48.85
Japan 1,000,000 Yen	1925	−361.4	+21.1	−10.5	+185.4	−165.4
New Zealand 1,000 Pounds Sterling	1926	−6,302	+443	−7,561	−425	−13,845
Norway 1,000,000 Kroner	1927	−244	—	−60	+241	−63
Poland 1,000,000 Zloty	1926	+625.6	−4.3	−160.0	+183.2	+644.5
Sweden 1,000,000 Kroner	1927	+33	−1	+19	+194	+245
United Kingdom 1,000,000 Pounds Sterling	1927	−392		+333	+155	+96
United States 1,000,000 Dollars	1927	+379	+6	+514	−394	+505

Source: League of Nations, *Memorandum on International Trade and Balances of Payments, 1913-1927* (Geneva 1928) vol. I.
* Minus sign indicates a debit balance, plus sign a credit balance.

tries for recent years. Some points are worthy of notice. On the basis of these returns the net export of capital from the United States in 1927 did not greatly exceed that from England. Charges against reparations (1455 million marks) accounted for some 30 percent of Germany's debit balance of indebtedness. In only two cases of the twelve were the commodity balances different in direction from the balances of indebtedness, but in five out of the ten cases for which such comparisons could be made the balances of payments differed in direction from the balances of indebtedness. The estimates of balances of indebtedness given here are in all cases indirect estimates. In a number of instances direct estimates based on data as to new loans and credits liquidated were also reported; they differed more or less radically from the indirect estimates.

Because old errors are still prevalent it is necessary to emphasize that the balance of indebtedness of a country for a particular year shows only the change in the relative amounts of assets abroad owned by residents of the country and assets in the country owned by non-residents. The balance itself or even a series of balances extending over a long period of years will not suffice to indicate whether or not the economic status of a country has improved or deteriorated. In order to appraise properly the significance of the balance of indebtedness it must be interpreted in the light of the greater balance of which it is only an arbitrary fragment, the national balance of production and consumption. It reveals nothing about national income or about the welfare of the people of a country. As to national wealth it shows only what changes have occurred in one class of assets and one class of liabilities. Attempts such as are still made to draw close analogies between the international balance of indebtedness and the standard forms of private accounting, whether the balance sheet or the profit and loss statement is employed, rest, therefore, on fallacious reasoning of the mercantilist type. It is a similar error to maintain that one can infer the extent of a country's capacity to make payments to foreign countries from the state of its balance of indebtedness for any particular year or series of years. If in 1929 the United States has made a net reduction in its outstanding investments abroad it will have an outward or debit balance of indebtedness. But this does not mean that its capacity during that year to lend abroad or to make payments abroad of any sort was any less than in previous years when it had a credit balance of indebtedness. Attempts to measure the capacity of Germany to make reparations payments by the amounts of its balance of indebtedness rest on misinterpretations of the sort which would lead to a denial that a rich and growing country, which offers a profitable field for the investment of foreign capital and therefore has a debit balance of indebtedness, has any capacity to lend, to pay reparations or even to make ends meet.

Similarly the economic significance to a country of the status of its balance of payments cannot be ascertained from inspection of that balance without reference to its internal currency and credit conditions. Under modern conditions of large bank credit superstructures resting on relatively small gold reserves, a moderate change in the balance of payments may mean, unless counteracted, the loss of a large fraction of the gold reserves and consequently a sharp contraction of credit. The development of internal credit facilities has tended greatly to increase the significance of international gold movements when they actually occur in substantial amounts. On the other hand, however, the development of international credit facilities and of a spirit of cooperation between the great central banks has tended to lessen the danger of the actual occurrence of excessive drains on any country's gold reserves. There are, moreover, certain factors which tend to check any serious outflow of gold from a country lacking supplies of gold in excess of its reserve requirements. The movement of the exchanges against a country with an adverse balance of payments stimulates postponement of liquidation of debit obligations and tends to bring about an increase of interest rates in that country. This in turn tends to result in the withdrawal of funds held abroad, the sale of securities having a foreign market and the inflow of foreign short term credits of various types. If this is not sufficient to correct the adverse balance, the reduction in gold reserves will lead to contraction of bank credit, reduction in prices, increase in exports and decline in imports. Through regulation of the rates of discount of central banks, adjustment factors of this sort can be brought into operation more quickly and thus prevent serious consequences which would follow a long and constant drain on the gold reserves. Under these conditions only the serious mismanagement of paper cur-

rency or of bank credit or the occurrence of some national or international catastrophe like the outbreak of war can result in so serious and continued a drain on a country's gold supply as to bring about a credit collapse. Nevertheless, a country which is decidedly a debtor may encounter difficulties if unusually large foreign obligations fall due at a time when credit conditions are unfavorable in the important foreign money markets. Conservative management of the currency and banking system of a country and a reasonable amount of cooperation between the banks of different countries are sufficient under ordinary circumstances to protect a country against a dangerously adverse balance of payments.

JACOB VINER

See: BULLIONISTS; MERCANTILISM; PROTECTION; ECONOMIC POLICY; INTERNATIONAL TRADE; CENTRAL BANKS; FOREIGN EXCHANGE; FOREIGN INVESTMENT; REPARATIONS.

Consult: Heyking, Edmund, *Zur Geschichte der Handelsbilanztheorie* (Berlin 1880); Yanzhul, I. I., *Angliyskaia si obodnaia torgovlia* (English free trade) (2nd ed. Moscow 1882); Suviranta, Br., *The Theory of the Balance of Trade in England* (Helsingfors 1923); Petritsch, Leo, *Die Theorie von der sogenannten gunstigen und ungunstigen Handelsbilanz* (Graz 1902); Dubois, Auguste, *Précis de l'histoire des doctrines économiques* (Paris 1903); Taussig, F. W., *International Trade* (New York 1927); Viner, Jacob, *Canada's Balance of International Indebtedness 1900–1913* (Cambridge, Mass. 1924); Lewis, Cleona, *The International Accounts* (New York 1927). The League of Nations publishes, since 1924, compilations of annual balances of international payments and of foreign trade for the period beginning 1910. Since 1922 the United States Bureau of Foreign and Domestic Commerce publishes in its series of *Trade Information Bulletins* annual estimates of the American balance of trade and of international payments.

BALBI, ADRIANO (1782–1848), Venetian geographer and statistician. At first a professor at Murano (Venice) and Fermo, he lived from 1821 to 1832 in Paris. In 1833 he became imperial counselor in geography and statistics at the Viennese court.

His geographical treatises, *Balance politique du globe en 1828* (Paris 1828) and *Abrégé de géographie* (Paris 1832, 3rd ed. 1838), which has been translated into several languages, were notable for accuracy, completeness and interesting methodological discussions. After analyzing several possible criteria for the classification of the human race, Balbi selected four as fundamental: political boundaries, stage of cultural development, anthropological characteristics and religious beliefs. The first of these he employed in the descriptive portion of his work as a convenient framework for the presentation of continuously revised and expanded compilations of statistical and other data, many of which were not relevant to the subject. Consideration of cultural stages led him to analyze the concept of civilization and the tripartite scheme of savagery, barbarism and civilization. The classification by anthropological charcteristics he reduced eventually to a language basis as distinct from one of political nationality. In this connection he compiled an impressive table of languages and the first fairly complete *Atlas ethnographique du globe* (2 vols., Paris 1826).

Of Balbi's statistical works the most notable is "Essai sur la population des deux mondes" (in *Revue des deux mondes*, 2nd ser., vol. i, 1830, p. 5–26, and vol. ii, 1830, p. 100–16), in which he attempted to estimate the population of the earth on the basis of judiciously selected statistics and of ingenious indirect calculations. His *Essai statistique sur le royaume de Portugal et d'Algarve* (2 vols., Paris 1822), a statistical description of Portugal, is superior to any other available at the time.

CARLO ERRERA

Consult: Balbi, Eugenio, in Società Geografica Italiana, *Bollettino*, vol. xviii (1881) 528–32; Jaja, Goffredo, *Adriano Balbi* (Rome 1903).

BALBO, CESARE (1789–1853), Italian historian and statesman. He was a native of Piedmont and took part in the Piedmont revolution of 1821. After a short exile he devoted himself to study until Charles Albert of Sardinia appointed him president of the first constitutional ministry in 1848. He became disillusioned with politics, however, and returned to scholarly pursuits and journalistic activities.

Balbo's *Delle speranze d'Italia* (Paris 1844, 5th ed. Florence 1855; reprinted with introduction and notes by Achille Corbelli, Turin 1920) is one of the most important documents of the early nationalist movement in Italy. Widely circulated, it inspired both directly and indirectly Italian political writing from 1844 to 1847. Balbo did not consider it possible to achieve complete Italian unity; he proposed instead a confederation of Italian princes under the hegemony of Piedmont. Although he was an admirer and follower of Gioberti he did not rely on the papacy for political regeneration. The most pressing problem was neither unity nor con-

stitutional liberty but liberation from foreign rule. This would be accomplished by the break up of the Ottoman Empire, which Balbo predicted; Austria would there receive compensation for her losses in Italy. He also insisted on the importance of an Italian policy based on a strong and harmonious public opinion which in the absence of parliamentary discussion must be created by the press. There were three immediate objectives: a single, well planned railroad system, a regime of commercial liberty and a customs union of the Italian states.

As a historian Balbo belonged to the Catholic-Liberal, called the neo-Guelfian school, which extolled the papacy as the instrument of progress and liberty and guardian of Latin Christian civilization. In the *Pensieri sulla storia d'Italia* (Florence 1858) he indicated the main currents of Italian history and in the *Sommario della storia d'Italia* (Turin 1846, 10th ed. Florence 1856; reprinted and extended to 1922 by Arrigo Solmi, Milan 1927) he told its story. In the *Meditazioni storiche* (Turin 1842–45, 2nd ed. Florence 1854) he developed a philosophy of history, which he conceived as the guidance of Providence.

Balbo was one of the collaborators of the *Antologia italiana* (July, 1846–February, 1848) and contributed to Tuscan newspapers and others. With Cavour he founded the *Risorgimento*. In the *Della monarchia rappresentativa in Italia* (Florence 1857) he outlined his theory of representative government.

G. SOLARI

Consult: Ricotti, E., *Della vita e degli scritti del conte Cesare Balbo* (Florence 1856); Passamonti, Eugenio, *Cesare Balbo e suoi tempi* (Turin 1923); Croce, Benedetto, *Storia della storiografia italiana nel secolo decimonono*, 2 vols. (3rd ed. Bari 1927).

BALDUINUS. *See* BAUDOUIN, FRANÇOIS.

BALDUS, PETER (de Ubaldis) (1319 or 1327–1400), Italian mediaeval jurist. He studied civil law at Perugia under the famous Bartolus, whose reputation he quickly equaled, and under other masters acquired a complete acquaintance with canon law. Although his name is always associated with Perugia, Baldus' teaching career, which lasted for more than half a century, began at Bologna when he was a very young man. He was equally famed as a teacher in every branch of law and as a legal consultant; yet it would be difficult to prove that Baldus was responsible for marked changes either in law teaching or in law interpretation. In his courses he followed the vicious practise of contenting himself with the exposition of mere portions of the Roman law texts, leaving his pupils without guidance in the remainder. His important work on procedure, the *Practica judicaria*, suffers from the typical mediaeval failing of the scholastic method: instead of straightforward handling of fundamentals it contains arguments on 283 arbitrary *Quaestiones*. However, the 2000 *Consilia*, Baldus' opinions on actual cases, are a most valuable mine of varied mediaeval law and exhibit his acuteness and strong practical sense at its best.

S. MACCOBY

Works: *Opera* (Parma 1473, Venice 1572, 1615 and 1616, Turin 1576, Lyons 1585).

Consult: Savigny, F. C. von, *Geschichte des römischen Rechts im Mittelalter*, 7 vols. (2nd ed. Heidelberg 1834–51) vol. vi, p. 208–48; *L'opera di Baldo* (Perugia 1901) published by the University of Perugia on the fifth centenary of his death; Wilson, J. D., "Baldus de Ubaldis" in *Yale Law Journal*, vol. xii (1902) 8–20; Holtius, A. C., *Het wisselregt in de XIV^de eeuw, volgens de Consilia van Baldus* (Amsterdam 1840); Bethmann-Hollweg, M. A. von, *Der Civilprozess des gemeinen Rechts in geschichtlicher Entwicklung*, 6 vols. (Bonn 1864–74) vol. vi, p. 247–51; Lainé, Armand, *Introduction au droit international privé*, 2 vols. (Paris 1888) vol. i, p. 166–78; Laspeyres, E. A. T., *Über die Entstehung und älteste Bearbeitung der Libri Feudorum* (Berlin 1830).

BALDWIN, ROBERT (1804–58), Canadian statesman, "the father of responsible government" in Canada. Throughout his public life, which began in Upper Canada, he persistently urged upon the British government that the only solution for colonial troubles was to permit the colonists to work out their self-government under an executive responsible as in Great Britain to the elected chamber. Baldwin's most clear cut expression of this belief was laid down in two famous letters, one to Glenelg, the colonial secretary (July 13, 1836), the other to Lord Durham (August 23, 1838), printed in the *Report of the Public Archives for 1923* (Ottawa 1924, p. 326–37). In them he expounded a political philosophy which not only influenced Durham's report but also proved fundamental in the evolution of the autonomy of the dominions. Baldwin lived to put his theory into practise. With the assistance of L. H. La Fontaine he formed in 1842 a ministry dependent for support on the House of Assembly; and after a period of political stagnation he formed with the same statesman his second ministry (1848–51), which completely vindicated his political phil-

osophy and became the permanent model for political developments throughout the British dominions. The Baldwin-La Fontaine Alliance was of further significance in that it furnished a precedent for successive ministries in United Canada, each of which took its name from a similar partnership of French and British leaders. It introduced the new principle of co-operation between the two national groups which has since governed the destinies of the country.

W. P. M. KENNEDY

Consult: Leacock, S., *Mackenzie, Baldwin, La Fontaine, Hincks*, ed. by W. P. M. Kennedy (Oxford 1926); Davin, N. F., *The Irishman in Canada* (Toronto 1877) p. 172–73, 385–589; Kennedy, W. P. M., *The Constitution of Canada* (Oxford 1922) p. 182–269; Morison, J. L., *British Supremacy and Colonial Self-Government, 1839–1854* (Toronto 1919).

BALFOUR, ARTHUR JAMES, FIRST EARL OF BALFOUR (1848–1930), British statesman and philosopher. Balfour was educated at Eton and at Cambridge and received his political training under the guidance of his uncle, Lord Salisbury. He was elected to the House of Commons in 1874 and won recognition as a caustic although somewhat flippant debater. In 1886 Lord Salisbury appointed him chief secretary for Ireland, a post which he held for five years to the discomfiture of the Irish Nationalists, who considered him a dilettante and regarded his appointment with contempt. In 1891 he became first lord of the treasury and leader of the Conservative party in the House of Commons. This latter post he held continuously for twenty years.

At the conclusion of the Boer War Balfour succeeded Lord Salisbury as prime minister. His ministry (1902–05) was a stormy one. He retained leadership of his party by effecting compromise after compromise to bridge the gap within the party between the protagonists of imperial preference and protective tariff led by Joseph Chamberlain, and the minority which stood by the free trade traditions of the nineteenth century. As leader of the opposition after 1906 Balfour fought bitterly the liberal legislation of 1906–11. He retired from active politics in 1911 but returned to office in 1915 as first lord of the admiralty and then as foreign secretary in the coalition ministry. He represented Great Britain in Washington as the head of the War Commission (1917), was one of the British peace plenipotentiaries at the Peace Conference (1919), principal British representative at the first League of Nations Assembly (1920) and head of the British delegation to the Washington naval conference (1921–22). His name is associated with the Balfour Declaration (1917) promising the support of the British government for the creation of a Jewish national home in Palestine, and with the Balfour note defining the British attitude on inter-Allied war debts. He was made first earl of Balfour in 1922, when he retired from active participation in public life. He spent his last years preparing the first volume of his memoirs.

Balfour throughout his long career completely mystified both friend and foe. His personality remained as elusive as it was charming. Indifferent to power, he clung to it; bored by politics, his political career was protracted; gentle and yielding in manner, he held his own easily against the redoubtable Chamberlain. He will go down in history as a great conservative; but whether his conservatism was born simply of distrust in the power of the mind and will to accomplish anything really worth while in human affairs or whether it was based on more positive premises is not clear.

WALTER PHELPS HALL

Important works: *A Defense of Philosophic Doubt* (London 1879, new ed. 1920); *Essays and Addresses* (Edinburgh 1893, 3rd ed. 1905); *The Foundations of Belief* (London 1895, 8th ed. 1901); *Economic Notes on Insular Free Trade* (London 1903); *Theism and Humanism* (London 1915); *Theism and Thought* (London 1923).

Consult: *The Mind of Arthur James Balfour*, ed. by W. M. Short (New York 1918); Raymond, E. T. (E. R. Thompson), *Mr. Balfour* (London 1920).

BALFOUR DECLARATION. *See* ZIONISM.

BALKAN PROBLEM. *See* NEAR EASTERN PROBLEM.

BALLANCE, JOHN (1839–93), New Zealand statesman. He was born in Ireland, the son of a tenant farmer, and as a youth emigrated to New Zealand. Here he ran a store, turned to newspaper work, fought in the Maori war and in 1875 entered politics. In the conflict between Conservative large landowners and the middle class Liberals he took the side of the latter and eventually became their leader. From the Manchester school and its laissez faire stand he turned eagerly to the works of Toynbee, Sidgwick, Marshall, Hobson, Henry George and the Fabians and to the belief that the state must play an active part in destroying social evils

and in carrying out constructive plans. His chief interest was in breaking up the large estates, in covering the country with small farms and in keeping for the crown the title of land yet to be alienated. In 1878 he carried a short lived land tax on unimproved value; between 1884 and 1887 he settled in villages a thousand families on small holdings with perpetual leasehold tenure. But his real chance came when the election of 1890, the first fought under manhood suffrage, returned him to power. Under his premiership, 1891–93, six labor laws and four land laws were passed. The latter included a graduated land tax with higher rates on land held by absentees and exemption of improvements; the repurchase of estates suitable for closer settlement; and the alienation of crown lands and of repurchased estates on "lease in perpetuity." These measures were a considerable factor, along with the upward turn of the general price level and the production of mutton and butter for export, in revolutionizing the country. Other reforms, including labor laws, women's suffrage, abolition of plural voting, a graduated income tax, the repeal of the personal property tax and a conciliatory policy towards the Maoris, took the middle and lower classes by storm, gave the Liberal party a long lease of power, delayed the rise of a strong Labor party and provided a program much of which was copied later by Australia. Ballance died in the midst of his work, and the completion of his measures formed part of the work of Reeves and Seddon.

HERBERT HEATON

Consult: Stout, R., "The Hon. John Ballance" in *Review of Reviews for Australasia*, vol. ii (1893) 107–15; Reeves, W. P., *State Experiments in Australia and New Zealand*, 2 vols. (London 1902); Le Rossignol, J. E., and Stewart, W. D., *State Socialism in New Zealand* (New York 1910).

BALLANCHE, PIERRE SIMON (1776–1847), French philosopher of history, a liberal member of the traditionalist school and a disciple of Vico and Bonnet. He forsook orthodox Catholicism in *Du sentiment considéré dans ses rapports avec la littérature et les arts* (Lyons 1801), but the idea that expiation could regenerate the human being became the foundation of his early faith in progress. His later preoccupation with the painful progress of humanity as a whole was foreshadowed in *Antigone* (Paris 1814), which seeks to trace the emancipation successively of the human imagination (in antiquity), of the moral conscience (through Christianity), of the intellect (in modern times). The most mature exposition of his ideas is the unfinished *La palingénésie sociale*, in which he adapted Charles Bonnet's idea of individual palingenesis to political and social forms. Ballanche considered each stage of rebirth as both an ordeal and an initiation. Clothing his thought in myths he showed the human race temporarily tortured, maimed or even isolated by the ordeal, but nevertheless guided by divine law out of barbarism (which followed original sin) through theocracy, aristocracy, plebeian ascendancy to ultimate union in democracy. In this final stage Christianity will adapt itself to democracy and become the "social genius." The myth *La ville des expiations* contains a picture of the new world where caste and capital punishment are abolished. Ballanche's philosophy of history is weakened by his lack of historical knowledge, but he anticipated Christian Socialism by a hundred years.

RENÉ HUBERT

Important works: *La palingénésie sociale*, which was intended to include *Prolégomènes* (Paris 1827), three episodes: *Orphée* (Paris 1829), *La formule générale* (never written), *La ville des expiations* (fragments published in reviews; books iv–vii, the most significant parts of *La ville*, were edited by A. Rastoul, Paris 1926) and an epilogue *La vision d'Hébal* (Paris 1831).

Consult: Faguet, Émile, *Politiques et moralistes du dix-neuvième siècle*, 3 vols. (Paris 1898–1900) vol. ii, p. 133–74; Huit, Charles, *La vie et les oeuvres de Ballanche* (Lyons 1904); Laprade, Victor de, "Ballanche sa vie et ses écrits" in Académie des Sciences, Belles-lettres et Arts de Lyon, *Mémoires*, Classe des lettres, vol. ii (1850) 127–89.

BALLIN, ALBERT (1857–1918), German industrial and political leader. Ballin began his career as manager of a small emigration agency in Hamburg. When the early eighties brought a fivefold increase in emigration he expanded his business by forming an association with a freight shipping company, whose steamers he adapted to the carrying of steerage passengers. The competition it offered caused the Hamburg-American Line ("Hapag") to amalgamate with it in 1886. Ballin, who was appointed head of the passenger department, became almost at once the dominant power of the "Hapag." Although his leadership covered a period of severe transatlantic competition he made the "Hapag" the foremost shipping company of Germany and of the world. His success was due to his far sighted analysis of transatlantic shipping problems, to

his establishment of new standards in traveling comforts, in speed and in types of ships and to his abandonment of the usual policy of geographical concentration and the creation of a widely extended network of services. It was also largely due to his ability to compromise with his competitors. His initiative and skill as negotiator were to a great extent responsible for the formation of the North Atlantic Steamship Lines Association. This was the first shipping pool to be created and covered the steerage passenger and freight traffic of the most important continental lines. In 1901, when the establishment of the International Mercantile Marine Company (Morgan Trust) threatened to impair either the business of the "Hapag" or its independence, Ballin succeeded in arranging for a mutual participation in dividend distribution which secured the cooperation of the trust without sacrificing the "Hapag's" independence. When the World War stopped German shipping, Ballin became engaged in the provision of food supplies for the Reich and organized the Central Purchasing Company.

Immensely successful in business, Ballin was less so in politics. The international importance of his enterprise, his familiarity with English conditions and particularly his personal friendship with the kaiser secured for him considerable political influence. But he failed in his main political endeavor, to find a basis for an English-German understanding as to naval armaments, although he was untiring in his attempts to arrange meetings between English and German leaders, particularly between Tirpitz and Winston Churchill. When the outbreak of the war ended those attempts, Ballin advocated a speedy termination of the war, even without territorial gains. But the unpopularity of his ideas with the military party diminished his influence and severed his connection with the kaiser. In 1918 it was planned to entrust Ballin with the impending armistice and peace negotiations, but his death, which occurred in that same year, prevented it.

EVA FLÜGGE

Consult: Huldermann, B., *Albert Ballin* (Oldenburg 1922), tr. by W. J. Eggers (London 1922); Stubmann, P. F., *Ballin, Leben und Werk eines deutschen Reeders* (Berlin 1926); Lair, Maurice, in *Revue des sciences politiques*, vol. xlvi (1923) 244–72; Delage, Edmond, "Ballin et la guerre" in *Revue maritime*, n. s., no. 36 (1922) 774–93. Ballin's political activities are reflected in many of the documents published in *Die grosse Politik der europäischen Kabinette, 1871–1914*, 40 vols. (Berlin 1923–26).

BALLOT (from the Italian *ballotta*, a little ball) has become associated with the modern method of voting used by electorates, assemblies and private associations to select officers and to pass upon measures. A piece of paper, upon which the names of the candidates or the titles of the measures appear, is usually employed for this purpose, but the use of balls still persists in Greece and also in some private clubs. The ballot has been introduced in order to lessen bribery, intimidation and coercion in elections.

In classic Greece white and black balls of stone or metal and marked and unmarked shells were used by popular courts and juries in making decisions. In Rome the Gabinian law of 139 B.C. provided that each voter should receive a carved wooden ballot for each of the candidates for the Comitia Centuriata. After dropping his choice in an urn the voter returned the other ballots to the attendant outside. "Yes" and "no" ballots were also provided for changes in the laws. There is evidence of the use of the secret ballot in India before 300 B.C. It was also used in mediaeval England. A papal bull of 1562 required the college of cardinals to vote by secret ballot in the election of the pope. In America some of the Indian tribes developed a democratic system which included the use of the ballot. The general court at Boston, Massachusetts, used ballot papers in the election of a governor in 1634. The American colonies of England led the rest of the world in introducing secret voting for the election of representatives. The use of ballot papers was made obligatory in all but one of the state constitutions adopted between 1776 and 1780. In Prussia an act was passed in 1808 providing for the ballot in municipal elections. In the nineteenth century the ballot came into wide use for national legislative elections. It was introduced in South Australia in 1856, in Italy in 1859, in France in 1852, in Great Britain in 1872, in Belgium in 1877 and in all of the American states except Kentucky by 1888. At the present time the ballot is almost universally employed for national elections. Among the notable exceptions are Soviet Russia and the rural parts of Hungary where voting is open.

The success of a ballot law in lessening violence and corruption at elections depends in part upon the extent to which voting is made secret. In Argentina, Brazil and Spain, where the ballots are printed by the parties, secrecy is only partially secured and there are complaints about bribery. In France and in some of the

Swiss cantons, where also the parties are allowed to print their own ballots, the requirement that ballots be put in an opaque envelope in the secrecy of a polling booth before they are deposited in the ballot box insures a fair degree of secrecy. In English speaking countries secrecy is commonly attained by the so-called Australian ballot system. Under this system only the official ballot furnished by the state can be used, the nomination of candidates is regulated by law, the ballots are distributed by sworn representatives of the state and they are marked in secret by the voters. Before this system was introduced in the United States (Massachusetts led the way in 1888) complaints regarding ballot box stuffing and intimidation were common. The Australian ballot is now used in Great Britain, Canada, Australia, the Irish Free State, Belgium, Holland, Germany and in all the American states except three (South Carolina still has party ballots, Georgia has an optional law and Delaware has official ballots but they are not marked in secret).

Various devices are employed in order that the ballots may be marked in an impersonal fashion so as to render later identification difficult. In most of the countries using the Australian ballot system, the voter marks a cross (X) in the square or circle opposite the name of the candidate or the title of the party. However, in parts of Australia, in the Irish Free State, in Sweden and in a few American and Canadian cities where systems of proportional representation have been established, the voter can indicate the order of his preferences by using the Arabic numerals. In Belgium and Holland the voter blackens a white bull's eye in a black square which is opposite his favorite candidate or list. In the American states there are several other methods to be noted. In several states the voter crosses out the names of the candidates whom he disfavors; in others he uses a rubber stamp to make his crosses instead of a pencil; and in parts of ten states he votes by means of a voting machine. Where voting machines are used the ballot appears only on the face of the machine and the voter indicates his choice for a given candidate or a given party by pulling down a lever over the name of that candidate or party. This choice is recorded automatically upon a counter which is concealed by plates during the voting.

The use of the secret paper ballot does not of itself secure honest elections. Unless each ballot is carefully checked the theft of a single ballot may open the way to the "endless chain" fraud. The corruptionist marks the stolen ballot and the voter substitutes it, in the polling booth, for the ballot that he received from the election inspector. The unmarked official ballot is brought out to the corruptionist who marks it and uses it with his next henchman. In England, the British dominions and in almost one half of the American states this fraud is guarded against by using a numbered stub which enables the election inspectors to see that each voter deposits the ballot given to him. Where illiterates are allowed to vote there usually is a provision that they may have assistance in marking their ballots, and if the election inspectors are lax this provision may be abused to destroy secrecy. When the election inspectors themselves are dishonest the ballots may be miscounted or spoiled. Fraudulent counting is guarded against by such means as watchers, the central count, the voting machine and the selection of election inspectors on the basis of merit or training.

The use of an official ballot has brought the political parties within the scope of the law. In Germany the voter is allowed no freedom of choice as between individual candidates but can choose only between rival party lists. However, in the Irish Free State and other places where the Hare system of proportional representation is used there are no party designations on the ballot and the voter is given the greatest freedom. In Great Britain and Canada also there are no party designations on the ballot. Because of the small number of elective offices the ballot is short and no difficulties are presented in voting it. In the United States, where there are many elective offices, the official blanket ballot has meant a long ballot. In the first decade of this century the short ballot movement, involving the limiting of elective offices to the most important ones and the filling of only a few at any one election, gained considerable following. In this movement the proposed shortness of the ballot was meant to secure adequate public examination of the candidates. The Indiana ballot law of 1889 gave each party a separate column, the name of each candidate being arranged under the appropriate office title. The voter can cast a straight party vote by making a single cross in the circle at the top of the party column. This form, which discourages independent voting, has been adopted by over one half of the states. Massachusetts and a dozen other states have the original office block ar-

rangement; that is, the names of all candidates appear under the title of the office which they are seeking. All of the remaining states, with the exception of South Carolina, have modifications of these two systems.

HAROLD F. GOSNELL

See: VOTING; ELECTIONS; POLLS; REGISTRATION OF VOTERS; PROPORTIONAL REPRESENTATION; CONTESTED ELECTIONS; PARTIES, POLITICAL; CORRUPTION, POLITICAL; SUFFRAGE; DEMOCRACY.

Consult: Seymour, Charles, and Frary, D. P., *How the World Votes; The Story of Democratic Development in Elections*, 2 vols. (Springfield, Mass. 1918); Wigmore, J. H., *The Australian Ballot System as Embodied in the Legislation of Various Countries* (Boston 1889); Ludington, A. C., *American Ballot Laws, 1888–1910*, New York State, Education Department Bulletin, no. 488 (Albany 1911); Evans, E. C., *A History of the Australian Ballot System in the United States* (Chicago 1917); Childs, R. S., *Short Ballot Principles* (Boston 1911); *The Voting Machine*, ed. by T. D. Zukerman (New York 1925); Gross, Charles, "The Early History of the Ballot in England" in *American Historical Review*, vol. iii (1897–98) 456–63; Wolfson, A. M., "The Ballot and Other Forms of Voting in the Italian Communes" in *American Historical Review*, vol. v (1899–1900) 1–21.

BALMACEDA, JOSÉ (1840–91), Chilean statesman. Allied through wealth, social position and education with the best traditions of Chilean aristocracy, he early abandoned the thought of a clerical career to which he seemed destined, became successful in business and in 1870 entered politics, where his ready wit, social prestige, personal charm and oratorical ability gave him a leading position. He was one of the early lights of the "Reform Club," a group of doctrinaire politicians, and pursued for nine years in the Chamber of Deputies a moderately liberal course, generally in opposition to the government. As minister to Argentina (1879–81) he helped keep that country neutral during the War of the Pacific, and under President Santa María he served successively in the ministries of foreign relations and of the interior. He supported various "theological reforms," hoping to effect a separation of church and state and to further his own advancement to the presidency. Although he incurred the grave displeasure of a Liberal-Radical minority in his own political group he was elected in 1886 virtually without opposition.

Balmaceda devoted the first years of his administration to the construction of numerous public works and to sincere attempts to conciliate his opponents. He embodied the monarchical tradition, which under republican forms had determined the policy of his early predecessors, while his opponents represented the principle of aristocratic control, itself a survival of colonial conditions. Although Balmaceda had formerly belonged to this aristocratic opposition he now chose to reassert in the name of public order the supremacy of the executive; to this end he sought to retain control over his cabinet and to choose his successor. When in 1890 the opposition, constituting a majority of Congress, sought to thwart him by withholding appropriations, he attempted to continue the budget of the previous year by executive decree. This led to the outbreak of civil war in January, 1891, and to his overthrow in the following August. After his defeat Balmaceda took refuge in the Argentine legation and there on September 18, 1891, the last day of his legal term, he committed suicide. He left behind a political testament that became the creed of an influential group, and his policy seems to be fulfilled to a considerable degree in the constitution of 1925.

ISAAC JOSLIN COX

Consult: Bañados Espinosa, Julio, *Balmaceda, su gobierno y la revolución de 1891*, 2 vols. (Paris 1894); Nabuco, Joaquim, *Balmaceda* (Santiago 1914); Rodríguez Bravo, Joaquín, *Balmaceda y el conflicto entre el congreso y el ejecutivo*, vols. i–ii (Santiago de Chile 1921–25); Edwards, Alberto, *La fronda aristocrática en Chile* (Santiago 1928) p. 163–78.

BALMES, JAIME LUCIANO (1810–48), distinguished Spanish philosopher and Catholic apologist. In *El protestantismo comparado con el catolicismo en sus relaciones con la civilización europea* (4 vols., Barcelona 1842–44, 6th ed. Madrid 1875; tr. by C. J. Hanford and Robert Kershaw as *European Civilization*, 7th ed. Baltimore 1861, reprinted Baltimore 1918) he refuted the thesis of Guizot's *History of Civilization*. He asserted the importance of Catholicism in human progress, maintained that Protestantism had distorted the course of civilization and declared that whatever progress had been realized since the Reformation had been achieved in spite of it. His treatise on logic, *El criterio* (Barcelona 1845, 3rd ed. 1851; English translation New York 1875), widely influenced contemporary Spanish education. In his *Filosofía fundamental* (4 vols., Barcelona 1846, 9th ed. 1910; tr. by H. F. Brownson, 2 vols., New York 1856) he tried to reconcile traditional scholasticism with the modern philosophy of Leibnitz, Descartes and the Scottish group.

Balmes developed his political ideas in the several reviews which he edited, *La civilización*,

La sociedad and especially *El pensamiento de la nación*. In his attempt to harmonize Spanish tradition with modern liberal ideas he contended that the principle of hereditary monarchy should take cognizance of national traits and of democratic rights. As a practical solution of the political problem of Spain Balmes advocated the union of the two dynastic factions, the Carlists, or traditional Catholics, and the liberals.

ANGEL DEL RÍO

Consult: Blanche-Raffin, Ade de, *Jacques Balmes, sa vie et ses ouvrages* (Paris 1849); Menéndez y Pelayo, M., *Dos palabras sobre el centenario de Balmes* (Vich 1910).

BAMBERGER, LUDWIG (1823–99), German politician and publicist. He was trained for the law and took an active part in the uprising of 1848–49 but was forced to flee when it failed. In Holland, England and later in Paris, where he became one of the early managers of the Banque des Pays Bas, he combined thorough study of economics with practical activity as a banker. Through journalistic work he also participated in the German unification movement. Having returned to Germany after the amnesty of 1866 he was elected to the Customs Parliament in 1868 and subsequently to the Reichstag, where he served from 1870 to 1893. He began by supporting Bismarck's policy and became one of the leaders of the National Liberal party, but he was alienated from the party in 1880 after Bismarck had turned to protection and to social insurance. For Bamberger was the classical representative of orthodox liberalism and a consistent opponent of both Marxian and state socialism. In the field of currency in which his work mainly lies his authority in the Reichstag was virtually undisputed; he played a leading part in establishing a uniform German coinage and in founding the Reichsbank, the centralized character of which is largely due to his influence. He demanded the abolition of bimetallism and the establishment of the gold standard in the interest of stability and uniformity. He ridiculed the fear that the increase in gold production, which began in the fifties, would depress the price of gold; he anticipated, on the contrary, that the increase in gold supply would lead to a more universal adoption of the gold standard throughout the world. When the government, influenced by the silver agitation, seemed inclined to prolong the transition period or to adopt a bimetallic standard, Bamberger set up a special organization to redouble publicity and fought tenaciously and in the end successfully to preserve his life's work. Bamberger's monetary policy was later adopted by the scholar and statesman, Karl Helfferich.

THEODOR HEUSS

Important works: *Gesammelte Schriften*, 5 vols. (Berlin 1894–98); *Ausgewählte Reden und Aufsätze über Geld- und Bankwesen*, ed. by Karl Helfferich (Berlin 1900).

Consult: Hartwig, Otto, *Ludwig Bamberger: eine biographische Skizze* (Marburg 1900).

BANCROFT, GEORGE (1800–91), American historian and diplomat. He was born at Worcester, Massachusetts, and educated at Harvard (A.B. 1817), Göttingen (PH.D. 1820) and Berlin for the Unitarian ministry. He taught for a while at Harvard but was dissatisfied with its teaching methods. In the Round Hill School, established at Northampton, Massachusetts, in 1823, he made a notable contribution to secondary education in America by the introduction of German methods of study and discipline. An ardent Jacksonian Democrat in a Whig state he several times ran for office unsuccessfully. He was appointed collector of the port of Boston in 1837, secretary of the navy in 1845, minister to England in 1846 and minister to the German Confederation in 1867. In the last capacity he secured the first international recognition of the right of expatriation through a treaty with Prussia (1868).

Bancroft's enduring monument is his *History of the United States from the Discovery of the American Continent* (10 vols.), the first volume of which appeared in 1834 and the "author's last revision" (6 vols.) in 1884–87. His half century of unwearied research and the enormous collection of documents made by him have been of great value to American historical study. Bancroft's historical writings are dominated by a theological-philosophical schematism; he envisioned God working out in American history an "epic of liberty." A partisan Democrat he at times took rhetorical liberties with his sources not only to prove the superiority of the American plan of government over all others but to vindicate party policy. His work often reflects and crystallizes the popular American notions of his day and frequently resembles both in its dominant ideas and its literary ornamentation the familiar type of Fourth of July oration.

DAVID S. MUZZEY

Consult: Howe, M. A. de Wolfe, *The Life and Letters*

of George Bancroft (New York 1908); Bassett, John Spencer, *The Middle Group of American Historians* (New York 1917) ch. iii.

BANCROFT, HUBERT HOWE (1832–1918), American historian and compiler. Bancroft went to California from the East in 1852 and after several years as a miner and a merchant he founded a publishing and bookselling house in San Francisco in 1858. In connection with his business he developed an interest in western history, and began to collect books concerning the Pacific coast. This collection grew eventually into a remarkable library of books, maps, pamphlets, newspapers, original manuscripts, transcripts of state documents and dictated narratives of pioneers totaling 76,000 volumes, which are now the property of the University of California.

Bancroft became the organizer and managing editor of the thirty-nine volumes dealing with the native races of the Pacific states, the history of Mexico, Central America, the Northwest coast, California, Oregon and adjoining states, which he published under his name between 1875 and 1890 with the general title, *History of the Pacific States*. With the exception of occasional contributions by Bancroft the books were written by eight specialists in his employ whose work he revised in order to increase its popular appeal. The volumes on aboriginal life, which were not based on original ethnological or archaeological research, were sharply criticized by contemporary anthropologists like Morgan and Bandelier for their uncritical reiteration of the Spanish sources. They have, however, proved a convenient although not always a reliable source for the study of Indian life. The volumes on pioneer history assumed more the character of a profit-making publishing enterprise than of an attempt at critical history. They are valuable chiefly in that they preserve materials on the early history of the settlement of the Pacific coast region that would otherwise have been lost. Bancroft's work as a compiler and as an entrepreneur in the field of western history furnished a foundation for further research and interest in this subject.

BERNHARD J. STERN

Consult: For autobiographical material, Bancroft's *Literary Industries* (San Francisco 1890). For a considered statement on the question of the authorship of the Bancroft material, Morris, W. A., "The Origin and Authorship of the Bancroft Pacific States Publications" in Oregon Historical Society, *Quarterly*, vol. iv (1903) 287–364.

BANCROFT, RICHARD (1544–1610), archbishop of Canterbury (1604–10), the greatest English ecclesiastic of the later Reformation. From his earliest years in the service of the church he interested himself in administration and reorganization. For many years he had charge of the censorship of the press; he created the definitive practise of bishops and archbishops at visitation; he was instrumental in breaking up the Puritan attempt to practise the new Discipline (1592) and in suppressing the Marprelate Tracts. His chief importance lies in his work of reorganizing the administrative and legal structure of the Reformation church in the canons of 1604, a careful codification of the entire practise of the church since the Henrician reformation. He thus gave the church its final constitution, which is still its fundamental law. The canons contained a reorganization of the jurisdiction and procedure of the ecclesiastical courts which lasted with modifications only until the nineteenth century. He was mainly responsible for the later development of the court of law known as the High Commission, and for a generation dominated its policies and practises. His contribution to the literature of the time is notable. He played a part of some consequence in the preparation of the King James version of the Bible. His book *Daungerous Positions and Proceedings, published and practised within this Iland of Brytaine under pretence of Reformation* (London 1593) is one of the main sources of information about the period and, along with his other writings and sermons, had an important influence on Hooker's *Ecclesiastical Polity*.

ROLAND G. USHER

Consult: Usher, Roland G., *The Reconstruction of the English Church*, 2 vols. (New York 1910).

BANDELIER, ADOLPH FRANCIS ALPHONSE (1840–1914), ethnologist. Although Bandelier was born in Switzerland and died at Madrid his work for forty years was in the field of Americanist studies. His investigations, carried on in Mexico, Peru, Bolivia and the American Southwest, gave him an enviable first hand acquaintance with the documents and with the living Indians of both Americas. In the Mexican field his three famous monographs ("On the art of war . . . of the ancient Mexicans"; "On the distribution and tenure . . . of land . . . of the ancient Mexicans"; "On the social organization and mode of government of the ancient Mexicans," Peabody Museum of Harvard University, *Annual Reports* for 1877, 1878 and 1879), portrayed

with marked sanity and realism the social and political institutions of the ancient Aztecs. His principal conclusion was that the celebrated "monarch" of ancient Mexico, as pictured by the novelist Lew Wallace, by Prescott and later historians and by the entire following of the romantic school, was entirely imaginary. He found in the documents only a loose tribal alliance, based on ideas of religion, clan and family—based, in brief, on American Indian ideas, not on ideas of royalty after a European pattern. To this day, however, the public and even most archaeologists prefer to think of Montezuma and the other Mexican chieftains as kings.

In southwestern United States Bandelier did an enormous amount of work and published numerous treatises, the most important of which is probably the *Final Report of Investigations among the Indians of the Southwestern United States* . . . (Cambridge, Mass. 1890–92). His novel, *The Delight Makers* (New York 1890), is the best picture we have of Pueblo Indian life.

T. T. WATERMAN

Consult: Hodge, F. W., "Adolph Francis Bandelier" in *American Anthropologist*, n. s., vol. xvi (1914) 349–58, containing a complete bibliography of Bandelier's writings; Waterman, T. T., *Bandelier's Contribution to the Study of Ancient Mexican Social Organization*, University of California Publications in American Archaeology and Ethnology, vol. xii, no. 7 (Berkeley 1917).

BANDINI, SALLUSTIO ANTONIO (1677–1760), Italian economist. After taking his degree in jurisprudence at the University of Siena he gave lectures there from 1700 to 1702. In 1705 he took holy orders and in 1723 became archdeacon. Shortly before his death he was elected president of the Accademia dei Fisiocratici.

About 1737 Bandini wrote his one work, *Discorso economico*, which circulated in manuscript until it was finally published in Florence in 1775 (best modern edition, Siena 1877). The peace loving archdeacon had been roused to indignation by the ruin into which the Maremma Senese, a marshy region covering about two fifths of Tuscany, had been plunged by misgovernment. After a vivid description of the social and economic evils produced by bad legislation Bandini proposed as remedies: first, the absolute and permanent freedom of grain exports and the abolition of price fixing by public authorities; and second, the replacement of the many obsolete and mischievous taxes by a single tax on the produce of land.

On the basis of the *Discorso* many writers have erroneously described Bandini as a precursor of the physiocrats and free traders. His general theoretical outlook was borrowed from Boisguilbert and he partook of the prejudices of his time against free importation of grain as depriving the country of money. His real significance for liberalism lies in the fact that the *Discorso* was ultimately responsible for the abolition of the particular restrictions which had burdened Tuscany for centuries. Thanks chiefly to Pompeo Neri, an official in the Finance Council of Florence, the essay found favor with the first prince of the House of Lorraine, Francis II, who in 1738 granted the Maremma freedom of grain exports for a limited period, which was extended from time to time. Finally in 1775 Peter Leopold incorporated Bandini's other proposals into his reform policy, and the Maremma entered upon a period of prosperity.

LUIGI EINAUDI

Consult: *Note e ricordi intorno a Sallustio Bandini e al suo discorso sulla maremma di Siena*, ed. by F. E. Bandini Piccolomini (Siena 1880); Gobbi, Ulisse, *La concorrenza estera e gli antichi economisti italiani* (Milan 1884) p. 114–18.

BANFIELD, THOMAS C. (dates of birth and death unknown), English economist. He is best known as the author of *Four Lectures on the Organization of Industry* (London 1845, 2nd ed. 1848), delivered at Cambridge in 1844 and described by Marshall as "perhaps the first ever given in an English university that owed much directly to German thought." Banfield, who resided for some years in Germany, acknowledged special obligations to the writings of Hermann. He considered a theory of consumption to be the scientific basis of economics and stated that in the gradation of human wants "the satisfaction of every lower want in the scale creates a desire of a higher character." Jevons in his appreciation of Banfield preferred to say that such satisfaction permits a higher want to manifest itself (*Theory of Political Economy*, 4th ed. London 1911, p. 84).

Banfield's articles on "The Industry of the Rhine" (*Knight's Weekly Volume*, no. 94 in 1846 and no. 28 in 1848) and "The Progress of the Prussian Nation since 1805" (Royal Statistical Society of London, *Journal*, vol. xi, 1848, p. 25–37) contain valuable material for the economic historian. He also published *Six Letters to . . . Robert Peel being an Attempt to Expose the Dangerous Tendency of the Theory of Rent*

advocated by Mr. Ricardo (London 1843) and *A Letter to W. Brown . . .* (London 1855) on his system of decimal coinage. Banfield compiled *The Statistical Companion* (London) for the years 1848, 1850, 1852 and 1854, at first in collaboration with C. R. Weld.

HENRY HIGGS

Consult: Marshall, Alfred, *Principles of Economics* (8th ed. London 1922) p. 90–91.

BANISHMENT. *See* EXILE.

BANK DEPOSITS. Bank deposits originated in several of the more important Italian cities in the early period of the Renaissance. At that time a bank deposit was just what the name implied—specie left for safe keeping with some person or institution in whom the owner had implicit confidence. The banker did not acquire title to the funds but merely held them as agent for the owner. He commonly charged a fee for this service, and it was understood that the owner could call in person for his funds at any time. Later the practise grew up of drawing orders on the banker to pay the money or some portion of it to a third person.

The next step in the evolution of bank deposits came when the banker actually acquired title to the funds left with him and obligated himself to return to the owner or pay on his order an equivalent amount of specie of standard weight and fineness. It was generally understood, however, that the banker kept all the specie in his own vaults ready to meet the demands of his depositors. Banks, however, finally began to take note of the fact that relatively few of the great number of depositors actually made demand for coin on any one day or week or month. Furthermore, such withdrawals as were made were offset in greater or less degree by additional deposits made by others. Banks then began to realize that they need not keep all their specie on hand but only a reasonable margin above what experience showed was likely to be called for. All the remainder could be loaned, as long as good loans were requested, and in this way additional income could be earned for the bank. Thus the total figure for deposits came to exceed the amount of specie or reserve on hand.

The discrepancy between these two figures became still more marked because those desiring loans frequently wished not the specie itself but merely the right to draw drafts against the bank in favor of their creditors and those from whom they wished to make purchases currently. This right was represented on the books of the bank by a credit to the borrower's account. Although its source was a borrowing operation this credit differed in no wise from credits made when customers actually deposited specie. With the development of this practise over a long period of years it has come about that deposits made in banks no longer consist solely or even principally of amounts of specie. Their constituent elements are: first, gold, silver and paper money; second, credits entered to depositors' accounts when loans are negotiated; and third, checks which have come into the possession of depositors, a large proportion of these checks having been made possible by the loan operations of other banks.

From the standpoint of the bank, deposits are obligations to pay depositors sums of money with which their respective accounts stand credited on the books of the bank. This is shown by the appearance of the item "deposits" on the liabilities side of the bank statement. These liabilities are offset by resources made available to the bank through deposits of cash or checks on other banks. Since a bank does not find it necessary to keep on hand all the funds deposited with it, deposits of this type make possible increased loans and correspondingly larger revenues.

Deposits may be distinguished as time deposits and demand deposits. Time deposits are legally collectable only after advance notice of intention to withdraw has been given to the bank. Corporations and individuals frequently have funds which they do not expect to need until some more or less certain date in the future. If a formal agreement is made not to withdraw the funds before some specified date, or without advance notice, such funds acquire the status of time deposits. Against such deposits the bank needs to maintain only a very small reserve and is able, moreover, to invest such funds most advantageously. This accounts for the fact that on savings deposits, by far the most important subdivision of time deposits, banks pay a relatively high rate of interest. While the bank still retains the legal right to refuse to pay the savings depositor on demand, in the United States the practise has developed of paying such depositors without requiring advance notice. Because the withdrawal demand is small, the bank still finds it possible to invest a large percentage of these funds in long term assets yielding a high rate of return.

Demand deposits, on the other hand, represent a considerable portion of the liquid funds of the business world. Corporations and individuals find it convenient to carry all their cash funds—except till money or pocket money—in the form of checking accounts. As additional receipts of funds come in they are deposited in the bank and checks are drawn against these deposit credits as it becomes necessary to make payments to others. It is in this way that demand deposits circulate in the form of checks; in some countries, especially in England and America, they constitute the principal medium of exchange. Banks must therefore be prepared for a rapid turnover of demand deposits; a correspondingly larger reserve must be carried and the remainder must be invested in assets which can be converted into cash without delay. Since the bank thus acts as a clearing house or bookkeeper for the entire business community its costs are correspondingly high. For these reasons banks can afford to pay only nominal rates of interest on its demand deposits.

ROBERT G. RODKEY

See: BANKING, COMMERCIAL: SAVINGS BANKS; BANK RESERVES; CHECK; CURRENCY; BANK DEPOSITS, GUARANTY OF.

Consult: Rodkey, R. G., *The Banking Process* (New York 1928) ch. xv; Phillips, C. A., *Bank Credit* (New York 1921) pt. i; Taussig, F. W., *Principles of Economics*, 2 vols. (3rd ed. New York 1921) vol. i, ch. xxiv; Hawtrey, R. G., *Currency and Credit* (3rd ed. London 1928) ch. xiii.

BANK DEPOSITS, GUARANTY OF. The guaranty of bank deposits is a device designed to protect bank depositors from loss due to bank failures. The need of safeguarding depositors came into prominence in the second half of the nineteenth century when with the rapid changes in business and banking practises deposit currency became more important in the credit structure of the country than banknotes. In the United States with its decentralized, free banking system such protection was particularly important; but even in the United States bank creditors have been partially safeguarded by such general means as the regulations for the organization of new banks, the double liability of bank shares, the legal limitation of loans and investments, the system of periodic reports and examinations and the repeated attempts to draw state banks into the national banking system. In addition, the maintenance of minimum reserves against deposits, which in other countries was enforced by the standards of conservative banking practise, was in the United States made compulsory by law in the federal and in many state jurisdictions. The guaranty of bank deposits is merely a supplementary method used in several states for the specific protection of depositors.

The guaranty system of protection was offered as a concrete plan during the epidemic of bank failures following the panic of 1893. At that time other types of bank protection were poorly developed; standards of banking supervision were rather low, and in a number of states banks were not required to maintain reserves. Deposit guaranty became one of the objectives of the Populist party and in the west central states serious attempts were made to enact guaranty laws. With the return of prosperity the idea was forgotten, but it was brought forward once more during the panic of 1907, when the proposal became so popular that in the following year it was incorporated as a plank in the platform of the Democratic party. It was opposed, however, by many bankers; those connected with well established banks were particularly antagonistic, claiming that it was unfair to make their institutions pay for the recklessness of small and new banks. Moreover, national banks, being excluded from these state guaranty schemes and fearing the competition of state banks, also objected.

Oklahoma became a state three weeks after the panic of 1907 had set in and within the next month passed a bank guaranty law. Similar laws were enacted in Kansas (1909), Nebraska (1909), Texas (1909), South Dakota (1909), Mississippi (1914), Washington (1917) and North Dakota (1917). The laws, although differing greatly in detail, were similar in general outline. In most cases all deposits not otherwise secured were protected. A guaranty fund, totaling either a percentage of protected deposits or a stated amount ranging from a half million to five million dollars, was provided by assessing each bank a percentage of its average daily deposits. Provision was usually made for raising special assessments in emergencies. If the fund became depleted through losses interest bearing certificates based upon its credit were provided for in most states; these were to be liquidated in normal times by assessments. A state banking board, which included the state bank commissioner, was usually charged with collecting the fund and administering the law. One of its most important functions was the supervision of the closing of insolvent banks and the payment of

depositors. When all the available assets of a bank that had failed were exhausted, the balance due to depositors was paid out of the guaranty fund. These guaranty systems were made compulsory except in Kansas and Washington. In Texas the banks were given the choice of either using the usual state mutual insurance fund or furnishing a bond for the protection of depositors.

The time during which these laws were in operation may be divided into two periods. The period prior to 1920 was in general one of prosperity and rising prices. Banks were in a strong position and the few sporadic failures were easily taken care of by the guaranty funds. Oklahoma was the one exception. In this state the collapse of a real estate boom in 1911 carried with it a large number of banks and by 1914 the guaranty fund was in debt to the extent of $800,000. By 1920, however, this indebtedness was liquidated because war prosperity swelled the income from assessments.

In the period following 1920 the guaranty laws were severely tested. The post-war depression was especially protracted in agricultural states; and the concentration of bank failures following in the wake of this disaster proved the undoing of most of the guaranty laws. When serious losses began to accumulate in the various states most banks forsook the voluntary systems, and many of those operating under the compulsory systems sought relief by becoming national banks. This further weakened the guaranty systems until in many cases the assessments fell far short of meeting the interest accruing on unpaid losses.

Oklahoma repealed her law in 1923, making no provision for liquidating the indebtedness. In Nebraska after more than one fourth of the banks had closed with a net loss of over $20,000,000, the guaranty fund was abandoned in 1930. In North Dakota the deposit guaranty law was repealed after nearly half of all the state banks had failed. South Dakota, with a net loss of over $25,000,000, repealed the insurance feature of her law, so that now the assessments of a bank protect only its own depositors. One large bank in Washington failed and the other banks, unwilling to meet the loss, speedily abandoned the law. The Kansas banks also withdrew from their voluntary system. In Texas the banks discarded the insurance plan and a court decision rendered ineffective the bond security system; the law was repealed in 1927. The indebtedness amounting to $3,500,000 in Mississippi will take eighteen years to liquidate at the present rate of assessment. Much liquidation is yet to be accomplished and it will be years before the results of this banking experiment are fully known.

In attempting to determine the causes of this disaster one must emphasize that the experiment was essentially a matter of insurance. Aside from incompetence and corruption, concentration of loss is the element that wrecks most insurance projects, as it did in this case. Guaranty laws have been restricted to single agricultural states in which people make their living largely from one or more crops, such as corn, wheat or cotton. Crop failures or extreme declines in prices render such communities prostrate. In a period of prosperity all goes well; but when prices collapse and depressions occur the mortality of poorly managed, independently owned banks having insufficient resources is appalling. It is clear that with the present methods of controlling losses the pooling of bank resources within the limits of single states is entirely inadequate in such periods. The concentration of loss resulting from the multiplicity of poorly managed banks, the lack of diversity of economic interests and the condition of general business depression wrecked the guaranty laws. This experience does not demonstrate that bank deposits cannot be insured; it does show, however, that success is dependent on greater economic and geographical diversification and further control of the hazard.

The insurance of bank deposits as found in the guaranty laws was designed to reduce loss caused by bank failures. As an insurance system it has little to contribute to the solution of this problem, for the prime function of insurance is to distribute rather than to eliminate loss. Its proponents, who hoped that the feeling of security engendered by the guaranty laws would minimize runs on banks in times of stress, regarded the guaranty scheme as a distinct contribution to banking reform. As such it has been of minor importance. The avoidance of bank failures depends primarily on a thorough system of bank supervision, the insistence on adequate financial resources and the development of a trained bank management.

T. BRUCE ROBB

See: BANKING, COMMERCIAL; BANK DEPOSITS; STATE BANKS; INSURANCE.

Consult: Robb, T. Bruce, *The Guaranty of Bank Deposits* (Boston 1921); Cooke, Thornton, "Insurance of Bank Deposits in the West" in *Quarterly Journal of Economics*, vol. xxiv (1909–10) 85–108, 327–91, and

"Four Years More of Deposit Guaranty" in *Quarterly Journal of Economics*, vol. xxviii (1913–14) 69–114, and "Collapse of Bank-Deposit Guaranty in Oklahoma" in *Quarterly Journal of Economics*, vol. xxxviii (1923–24) 108–39; Dickinson, Z. Clark, "Bank Deposit Guaranty in Nebraska," Nebraska Legislative Reference Bureau, *Bulletin no. 6* (1914); "State Laws Relating to Guaranty of Bank Deposits" in *Federal Reserve Bulletin*, vol. xi (1925) 626–68.

BANK RESERVES are liquid funds kept by commercial banks in order to enable them to meet their demand liabilities as these are presented for payment. Perhaps the distinguishing feature of commercial banking is that while most of the bank assets are in the form of short time obligations not collectable on demand, most of the bank liabilities are in the form of claims on the bank payable on presentation. The investment of available resources in loans and discounts, bank acceptances, securities and other less liquid forms is the chief source of revenue of a commercial bank; the larger the proportion of assets so invested, the greater is the profit earned by the bank, provided that measures have been taken to meet whatever claims may be made for repayment of the demand obligations. More than in the case of any other business concern, it is important that a bank be in a position to repay its obligations promptly; a failure to do so would cause a loss of confidence and result in a rapid withdrawal of deposits, which constitute the main source of funds. Under modern conditions the liquidity of all other types of business depends in part upon the ability of the banks to redeem checks and banknotes at sight; any indication of the inability of the banks to live up to these expectations will inevitably affect not only the banks themselves but the entire business community. The necessity of redeeming its obligations on demand determines to a large extent the policy of the bank management in investing the assets. Investments are made in such a way and for such periods of time that an adequate and well timed flow of funds into the bank will keep it prepared to satisfy its creditors. Proper bank management thus involves the achievement of a certain degree of correspondence between the maturing of the bank's claims on others and the anticipated rate at which demands will be made on the bank. Since in the nature of things such a correspondence can never be perfect, it is necessary for the bank to keep some portion of its assets in a form immediately available for the payment of its obligations. Deposit balances which one bank may keep with other banks are generally regarded as continually available for such uses. Together with lawful money they constitute the primary bank reserves.

The proportion of bank assets that should be kept as a primary reserve cannot in general be established by rational calculation; although the requirements of good banking practise and of statutory enactments may help, this is a quantity the magnitude of which each bank learns by experience. There are too many factors of uncertain weight to make possible any but a broad generalization concerning the size of the reserve required. Perhaps the more important of these factors are the size of the bank and the quality of the secondary reserve.

It is quite obvious that the smaller the bank and the fewer the number of its creditors, the more likely it is to be affected by the call from one of them for a repayment of the obligation. With only one depositor a bank would find it necessary to keep a 100 percent reserve. As the number of depositors and noteholders increases the distribution of their claims in time is likely to be more even and less subject to chance fluctuations of considerable magnitude; the proportion constituted by primary reserves may then be reduced.

It is equally obvious that the more liquid the investments of the bank, the smaller is the proportion of primary reserves that need be kept. That part of the investment which is so marketable that it can be liquidated at will and with little if any loss is regarded as a secondary reserve. It includes generally call loans, bank acceptances and securities enjoying a wide market and a stable price. The greater the proportion of such a secondary reserve and the higher its liquidity, the less is the need for a primary reserve. It should be observed that with the possibility of rediscounting or selling on the open market commercial paper in the bank's portfolio, virtually the entire amount of bank assets takes on the character of secondary reserve.

With the increase in the size of banks and the improvement in the quality of the secondary reserve, the amount of actual specie or lawful money reserve kept by individual banks has shown a tendency to decline. The most important cause for this reduction is, however, the greater integration and centralization of the banking system, which takes the form either of closer relations between smaller local banks and large banks in financial centers or of efficient co-

operation with central banks. The gold reserves of the banking system then become centralized in the hands of a few large banks or even of a single bank. They are generally made available to the smaller or ordinary banks through a system of interbank deposits, most of which may be created by rediscounting of the paper held by these banks. In addition, through the issue of notes of general acceptability and through its readiness to buy commercial paper in the open market, the central bank enhances the liquidity of the assets of the entire banking community and thereby reduces the proportion of primary reserves that must be kept by individual banks. In order properly to perform such functions central banks or banks which act as reserve depositories must keep a larger gold reserve against their obligations, a considerable part of which may be obligations to smaller banks. In the United States while the cash on hand of ordinary commercial banks comprises from 1 to 2 percent of their resources, the Federal Reserve Banks keep from 40 to 70 percent of their resources in the form of cash on hand, such cash being mainly gold. While such a proportion of reserves is unduly high even for central banks it is indicative of the difference in function between the reserves of central banks and those of ordinary banks.

The reserves of a central bank are a good index of the banking strength of the country, because they are the base of the entire structure of commercial credit. The amount of bank credit which may be erected on this foundation depends upon the character of the banking organization and the business habits of the community. Assuming these factors to be fixed, as they actually are at any given time, the size of the gold reserve of the central banks determines the upper limit for the amount of credit that may be made available. For this reason the ratio of the gold reserve to the credit outstanding, as indicated by the liabilities of the central bank, shows the unused capacity for bank credit expansion when it is compared with the lowest value to which this ratio may decline without causing serious economic disturbances. The reserve ratio does not, however, reflect accurately the state of business expansion and contraction, because this ratio may be affected by international gold shipments which bear only an indirect relation to business conditions.

The primary reserves for deposit obligations are always directly elastic, that is, they fluctuate relatively less than the amount of deposit liabilities, so that the ratio of reserve to deposits changes inversely with the fluctuation of the deposits. The primary reserves against notes may, on the other hand, be inversely elastic, that is, they may fluctuate relatively more than the notes outstanding. This occurs when the size of the uncovered part of a note issue is fixed at a definite absolute limit which does not exceed the normal demand for circulation purposes. The best known example of this type of note reserve is found in the Bank of England. If the fiduciary limit has been reached an additional issue of Bank of England notes results in an increase in the ratio of the reserve to the note liabilities. Similarly a contraction of the note circulation under the same conditions leads to a more than proportional diminution of the primary reserve. The central banks of Japan, Sweden and Norway use a similar system of note issue regulation.

The regulation of primary reserves of ordinary banks is usually left to the discretion of the bank management. In the United States there have been statutory requirements for the maintenance of certain minimum reserve ratios. Since such legal reserves cannot actually be used, only the reserve in excess of the legal minimum is useful in meeting current demands. These facts that under the national banking system a certain part of the legal reserve could consist of deposit balances with banks in larger cities and that under the Federal Reserve system only deposits with Federal Reserve Banks are regarded as legal reserves mitigate but little the unduly restrictive character of such requirements.

The reserves of the central banks are generally regulated by law. In the case of all central banks a legal minimum is set to the note reserve; it may be either a certain proportion of the note liabilities or a full cover for all note liabilities in excess of a definite amount. A degree of elasticity is sometimes introduced by a system of tax penalties, the taxes being graduated in proportion to the difference between the legal minimum and the actual note reserve. Over a half of the number of central banks are also required to keep a minimum of primary reserves for their deposit obligations. In view of the close cooperation which is generally established between central banks and the governments these regulations operate not to hamper the activities of the central banks but to strengthen their position in the domestic and international markets.

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See: BANKING, COMMERCIAL; BANK DEPOSITS; BANK-

NOTES; CENTRAL BANKS; NATIONAL BANKS, UNITED STATES; STATE BANKS; FEDERAL RESERVE SYSTEM; CALL MONEY; BROKERS' LOANS.

Consult: Hawtrey, R. G., *Currency and Credit* (3rd ed. London 1928); Mitchell, W. F., *The Uses of Bank Funds* (Chicago 1925); Phillips, C. A., *Bank Credit* (New York 1921) pt. i; Rodkey, R. G., *The Banking Process* (New York 1928) chs. iii, iv, vi–x, xv; Sprague, O. M. W., *Banking Reform in the United States* (Cambridge, Mass. 1913); Kemmerer, E. W., *The A B C of the Federal Reserve System* (6th ed. Princeton 1926); Willis, H. P., and Steiner, W. H., *Federal Reserve Banking Practice* (New York 1926) chs. iii, v, xxviii; Lawrence, J. S., "Borrowed Bank Reserves" in *Quarterly Journal of Economics*, vol. xlii (1927–28) 593–626; Kisch, C. H., and Elkin, W. A., *Central Banks* (London 1928) chs. iii, v.

BANKING, COMMERCIAL

THEORY.....O. M. W. SPRAGUE
HISTORY TO THE CLOSE OF THE EIGHTEENTH CENTURY..JULIUS LANDMANN
MODERN BANKING
United Kingdom.....R. G. HAWTREY
Continental Europe.....ADOLF WEBER
United States.....O. M. W. SPRAGUE
Canada.....BENJAMIN HAGGOTT BECKHART

THEORY. The word commercial does not definitely characterize the operations of banks which are commonly known as commercial banks, although it does distinguish them from savings and mortgage banks as well as from banks and bankers primarily engaged in the business of marketing securities and in the management of trusts. These various functions may, however, be undertaken by commercial banks; in recent years there has been a striking tendency for banks to engage in virtually every type of financial business, a tendency which is significantly manifested in the designation "commercial department" for what was formerly the sole business of many banks.

Commercial banking may be examined either on the assets side, with attention directed toward loans and other investments, or on the liability side, with consideration of the sources of the funds employed. On the assets side, short time loans, readily marketable securities and cash reserves, including balances with other banks, constitute the bulk of the resources of a concern engaged in commercial banking; while on the liability side, the significant items are obligations payable to the general public on demand or in the near future. The character of the obligations incurred in securing the major portion of the funds employed by banks in large measure limits and determines the field of their employment, that is, the nature of the liabilities determines the character of the assets.

In comparison with most other branches of business, a smaller proportion (seldom as much as one fifth and often less than one tenth) of the funds employed in banking is furnished by the shareholders or owners either through the providing of capital or through the building up of a surplus from profits retained in the enterprise. Since no considerable amount of fixed assets is required in banking, capital and surplus funds are employed like other resources and may be regarded primarily as a means of providing a margin of safety contributing to the establishment of a widespread confidence in banks and thus enabling them to secure funds from the two, or in some communities three, sources which they are organized to tap. These three sources are: first, savings, some portion of which is lodged with banks as deposits because owners are either temporarily or permanently disinclined to invest on their own account; second, the active working cash balances of individuals and organizations having payments to make and to receive, the bulk of these balances being represented in a highly developed banking system by demand deposits; and third, some part of that portion of the purchasing medium held by the public outside the banks, which is reached by the issue of banknotes.

Commercial banks are primarily concerned with the acquisition of funds from the second of these sources, active cash balances. In any community which has reached the stage of a money economy, both individuals and organizations having a continuing succession of payments to make and to receive find it inconvenient and even unnecessary to keep more than a certain amount of their resources in an immediately available form. Many considerations have a bearing upon the exact size of this amount in each particular instance; for example, in the case of a business the important factors are the degree of certainty of regular payments by customers and the readiness with which other assets may be converted into cash. Obviously the

level of prices and of many incomes is an important factor. Some part of these cash resources has to be kept in the actual possession of individuals and organizations, but by far the greater portion may conveniently be deposited in banks. The inducements offered by banks to attract the active cash balances of a community are varied in character, the most important being safety, facilities for making payments (checks and drafts), the payment of interest on deposits, and readiness to extend loans to depositors.

Once the practise of lodging balances with banks has become firmly established, banks are able to lend more than the balances which they have acquired; in other words, they are able to increase the balances of depositors by the extension of credit. It is to be noted, however, that no single bank can go far in this direction unless other banks are following the same course, since the credits it creates will be drawn against by borrowers to make payments to others, most of whom will presumably be depositors in other banks. Settlements with these banks will speedily enforce restraint upon the expanding bank. But when banks generally are expanding credit, restraint is far less immediate, the greater withdrawals from each bank being offset by correspondingly larger receipts from the other banks. There are, nevertheless, limits upon indefinite credit expansion. Experience everywhere and legislation in many countries impose upon banks the necessity of maintaining cash reserves that shall be in some ratio, however small, to their obligations to the general public. With the expansion of credit, therefore, more cash reserves are required, while the expansion of credit itself, if carried far, is certain to set in motion influences which will tend positively to reduce reserves. By no means all of the purchasing medium of a country is held by the banks. A part of it is at all times in the pockets of the people and in the tills of shopkeepers and other business organizations. Requirements for money to be used outside the banks ordinarily increase in years of business activity and are certain to do so whenever there is a considerable rise in the level of prices and of money incomes. This restraining influence upon the expansion of credit exerted by an internal drain is greatly diminished if requirements for additional money can be satisfied by the issue of banknotes, since the absorption of gold or other reserve money will then amount only to that percentage of the notes which may be prescribed by law as a minimum reserve against them. In the early stages of banking development the power of issue was generally exercised by most banks, but in modern practise this privilege has in almost all countries been restricted to central banks.

Credit expansion by the banks of a single country is subject to a limitation similar, although less immediate in its effects, to that imposed upon the individual bank when its neighbors are not pursuing the same course. Sooner or later the resulting lack of equilibrium of payments with the rest of the world will deplete reserves through gold exports and enforce credit restraint. The amount of gold involved in such situations will ordinarily not be very considerable, for it is not the settlements made with gold but the consequent cessation of credit expansion which restores equilibrium.

In a fully developed banking system a high degree of stability may be expected to characterize the aggregate cash holdings of the banks, marked by occasional slight reductions but increasing over the years with increments to the world stock of monetary gold. It may also be said that there is no particular minimum proportion between cash reserves and the volume of credit, whether notes or deposits taken singly or together, that must be maintained as an essential factor in a satisfactory banking system. Precise ratios between gold and the volume of credit are to be deplored. They involve danger of excessive credit expansion when supplies of new gold are abundant, and impose a check upon such expansion as may be needed to prevent a downward trend of prices in periods of stationary or declining gold production.

Large reserves would be indispensable if reductions in the deposits of each individual bank ordinarily subjected it to the necessity of making payments in gold or currency. It is true that individual deposits exhibit wide and unpredictable variations, and the same may be said, although in less degree, of the aggregate deposits of any one bank. But for meeting this contingency the modern bank does not require a large store of cash. A small amount of till money for counter payments is sufficient, provided a bank maintains balances with other banks and particularly with a central bank, checks drawn on such balances being used in making settlements. And further, these balances need be no large percentage of outstanding deposits, since they are merely a first line of defense pending the conversion of some part of the other assets into available means of payment. Such conversion may be accomplished in three ways; by the

repayment of loans as they become due, by the sale of assets or by borrowing upon them as security. By using resources only for the acquisition of assets which can be converted in one or more of these ways banks may with safety incur obligations payable on demand and many times greater than their own reserves.

There is one important use for the funds of banks which meets this requirement of convertibility and at the same time is a means of attracting and retaining deposits. A large proportion of the loans of banks are made to their own business depositors and serve to provide them with some part of the working capital employed in their undertakings. The most desirable of these loans are those which provide funds for temporary peak requirements, but even when made for more prolonged purposes they will ordinarily be limited to amounts which could be liquidated without serious difficulty. If the loans are made to numerous borrowers engaged in many different occupations the likelihood of a steady succession of payments is obviously strengthened. This is an important advantage enjoyed by a large city bank or a bank operating branches scattered throughout a considerable area over a bank established in a locality concerned mainly with a single industry. Even in the most favorable circumstances, however, loans exclusively to the depositors would fail to give adequate convertibility. Some part of the invested funds must be more certainly and immediately convertible. This purpose is served by purchases of commercial paper from brokers, bank acceptances, stock exchange loans and holdings of readily marketable securities. With such diversified assets a bank will ordinarily experience no difficulty in adjusting its position to heavy withdrawals of deposits. But it will not be able to do so if all of the banks are likewise endeavoring to convert loans and securities into balances and cash. Convertibility presupposes buyers, and in the face of general credit contraction buying power is either taken away or becomes hesitant. To meet such situations it is essential in every banking system that there be lending power unused in ordinary times but freely available in times of stress and emergency. This constitutes one of the most important functions of central banks, which, unlike commercial banks, do not endeavor to employ their entire funds at all times but as the fulfilment of a recognized responsibility keep themselves ready to grant large additional credits in case of need. In fact, however, little assistance is required, because with the assurance of potential convertibility the pressure for actual conversion is speedily relaxed.

The economic consequences of the employment of banking resources differ in some degree from those of other financial agencies. Banks administer by far the greater part of those resources which are constantly available in varying amounts for both individuals and organizations, at one time principally for certain uses and a little later for quite different purposes. This flexible fund is essential under an economic system marked by wide geographical, occupational and industrial division of labor employing roundabout time consuming processes of production. It makes possible the more or less orderly purchasing and marketing of goods, facilitating the passage of commodities through successive stages of production to the ultimate consumer. The mode of employment of banking resources has a potent influence in another direction. Since a large proportion of the loans of banks are made wholly or partly on an unsecured basis, the banks are compelled to subject the management of business to close scrutiny, fostering with liberal accommodation the growth of efficiently directed undertakings and withholding assistance from those in whom they have little confidence.

On the deposit side the economic effects of banking are mainly of a monetary character. Banks provide improved facilities for making payments and endow the circulating medium with greater elasticity than it would otherwise possess. They also greatly increase the total volume of the circulating medium, but that is of advantage to the community only to the extent that greater stability in the general price level is thereby attained. With the development of central banks as the custodians of gold reserves, however, responsibility for prolonged price trends no longer rests even in small measure upon the commercial banks. Central banks can neutralize the influence on prices of an abundance of new gold by increasing their own reserves as well as the amount of gold in circulation; they may also do much to counteract the effect of a decline in the output of gold by working upon the basis of lower than customary reserve ratios.

O. M. W. Sprague

History to the Close of the Eighteenth Century. Commercial banking in the proper sense of the term, that is, the utilization of the machinery of deposit, clearance and banknote

issue for the granting of short term self-liquidating loans, is a product of the nineteenth century. This combination of elements did not exist prior to that period in any country, with the sole exception of England. The early history of banking must therefore be limited to tracing the separate development of these mechanisms in connection with the conditions which account for their rise and spread.

While Babylon had its temples, which granted commodity loans, and ancient Greece and Rome their *trapezites* and *argentarii*, who engaged in transfer and lending operations as well, it would be idle to begin the history of banking with antiquity. Between the fall of Rome and the tenth century lies a period in which little of the preceding business development survived. Conditions of natural economy prevailed, and few opportunities existed for the accumulation of surplus money income and dealing in money as a specialized pursuit.

When professional money lending eventually developed, it arose primarily in response to the need for consumption credit of both private individuals of high rank and public authorities. As early as the tenth century monasteries which enjoyed appreciable incomes from charity contributions and rent receipts began to engage in extensive money lending generally to local peasants and smaller landowners. While these loans were on a business basis, loans which were not quite voluntary were for political reasons occasionally granted to the seigneurs of various ranks, both lay and ecclesiastical, including the Emperor and the pope. Later knightly orders (Templars, Teutonic order), in whose treasuries were stored not only revenues from their own far flung possessions but also deposits of moneys belonging to the Curia, various princes and private individuals, played the part of kings of finance and supplied the credit needs of the high and mighty.

In the mediaeval cities the role of professional money lender fell to the Jews, Lombards and Cahorsins on the one hand and to money changers on the other. The reasons for the temporary Jewish domination of the mediaeval credit organization are not quite clear. It is probably significant in this connection that the development of a native merchant class forced the Jews out of mercantile pursuits and that the Jews were not subject to the canonical interdict against interest charges. At any rate in the beginning of the eleventh century the Jews turned to money lending on a considerable scale and in the twelfth century the old identity of Jew and merchant was replaced by the new identity of Jew and *usurarius publicus*. Admission of the Jews to settlement, with rights that were as a rule explicitly granted for the conduct of an interest bearing loan business, was often coupled with the obligation to make loans; the Jew dared not refuse the demand upon him for a loan if sufficiently valuable security was offered. The Cahorsins and the Lombards began to engage in money lending somewhat later and soon were active competitors of the Jews. These groups of creditors met the needs for consumption credit of the urban aristocracy as well as of the lords in the vicinity of cities; they likewise furnished credit for handicraft production and occasionally also for trade. Since the total sum of credits granted was often far in excess of the capital owned by the creditors, additional funds had to be raised in various ways. Of these the more important were the soliciting of interest bearing deposits, a practise which was only formally closed to the Jews by municipal prohibitions, and the establishment of credits with more wealthy business friends. The Lombards drew upon the Italian houses whereas the Jews were in close business relations with their coreligionists.

The acceptance of deposits and money lending were further developed in connection with the specialized pursuit of money changing, a business which was rooted in the monetary system of the Middle Ages. The allocation of the minting prerogative among greater and lesser territorial lords and the exploitation of this privilege for revenue purposes bore fruit in the principle of territoriality of coin: "the penny has currency only where it is minted." Frequent and finally annual recoinages led to a progressive debasement in weight and quality. The result was a multiplicity of monetary systems inefficient even for local payments and completely useless for interlocal exchanges.

The money changers (*campsores*), who generally held the minting concession and functioned as official coin inspectors and fiscal agents for larger payments, exchanged old coins for new and domestic for foreign. They had solid vaults at their disposal and inspired confidence because of the large capital that their business required. The merchants, with whom they were in constant contact, became increasingly accustomed to deposit with them moneys not immediately needed, and were generally charged a fee for safekeeping. The deposits became at first

the basis of a book transfer (clearing) system of local payments. As these deposits were gradually transformed into *depositum irregulare*, often contrary to the original intention of the depositors, they could also be used for the extension of credit by the money changers. Moreover they gave rise to a transfer system of interlocal payments established by the money changers through connections with business colleagues in other cities. The close of the twelfth century in Italy offers the first definite record of the replacement of an actual coin exchange (*cambium reale*, *cambium sine litteris*) by the written promise of the money changer (bill of exchange) to pay in foreign parts in coin of that realm the equivalent of a sum received in domestic coin (*cambium per litteras*). In such instances the granting of credit to the recipient of the bill of exchange suggested itself quite as obviously as the establishment of credit relations among the money changers operating in different localities. Thus the bill of exchange, originally a currency instrument, was very soon transformed into a credit instrument. As a result of the pivotal importance of fairs for all interlocal transactions in the Middle Ages, bills were likely to fall due at the time and place where fairs were held; consequently there developed a special bill of exchange payable at fairs. The special legal safeguards which were provided for bills of exchange payable at fairs and the emancipation of the latter from the confused coinage of the time by the development of an ideal standard (the *scutus marcarum*, which was never minted) favored the growth of clearing at fairs and the increase of credit grants from one fair to the next. The largest part of the European credit business transacted on the basis of bills of exchange was concentrated at the clearing fairs of Champagne and, from the first half of the fourteenth century, successively at the fairs of Geneva, Lyons, Besançon and the clearing fairs of Genoa; the latter continued down to the beginning of the seventeenth century. Also of considerable importance were the operations at Bruges and Antwerp where for some time "the fair was held all year round." The rapidly growing credit business, which employed funds attracted from merchants throughout Europe, served to finance a very considerable part of all the larger enterprises during the Renaissance.

Money lending was further developed in connection with the administration of finances of the Roman Curia and of the rising nation states. The increasing employment of mercenary troops transformed war into a wage industry and the financing of war into a large scale business operation. Owing to the lack of an efficient fiscal bureaucracy and to insufficient revenue from taxation, states were perennially dependent for credit upon *gens de finance*, to whom they mortgaged their future income and leased the levying and collecting of taxes.

The first state to organize its finances on a fiscal and monetary basis was the Roman Curia. With the development of church taxes (Crusade tithes, Peter's pence, dispensation moneys), which were collected throughout Europe, the need was felt for a new, more centralized organization for the collection of taxes. This development culminated in the replacement of ecclesiastical collectors by the agents of Italian commercial houses, and the establishment by the middle of the thirteenth century of regular deposit relations between the *camera apostolica* and these commercial houses. The collection of the taxes brought with it a mass of other business: in addition to the actual money changing and money transfer there was also the conversion into money of taxes in kind coming from the fringes of the Christian world and the extension of loans to enable taxpayers to meet their tax obligations promptly.

Within the circle of the *campsores camerae apostolicae* was formed a narrower circle of preferred firms including in addition to the Italian some south German firms with whom the Curia was accustomed to deposit moneys for which there was no immediate need. These deposits, which sometimes were not withdrawn for years, constituted a considerable part of the working capital necessary for the organization of an international system of branch houses. Other resources were obtained through a widespread net of depositories which appealed to all strata of the population; through active operations on the money market (clearance fairs, Antwerp); and through the establishment of credit relations with business associates. The active side of the business of these houses was distinguished primarily by its universality. It necessarily included dealing in merchandise and money lending in close association as long as the money lenders were armorers and grain purveyors to their princely debtors and as long as the granting of credit to princes provided the best means of obtaining privileges, especially tariff concessions, which made possible a particularly profitable commercial business. Simi-

larly closely associated were large and small loans; the royal banker and the pawnbroker who lent money to insignificant people at a usurious rate of interest were not infrequently one and the same person.

By the time of the Renaissance there were several distinct groups among these large scale private financiers. The Italians, with the Florentines in the forefront, occupied the central position in business relations with the Curia, the vassals of the church and the kings of France, England and Naples. The south German financiers, who were no longer important as merchants because of a change in the routes of international commerce, were supreme as creditors of the Hapsburgs of Austria and Spain and of the German princes and lords. The Hansards, whose money lending was still very closely associated with the mercantile business, worked primarily with the English kings and the Scandinavian rulers.

Because of their close connection with princely finance all of these financial houses perished with the state bankruptcies of the sixteenth century. Although most of the larger loans were shared by a syndicate of several houses, still the total credits granted by each house were far in excess of their individual fortunes. Since there was as yet no possibility of transferring the credit risk to the public, the financiers themselves were compelled to remain in the position of both permanent creditors and permanent debtors. Thus whenever a princely debtor failed to meet his obligations the unavoidable consequence was the failure of banks and the ruin of business associates and depositors.

By the seventeenth century the field was clear for the development of other types of private finance. Recruits for the new business were drawn from three different sources. In France and Italy the tax farmers who anticipated future tax yields and provisioned the army raised working capital by accepting interest bearing deposits which were utilized in part in discounting bills of exchange and in making advances to private persons. Elsewhere the Jewish business men, after being temporarily forced out by the Christian financiers of the Renaissance, began in the seventeenth century to regain an important position. They provided financial support to England under the Commonwealth and in the reign of Queen Anne, they raised funds to enable the Emperor to prosecute the War of the Spanish Succession and they were active as "court Jews" among the German princes. Their business was uniformly characterized by a combination of loans to princes and private persons, and a mercantile business which was not, however, confined to the provisioning of the army. These Jewish financiers raised the necessary capital by obtaining credit from their coreligionists throughout Europe; and it was through this system of mutual credit grants that this group developed in the course of the eighteenth century into a loose but efficient organization out of which the *haute banque juive* was later to evolve. Finally, private banking developed also out of wholesale trade, shipping and the commission business. The dealing in bills of exchange involved in wholesale trade was enlarged into an independent discount and foreign exchange business; the prepayment of goods and anticipation of bills of exchange connected with the shipping business were developed into a system similar to modern bank financing of the movement of goods in wholesale trade. These specialized pursuits became associated with the management of private fortunes and with the gradually developing security brokerage. This group of private bankers also participated in the flotation of government loans, but at a much smaller risk than did the Renaissance financiers, because with the introduction of the device of transferable certificates of indebtedness for relatively small denominations and with the development of regularly functioning security exchanges the banker was reduced to an intermediary who merely anticipated the forthcoming public subscriptions. The continuous striving for the lowering of risks distinguished these private bankers from the *traitans* and the Jews, who, having prospered from the financing of states, still engaged in adventurous operations.

In the course of the second half of the eighteenth century the extreme peculiarities of the three types of private banking were gradually obliterated. As the result of a mutual assimilation of business methods, favored by the establishment of close personal ties, there developed a new type of banking business which appeared first in Holland and the commercial ports of international importance, in the capitals of the great European powers and in some of the old money markets. The house of Rothschild as it existed at the close of the eighteenth century is representative of this type of banking; some of its distinctive characteristics survive even at present in the business of English merchant bankers and the American "international" banking firms. These private banks were not

burdened with a multiplicity of small accounts and their business could be conducted by the partners of the firm with the assistance of a few clerks. They worked in constant close association with one another, the cooperation generally taking the form of continually renewed underwriting syndicates. Nor did they scorn connections with private banks of local importance, because this policy facilitated flotation and dealing in large issues of government securities, which were the main item of their business. The constant care of the private banks was to keep their tremendous capital liquid in order to be able easily to engage in large scale transactions at short notice. They preferred therefore to finance wholesale trade and kept away from industry, at any rate until the adoption by the latter of the stock issue method of capital financing. When their capital was not tied up in large security deals they invested it in prime commercial paper of international reputation, which could be easily rediscounted. They used it also to finance security speculation and were thus able to influence the temper of the market and to manipulate security quotations.

Money changers and a book transfer system of payments were essential while coinage disorganization persisted. It lasted everywhere until the eighteenth century and in many small states down to the nineteenth. But as soon as money changers began to use deposits for the extension of loans their effectiveness in serving the original function was impaired. Losses in the money changers' loan business repeatedly involved losses to depositors and destruction of the local system of payment transfers. Attempts to prevent such catastrophes by requiring a bond of the money changer were unsuccessful, for there were recurring instances in which the amount of the bond was insufficient to cover the losses. Equally ineffective was the succession of regulations, especially frequent in Venice, prohibiting the *campsores* to grant loans and the *banchieri* to open deposit accounts for clearing purposes. Money changers, moreover, were often accused of melting down the heavier coins and so debasing the circulating medium. Consequently the municipal authorities stepped in and established public transfer banks. By subjecting the transfer bank to constant municipal control they intended to provide absolute security against the use of deposits for the extension of loans; deposited coins were to remain untouched in the vaults of the bank to serve as the foundation of a book transfer payment system. The oldest bank of this type was established in Barcelona in 1401; in 1408 the Genoa Casa di San Giorgio assumed the functions of a transfer bank; the Banco di Rialto was founded in Venice in 1587 (reconstituted as Banco del Giro in 1619) and in 1593 the Banco di Sant' Ambrogio in Milan. In the seventeenth century numerous banks of this kind were established north of the Alps; the Amsterdam Wisselbank (1609) and the Bank of Hamburg (1619) became the most famous.

Balances with these banks were established by the deposit of domestic or foreign coin or of bars of precious metal, the fine bullion content of such coins or bars being recorded in credit entries. Just as the money changers used an ideal standard, the *scutus marcarum*, so the transfer banks developed a separate bank standard, the unit of which was a certain fixed quantity of precious metal. Thus in the Hamburg transfer bank one mark banco was equal to 8 1/3 grams of fine silver. Customers of the bank formed a closed community within which payments were made by transferred entries in the books. For payments in excess of a certain sum settlement by bank transfer could be declared obligatory either by law or by agreement between merchants; the use of coins could thus be confined to routine petty transactions. Since the use of deposits for the granting of loans, particularly of loans to private individuals, was prohibited, no interest on transfer bank deposits was paid; on the contrary a small charge to cover the costs of administration was made on each deposit. Wherever established, public transfer banks generally monopolized the business of money changing.

With respect to the extension of credit a distinction must be made between pure transfer banks, such as those of Amsterdam and Hamburg, and public institutions found in Italian cities which were originally organized in connection with the requirements of public credit. In the Italian city-states the creditors who participated in a public loan formed into corporations called *montes profani*, which were charged with the collection of revenue pledged as security and with distribution of interest. Since the income from the pledged excise and customs duties was rather uniformly spread through the year, whereas interest payments were made only once or at most twice a year, the periodic accumulations of funds could be utilized for occasional loans to the state or, more

rarely, to private persons. In addition the *montes* had secure strongboxes and vaults at their command and were therefore used as depositories by members of the corporation, the capitalists and merchants of the city. This led to a gradual development of a book transfer system of payments among the depositors. The most important example of such a combination of state creditors' organization, public debt administration and municipal transfer bank was the Casa di San Giorgio in Genoa in which were united all the Genoa *montes* (called *compere* and *maones* in Genoa). With the functions of a transfer bank it combined the granting of short term loans to the state; the balances on its time deposit accounts were used to finance large public enterprises such as the building of the Genoa harbor. The transfer banks of Venice and Milan were similarly engaged in the granting of public credit and were consequently in frequent difficulties, being repeatedly compelled to suspend payments.

Pure transfer banks, although prohibited from granting credit either to private persons or to the state, could not resist the pressure of public authorities for unauthorized and often secret loans. Thus the Amsterdam Wisselbank entered as early as the middle of the seventeenth century into business relations with the East India Company; moreover, the city of Amsterdam itself frequently made demands upon the bank's credit. These loans impaired the ability of the bank to convert bank money into precious metals on demand, and as a result bank money, which had originally been quoted at a premium, dropped below par. When the Hamburg transfer bank was founded, a loan bank extending credit on merchandise collateral was immediately associated with it. As a result of excessive credit grants to the loan bank the Hamburg bank was compelled to suspend payments in 1672 and 1755 and quotations for the mark banco repeatedly fell below par with the precious metal. After the further segregation of the book transfer operations from the loan business the Hamburg bank continued in existence until it was taken over by the Reichsbank in 1875. Most of the transfer banks were dissolved by the end of the eighteenth century.

While the money changers and transfer banks forged the mechanism of deposit and clearance and the private money lenders and financiers developed the international market for the discount of commercial paper, the banks of issue supplied the other essential element of modern commercial banking, the banknote. The banks of issue began to be organized at the end of the seventeenth and the beginning of the eighteenth century to satisfy the need for capital of both the centralized state and the expanding commerce and industry. The policy of territorial expansion and conquest which demanded large standing armies and strong navies, the acquisition of extended colonial possessions, the centralization of power with the accompanying increase of governmental economic activities and finally the growth of population combined to augment the financial needs of the state. On the other hand the development of large capitalistic contracting out firms and manufactories, mining enterprises and wholesale concerns on a far greater scale than that of the Middle Ages created an increasing demand for generous supplies of capital. An additional stimulus came from current credit theories which saw in the issue of banknotes not only the *arcanum publicum* but also the key to unlimited possibilities for the development of the productive resources of the nation. As in all periods of change in the economic basis of society, the increased demand for capital funds resulted in the drafting of a number of projects envisaging the creation of a bank of issue. These schemes were evolved in all countries. On the face of them they were intended for the benefit of the state treasuries, but this was merely indicative of the fact that even plans conceived in the interest of private business were likely to succeed only if the government could expect to derive a direct advantage from them.

Beginnings of banknote issues are found in certain transfer banks. *Fedi di credito*, which had been circulating in Naples for some time, were imitated by the Casa di San Giorgio in Genoa, which began in 1675 to issue deposit vouchers called *biglietti*. They were made out to individuals but were transferable by endorsement and were used as a medium of payment. Even before that time the bank established by Palmstruch in Sweden issued certificates, at first as receipts for copper coin deposits; the issues, however, were soon far in excess of the amount of the deposits. It was in England that such deposit vouchers developed into modern banknotes and the modern type of bank of issue was perfected.

When in 1640 Charles I attached the deposits of the London merchants in the royal mint and released them only after the merchants agreed to grant him a loan, he had shaken the confidence of the city in the mint and furnished the opportunity for the goldsmiths to become depositories

for the merchants and the landed nobility. In contrast to the principles of the continental transfer banks the goldsmiths did not assume the obligation to keep the deposits untouched, but only to repay them on demand or at short notice. They made it clear to their depositors that they were using the deposits for the granting of loans; consequently they were making no charge for safekeeping but were, on the contrary, paying interest, at first on deposits of all types. The goldsmiths soon recognized that the value of deposits as working capital increased according to the length of time for which they could be freely used and therefore ceased paying interest on demand deposits and graduated interest on time deposits according to the time of grace between the notice of withdrawal and the actual repayment. Demand deposits were made available to the depositors in several ways. They could transfer them by order; these orders formed the foundation for a book transfer system of payments within the circle of the goldsmiths' clientele. They could use a draft on the goldsmith in order to effect a payment; these drafts led to the development of the check system. Finally, they could transfer the deposit or any part of it by handing over the deposit vouchers issued by the goldsmiths, goldsmiths' notes, which are the oldest form of banknote in England. These vouchers were payable on demand but in view of their free transferability and of the confidence reposed in the goldsmiths they were soon adopted as a circulating medium; therefore the number presented for payment was considerably below the amount of the underlying deposits. Realizing that the amount of vouchers outstanding might be appreciably larger than the available cash balance, the goldsmiths began to issue notes which were no longer vouchers for previous deposits of gold but means for making available the loans that had been granted. At first these loans were extended to the London merchants through discount of their bills of exchange. As the goldsmiths became financially stronger, however, the Exchequer began to take a lively interest in their affairs. There ensued a period of business connections between the London goldsmiths and the Treasury which ended in 1672 with the suspension of payments by the government and with the bankruptcy of most of the goldsmiths. The credit of the government was destroyed for a long time and the confidence in the goldsmiths, which was the foundation of their banking business, was likewise shattered.

The failure of the goldsmiths and the disappearance of the convenient means of payment brought to a head the desire of the English business circles for a credit institution independent of the state. The realization of this need was at first prevented by the struggle between the king and Parliament. The right of Parliament to authorize public loans was one of the most important safeguards of civil liberty; Parliament naturally opposed the establishment of a bank which would make the government more independent of parliamentary grants. With the change in the political situation after the Revolution of 1688 the banking question entered upon a new stage; whereas the earlier bank projects had stressed the credit needs of private business, the new plans emphasized the credit needs of the state.

Out of a wealth of projects that of William Paterson was finally realized. It combined the founding of a bank with the granting of a loan to the government. The latter was empowered to raise a loan of £1,200,000 on the security of the newly authorized beer and ship taxes, the loan to be repaid in annuities of £100,000. By the royal charter of April 25, 1694, the creditors were grouped into a corporation under the name of the Governor and the Company of the Bank of England, entitled to engage in banking operations, particularly the purchase of gold and silver bullion, discounting of bills and granting of secured loans. The capital of the bank was the government loan, but the bank was empowered to raise working capital by accepting deposits and issuing notes against negotiable securities to the amount of its capital. The same policy was pursued later; every increase in the loan to the government was financed through an increase of capital and the note issue limit was raised accordingly, but notes could be issued only against negotiable securities. The Bank of England, the first modern bank of issue, combined the functions of a transfer bank with those of a commercial bank.

From the beginning of the eighteenth century the success of the Bank of England inspired the foundation of similar institutions on the continent. The fact, however, that government demands for credit were more pressing there proved to be a serious obstacle. Although certain continental banks attempted to follow the policy of the Bank of England by introducing a rigid separation between government loans and banknote issues, they could not resist the pressure of the government. The experience of John Law's

institution is typical. His Banque Générale in Paris, established by royal charter in 1716, adhered to the principle of issuing notes against negotiable securities during the first two years of its existence. With its conversion into the Banque Royale the restrictions that had applied to note issues were removed, these ceased to be redeemable and a loan of 1500 million livres was granted to the state for the liquidation of the entire national debt. This step marked the transition from banknotes to government paper money. In 1720 the excessive issues led to the collapse of the system. In Denmark the Courant bank was chartered in 1736 as a note, exchange and loan bank. It granted excessive loans to the state and was compelled in 1757 to suspend redemption of its issues. The Stockholm exchange and loan bank, established in 1656, was unable to redeem its issues after 1745. The Russian note bank, established in 1769, likewise used its right of issue to finance government loans, suffered from the ensuing inflation and was finally compelled to suspend redemption. All of these banks are just so many examples of the validity of Montesquieu's observation: "To establish banks in countries governed by a single head, is to believe that it is feasible to separate money and power, that is, on the one hand the possibility of having everything without the power, and on the other the power without this possibility."

The royal bank of Berlin and the municipal bank of Vienna occupy a special position among the government banks of the time. In western and to some extent in northern Europe, overseas commerce, the development of colonies and the growth of large manufactories offered many opportunities for the employment of capital. In the economically backward regions of Prussia and Austria, however, capital seeking investment accumulated in the public banks, which paid interest on deposits, and in this form was more than sufficient to meet the needs of the state as well as of private business. The Königliche Giro- und Lehn-Banco, founded in Berlin in 1765, which became the Preussische Bank in 1846 and later the Reichsbank, received the right of note issue in 1766 but made little use of it. Banknotes were scarcely needed to finance government loans, and funds for discounts and commercial loans as well as for mortgage loans could be raised by acceptance of interest bearing deposits. The Vienna municipal bank, founded in 1703 on the model of Italian *montes* and transfer banks, had a much more limited field of activity. It received the proceeds of certain assigned taxes and distributed them in the form of interest and amortization payments on a part of the Austrian public debt. It used its interest bearing deposits and banknote issues, which were begun in 1762, exclusively for government loans. The redemption of notes was suspended in 1797.

In France the collapse of Law's system for a long time prevented the establishment of a bank of issue. The Caisse d'Escompte, founded by Turgot with private capital in 1776, issued notes which were current as long as the bank refrained from participating in public credit operations. As soon as it began to grant public loans confidence in the bank was undermined and its notes had to be given the privilege of forced circulation. During the French Revolution the freedom to pursue any occupation extended even to banks of issue but had little practical effect while assignats were being issued. Beginning in 1796 several banks of issue were established in Paris and in the provinces. Financed with private capital and deliberately refraining from making government loans, they were unimportant for the later development of banknote issue in France. The Bank of France, founded in 1800 at the instigation of Napoleon Bonaparte, then first consul, with government cooperation in the raising of its capital of 30,000-000 francs, had the double task of restoring the completely disorganized public credit and of meeting the credit demands of business. At first there was free competition between the Bank of France and the older banks of issue. But as early as 1803 the Bank of France received the monopoly of issue in Paris as well as the right of unlimited issue. This privilege was coupled with the provision that net profits in excess of a 6 percent dividend should become part of the bank reserve and be invested in French *rentes*. The association between the bank and the government was further strengthened and control of the bank by the government was assured by the law of April 22, 1806, providing that of the fifteen *régents* elected at a general meeting of the stockholders three must be tax collectors that were still active state officials; the *régents* together with the three *censeurs* (auditors) constituted the Conseil Général of the bank. It also provided that the head of the state appoint the *direction générale*, the actual management of the bank, consisting of the governor and the two vice-governors. Banks of issue had hitherto been organized either as private corporations like the

Bank of England or as state owned institutions like most of the continental establishments. The law of 1806 thus created a new type of organization, which subsequently became the model for most of the European banks of issue: a mixed public and private enterprise with capital from private sources but with effective public control in accordance with the law, expressing itself particularly in the appointment of executives.

In addition to banks of issue the eighteenth century witnessed the organization of banks which made advances on the security of merchandise. They catered to the need for short term credit of wholesalers and entrepreneurs on the putting out system, who were operating under the disadvantage of slow turnover and large inventories. Until the creation of these banks such borrowers could resort to the bill of exchange, a market for which was created by the private bankers. The fact, however, that in the circles *du vieux commerce solide* the turning over of a bill for discount was viewed as a slightly disreputable operation even after endorsement and reendorsement of bills grew common among them, prevented an adequate utilization of this credit instrument. Occasionally, as in the case of Monte dei Paschi in Siena, such borrowers made use of the *montes pietatis*, originally charitable pawnbroking establishments which supplied consumption credit at moderate interest. They would receive loans from these organizations by pledging raw materials, semi-manufactured and finished goods. In some cases private banks of issue would engage in making advances on merchandise security. A specific solution was found, however, in the organization of special banks lending on merchandise. They were established in centers of industry organized on the domestic system (Leinwand Bankcassa in St. Gallen) or in international commercial centers (Lehnbank in Hamburg, associated with the Hamburg transfer bank). They were organized either as government institutions or under the auspices of merchants' corporations.

By the end of the eighteenth century there could thus be found all the essential elements of modern commercial banking: deposits and a limited clearance system, advances and discounts of commercial paper, and banknote issues. They were developed in different places and under different circumstances and did not necessarily coexist within the framework of a single institution. The coalescing of these elements into the specialized business of modern commercial banks and the establishment of such close relations between individual banks as to fuse them into a banking system occurred in the course of the following century in response to the needs of developing industry and commerce and under the influence of local legislation and custom. Banking progress from this point forward must of necessity be surveyed by countries and should be more closely confined to commercial banking as distinguished from other types of financial business.

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See: USURY; FAIRS; PAWNBROKING; PAPACY; WAR FINANCE; PUBLIC DEBT. See also general cross references at end of article.

MODERN BANKING. *United Kingdom.* The dominant factor in English banking in the eighteenth and the first third of the nineteenth century was the monopoly of joint stock banking supposed to have been conferred on the Bank of England by the act of 1697. As defined by the act of 1742 this not only precluded the grant of corporate form to any other bank but even prohibited a partnership of more than six members from carrying on the business of banking as then understood. Private banks existed in London before that time and after the middle of the eighteenth century appeared in other parts of the country. Local traders whose credit stood high on the country market took advantage of this reputation and gradually developed a regular banking business, issuing notes and making loans to their neighbors. By the end of the eighteenth century the number of such banks ran to several hundred. As distinguished from the country banks the private banks in London specialized in the deposit, loan and discount business. The connection between the London and the country banks took the form of deposits kept by the latter with London correspondents; these deposits were used to settle interlocal balances. The London banks belonged to the Clearing House, which developed out of informal meetings of bank runners and became formally organized in 1773. The Bank of England was even then assuming the role of a bankers' bank. Its notes were the only banknotes which enjoyed the privilege of a national circulation, and since they were used to settle balances in the London Clearing House it was usual for the private banks in London to keep accounts with the Bank of England.

The fact that the size and stability of private banks were severely circumscribed by the monopoly of the Bank of England began to be keenly

felt with the expansion of English business after the Napoleonic wars. The economic instability which characterized the period of suspension of specie payments (1797–1821) was another contributing factor. During the crisis of 1814–16, 240 country banks stopped payments and 89 went into bankruptcy. Again after an outburst of speculation in 1824–25 over 70 banks failed within six weeks. Attention was drawn to the fact that in 1742, when the monopoly of the Bank of England was defined, banking had been considered to be inseparably connected with note issue. It was contended that the act of that year did not prohibit the establishment of joint stock banks which did not issue notes. In 1826 a bill was passed explicitly allowing banks having more than six partners to carry on business outside of the London area, at a distance not less than sixty-five miles from London. In 1833 the act renewing the Bank of England charter granted for London a similar right of joint stock banking without note issue. The establishment of a large number of joint stock banks of deposit followed immediately, the first being the London and Westminster Bank (1834), one of the "big five" at present. By the same act the notes of the Bank of England were made legal tender except for payments by the Bank itself. Thus its position as a central bank was confirmed.

Sir Robert Peel's famous Bank Charter Act of 1844 placed the right of note issue on a new basis. As far as private banks were concerned existing rights were preserved; but no new rights were to be conferred in the future and no increase of the circulation of any bank which already possessed the right was to be allowed. The gradual supersession or absorption of the private banks by joint stock banks meant the gradual lapse of the rights of note issue. The regulation of the Bank of England note issue became automatic. The Bank was divided into an Issue Department concerned exclusively with the note issue and a Banking Department concerned with the other business. The Issue Department was authorized to issue only a fixed amount of notes against securities (the fiduciary issue); any additional notes had to be covered by an equal reserve of coin or bullion. The fixed fiduciary issue was initially £14,000,000, but provision was made for extending it by two thirds of the amount of any private bank's note issues that lapsed. Such extensions were made from time to time and in 1923, when all the private note issues had lapsed, the limit of the fiduciary issue was set at £19,750,000.

After 1828 no notes below £5 had been allowed, and coin was the only available medium for the chief ready money transactions such as wage payments and retail deals. As the use of checks came into vogue during the nineteenth century for the larger payments, not only among traders but among private individuals, the note circulation played a smaller and smaller part in the country's currency system. In 1853 the London Clearing House abandoned the use of Bank of England notes for the settlement of the daily clearing balances in favor of checks on the Bank of England, and ever since the current balances to the credit of the clearing banks at the Bank of England have been an important factor in the London money market. It is most surprising that the note issue in active circulation showed apart from moderate fluctuations no increase between 1844 and 1914, despite the immense expansion in business and in economic activity of all sorts.

The rigid limitation of the Bank's note issue could not in practise always be maintained. By virtue of its position as the bankers' bank the obligations of the Bank of England, whether notes or deposits, are considered as cash by the banking community and the public generally. At a time of stress the Bank could keep its obligations within an arbitrary limit in the last resort only by refusing to lend on any terms. That might mean a deadlock, a breakdown of the credit system owing to a shortage of cash. In order to avoid such a catastrophe the government on three occasions, in the great financial crises of 1847, 1857 and 1866, authorized the Bank to exceed the fiduciary limit. The government had no legal power to give such authority but because of its constitutional predominance in the House of Commons it was in a position to promise that it would procure indemnifying legislation from Parliament to give retrospective sanction for any breach of the law. On only one of the three occasions, the crisis of 1857, was the limit actually exceeded and the indemnifying legislation passed.

With the outbreak of the war in 1914 the Currency and Bank Notes Act was hastily passed empowering the government to suspend the fiduciary limit "temporarily" and authorizing the government to issue legal tender currency notes for £1 and 10s. The appearance of these notes made the whole question of the fiduciary limit one of secondary importance. The act remained operative until 1928, the currency notes being subject to no statutory regulations

with regard to reserves, although the Treasury issued administrative directions on the subject. The Currency and Bank Notes Act of 1928 transferred the power of issuing notes for £1 and 10s from the government to the Bank of England and contained provisions for a new reserve law for the Bank's note issue thus extended. Since notes had entirely replaced gold coin as the standard circulation of the country the Bank's circulation exceeded £350,000,000 as compared with about £30,000,000 in 1914. The fiduciary issue was fixed by the act of 1928 at £260,000,000 but the Treasury was empowered, at the request of the Bank, to increase or decrease it. An increase could be made only for six months at a time or less and could be renewed for not more than two years in all. The profits derived from note issue were to revert to the Treasury.

The extension of the private banks through the establishment of branches was circumscribed by the limitation of their capital to that of not more than six partners. But a joint stock bank with well distributed branches enjoyed the advantage of solid credit, and clearing facilities available through its head office placed it in a position to transmit funds for its customers from London to the provinces and from one part of the country to another. From the very beginning of joint stock banking, whether such banks were established in London or in the large provincial cities, there was therefore a marked tendency for branches of the joint stock banks to supersede the private banks. The usual process was the absorption of a private bank as a going concern and its transformation into a branch or a group of branches of the joint stock bank. When in 1862 the Companies Act was passed facilitating the establishment of joint stock banks, this absorption of private banks was accelerated. Toward the end of the nineteenth century the process of amalgamation extended also to the smaller joint stock banks. So far has this proceeded that at present the number of joint stock banks carrying on business mainly in England is only sixteen, and five sixths of the business is in the hands of five big banks.

In the private banking era trade in England was financed largely by bills of exchange drawn by sellers of goods upon buyers. Since London was the great center of commercial business, both domestic and foreign, and the greatest commercial houses had their head offices or at any rate responsible agencies there, the country banks were constantly receiving bills drawn on London by their customers in the ordinary course of business and were at the same time called upon to use the funds they thus acquired in London in order to provide remittances. The country banks needed a constant correspondent in London and would of necessity keep their reserves there. Quite naturally there developed in London early in the nineteenth century a market in bills of exchange. Brokers, who made a special study of the credit standing of the names appearing on bills as drawers, acceptors or endorsers, would undertake to find buyers for any bills held by a banker in excess of requirements or to obtain bills for one who had superfluous funds to invest. The market, in thus sorting out the available supply of bills and of money among the banks, became a sensitive index of the cash position of the banking community. If the City was short of cash the bill brokers would become aware of a supply of bills exceeding the demand; if cash was redundant the demand for bills would exceed the supply. The Bank of England, which since the second half of the eighteenth century had begun to acquire the functions of a central bank, would make good a shortage of cash in the City by lending. At first it lent directly to merchants, but when the discount market came into being the responsibility for borrowing from the Bank devolved upon the bill brokers, who had the most immediate evidence of the position of the market. There grew up a rediscounting system, with the peculiarity that the rediscounts were obtained from the central bank not by the other banks but by the bill brokers.

As the bill brokers became responsible for the rediscounting business they ceased to be mere brokers or intermediaries. The existence of an active and liquid discount market enabled the banks to cut down their actual holdings of money to the bare minimum required for till money and clearing operations and to lend to the bill brokers at short notice (sometimes a week, but usually from day to day) any balance that could be spared. With these funds the dealers were enabled to buy bills on their own account. By 1830 this had become the most characteristic business of the bill brokers and the present organization of the London money market had already emerged. The discount houses, still often called bill brokers, have thus acquired some of the characteristics of bankers, holding liquid investments against demand or short term obligations.

In view of the narrow margins on which they

transact business the discount houses are most sensitive to changes in the cash position of the market. Their gross profits are determined by the difference between the rate of interest paid to the money lending banks and the rate of discount which they charge the sellers of the bills. The rate of interest charged for day to day money is a sensitive rate, varying sometimes from hour to hour according to the state of the market. The rate of discount is likewise sensitive, although the range of its variations is narrower because it relates to longer periods. A scarcity of cash among the banks is felt in the first instance not through an excess of bills offered for sale but through a withdrawal of funds from the discount houses. Borrowing as they do on short notice, discount houses must be in a position to supply cash in whatever amount may be demanded. To satisfy such demands they resort to the Bank of England, with which they create deposits equivalent from the standpoint of the market to cash, either by rediscounting the bills of exchange or by obtaining loans for a few days on the security of the bills. The "Bank rate," fixed and announced by the directorate of the Bank of England every week, is the minimum rate at which the Bank is prepared to rediscount bills for the discount houses; the Bank usually also grants them loans at a rate ½ percent higher.

The Bank rate is effective when the discount houses have to resort to borrowing from the Bank of England. Sometimes, when the credit position requires restrictive measures, the directors of the Bank "put the market in the Bank" in order to force the market rate of discount up to the Bank rate. They create an artificial shortage of cash by offering government securities for sale or by letting bills run off without replacing them. To forestall a falling off in their deposit balances with the Bank the London banks recall their loans with discount houses and the entire machinery is thus set in motion.

With the development of branch banking the bill of exchange in internal trade was almost entirely superseded by loans and advances. As the practise of remittance by check grew, the occasion for the creation of domestic bills disappeared. A bank will lend a customer a specified sum for a specified period or sometimes will grant him an "overdraft," the right to "overdraw his account" as much as he needs from day to day within an agreed maximum limit. In the case of the loan, interest will be charged for the whole amount lent until its maturity, although a portion may be repaid before maturity by agreement; in the case of the overdraft, interest will be paid only on the amount actually outstanding from time to time. Loans and overdrafts are sometimes protected by real estate or stock exchange security collateral.

With the disappearance of domestic bills of exchange the London market is almost entirely confined to bills drawn for financing international trade. These are not limited to the bills arising out of the trade of English merchants as importers or exporters. A large part of the paper is created in transactions between merchants of two foreign countries which are financed through the intermediation of the London market. This is generally done by the seller's drawing a bill on a London banking house, which accepts it because a credit had been arranged with it by the bank of the importing buyer. This international position of the London market is due to several causes. Geographical position, maritime power, freedom from invasion, numerous colonies, extensive foreign trade, all helped. After 1819 a stable currency and a free gold market were factors along with a highly organized banking system and discount market.

The accepting of bills on behalf of foreign clients is carried on mainly by merchant bankers. Some of them located in London in the late eighteenth and the early nineteenth century, when it became abundantly clear that with the breakdown of the Bank of Amsterdam and the increasing hegemony of British shipping in international trade London was bound to develop into the center of international commerce and finance. Other such houses have grown out of the big mercantile firms of the eighteenth century. A merchant who bought goods and accepted bills on a very large scale came to be well known in the countries where he did business, and his name commanded high credit. He could confer a great benefit on his smaller and less known fellow merchants by letting them have bills drawn on him instead of on themselves, and if he were satisfied that they were sound he could conduct a lucrative business by charging them a commission for the use of his name. Merchants who had established a business of this kind and who had accumulated a large capital from their own business found it worth while to concentrate on acceptance and other financial operations and to drop the commercial side of their business altogether. With

their international connections they were also equipped to deal in foreign exchange. They were naturally led also to engage in the flotation of securities, particularly on behalf of foreign business concerns and governments.

The concentration of foreign bills on the London market is also due to the activity of colonial banks and of exchange banks. These banks have either their head offices or important branches in London but receive deposits and carry on business abroad, either in the British possessions or in foreign countries, especially in the Far East and South America. They do a considerable amount of local business abroad, but their most characteristic activity is the financing of those of their customers who are engaged in international trade. The customers of a colonial or exchange bank include both buyers and sellers of goods. For the buyers the bank undertakes to accept bills drawn on its London office. The sellers draw bills, as a rule on some other bank or financial house in London; the bank discounts these and thus acquires many bills on London, which it transmits to its London office, where after being presented for acceptance they are either held as an investment or sold in the market. The overseas banks are thus the principal channel through which bills reach the London market. The bills represent both imports into England and imports whether from England or elsewhere into the countries in which the overseas banks do business. These banks are obviously in a favorable position to deal in foreign exchange in the form of foreign bills drawn on London or in other forms.

In recent years the tendency toward amalgamation which has been so prevalent among the interior banks has spread to the overseas banks. In one or two cases they have amalgamated with one another, and some have also been affiliated with a big joint stock bank. These big joint stock banks have thus become engaged in financing international trade, some of them more directly by the establishment of foreign departments and foreign branches.

The preceding description is limited to English banking. The institution in Scotland developed for a considerable time independently of the English and even at present exhibits somewhat different characteristics. At the end of the seventeenth century there existed in Scotland a number of substantial local banks organized on a partnership basis. Despite the fact that the number of partners was not limited these local banks were found inadequate. In 1695 the Bank of Scotland, which for some time occupied a position analogous to that of the Bank of England in English banking, was founded by an act of the Scottish Parliament. This was the only large note issuing bank until 1727, when the Royal Bank of Scotland was chartered by the British Parliament. Since then the British Linen Company, rechartered in 1806 to do banking business exclusively, joined the ranks of the large scale banks. These as well as the smaller local banks engaged extensively in note issue. In some cases the notes were of very small denomination, but after 1765 none below £1 was allowed. Deposit business did not develop until much later. After the middle of the eighteenth century credit was extended on the basis of the cash-credit system, that is, on the personal security of the borrower and of two bondsmen. The cash-credit loan, supplementing credit protected by land and other property, proved of great value in the encouragement of industry and trade. With the development of interlocal communications early in the nineteenth century joint stock banks began to appear in the larger centers and somewhat later established branches into which local banks were gradually merged. The joint stock banks amalgamated among themselves as well, so that while there were thirty-six such institutions in 1819 their number had been by 1844 reduced to twenty-four. The act of 1845 restricted the right of note issue to those banks which exercised it at the time and limited the fiduciary issue to the amount then outstanding, and since then no new bank survived the competition of the older institutions. Their number had been reduced by amalgamation in the meantime, and in 1873 there remained only eleven banks of any importance. After the middle of the nineteenth century these banks developed extensively the deposit business and in connection with it the circulation of checks. Scottish banking, except for the note issue feature, came increasingly to resemble the English type. As was inevitable close ties were established with the London money market which culminated in the stock control by London joint stock banks of four of the eight large Scottish banks in existence at the present time.

R. G. HAWTREY

Continental Europe. I. The Nineteenth Century. While English banks were developing with the commercial expansion of the eighteenth century and were prepared to finance the short

time needs of industry when the latter assumed modern forms after the industrial revolution, banking on the continent was lagging behind. Before the nineteenth century it was called upon to satisfy the demands of government for credit, to provide a stable currency for commercial purposes and in a few centers to finance industry and trade. It is not surprising, therefore, that at the beginning of the nineteenth century banking facilities on the continent were confined to banks of issue, a small number of extremely rich private bankers who discounted trade bills of exchange of international currency, and a few banks which made loans on the security of merchandise. In certain localities notaries would lend funds entrusted to them and in some cases would open formal current accounts. Napoleon's observation, " . . . la France manque d'hommes sachant ce que c'est qu'une banque. C'est une race d'hommes à créer" (quoted in A. Courtois, *Histoire de la Banque de France*, Paris 1875), was applicable to other continental countries as well.

The Société Générale pour Favoriser l'Industrie Nationale, founded in Brussels in 1822, was significant in the further development of European banking. It represented a type of bank which later was most successful not only in Belgium but also in France and almost all other continental countries. In contrast to the rigid separation of functions characteristic of English banking, the Société Générale combined commercial and investment banking operations; it granted loans on current account, discounted commercial paper and accepted drafts, engaging at the same time in long term industrial financing. A large part of its resources came from capital stock subscriptions supplemented by a bond issue. A few decades later the brothers Pereire founded the Crédit Mobilier in Paris, regarded at the time as an extremely large organization, which attempted to combine in a peculiar way loans for industrial and commercial purposes. Its paid up capital was 60 million francs but its holdings of securities, mainly shares of stock, amounted at times to 120 million francs or more. Although it existed only a few years it stimulated the foundation of new banking institutions which have been of leading importance up to the present time. With the vigorous cooperation of the House of Rothschild, which saw its power threatened by the Crédit Mobilier, the Austrian Creditanstalt für Handel und Gewerbe, still the largest commercial bank in Austria, was founded in 1855.

About the middle of the nineteenth century a number of important joint stock banks were established in Germany along the general lines of the Crédit Mobilier, but with such modifications as were dictated by considerations of prudence and the necessity of adaptation to local conditions. They were the Bankverein of A. Schaaffhausen in Cologne (1848), the Bank für Handel und Industrie in Darmstadt (1853), the Berliner Handels-Gesellschaft (1856) and the Diskontogesellschaft (1851). In the course of time these banks succeeded in establishing their position of leadership on an increasingly firm foundation. The character of their operations as well as their significance in the economic situation of the time are best described by a few sentences from the report of the Bank für Handel und Industrie for the year 1853: "Bank branches inside and outside the country should act as intermediaries in export trade and innumerable other relations between the German industry and the world market. The bank has the right and the duty to take capital from an industrialist who can spare it temporarily and to transfer it to another who happens at the same time to need it, and by this continuous redistribution to stimulate and enlarge industrial activity. It is entitled to participate in a similar way in the great public works and large financial operations of the state and to act also in these fields as an agency for the investment of free funds. In brief, the Bank für Handel und Industrie is a banking house of heightened potentiality, equipped with large resources and with numerous branches. No dead letter has unwarrantably restricted the limits of its activity" (quoted in Weber, p. 62).

In contrast to the English banks, these continental institutions did not at first attempt to increase the resources at their disposal by attracting deposits. Certain conditions had be to met before they could engage in the deposit business on a considerable scale. Capital accumulation by the public had to be developed to a certain degree before it would repay the effort of gathering surplus capital in the form of deposits. The public had to have more confidence in the joint stock banks, had to become accustomed to regard them as the honest administrators of its moneys. On the other hand bank executives had to revise their traditional notion that demand deposits were valueless from the point of view of the security of the bank; and commercial loans on an extended scale (in addition to industrial loans and the stock issues connected with them)

had to provide the opportunity for a larger proportion of short term investments. In the light of these considerations it is not surprising that the Deutsche Bank, founded late in 1870 particularly in order to promote and facilitate commercial relations between Germany and foreign and overseas markets, had at the end of its first business year total deposits of only $15,000. The situation gradually changed in Germany as it did in other European countries emerging from the poverty stricken agricultural stage of their history. The deposit business has been developing at a rapid rate since the beginning of the twentieth century. External evidence is provided by the rapid increase in local depositories which the large banks took pains to establish all over the country. In the early nineties there were scarcely two dozen bank branches in Germany; at the outbreak of the war in 1914, 36 of the larger commercial banks in Germany were maintaining as many as 1522 banking offices in addition to their head offices.

The German system of general banks, combining the deposit and loan business with the promotion of industry and the stimulation of foreign trade, withstood the test of experience for several decades and was imitated by most of the other European countries. At present the German system of combining banking functions, unlike the English system of functional separation, prevails in European countries and even outside of Europe, as for example in Japan.

In France the development of banking did not follow uniformly in the direction of the general bank as it did in most of the other countries on the continent. The Revolution of 1848 destroyed what there was of existing credit institutions. Complete lack of credit threatened a collapse of French business when the government came to the rescue and helped to found the Comptoir National d'Escompte. The bank could begin work only with the help of a substantial government advance. The acceptance of demand deposits and the discounting of bills of exchange were the only operations in which the new enterprise was at first permitted to engage. Later it became possible to grant loans against goods in warehouse in order to allow the release of capital invested in unsalable goods. In the course of time its sphere of operations was increasingly expanded. Loans on securities and security brokerage were added to its business; it was also given permission to grant acceptance credits guaranteed by a cash or security collateral, but the acceptance of drafts secured by bills of lading became possible only in 1860. Apart from its own capital the resources of the Comptoir d'Escompte were restricted to moneys which came to it automatically in the course of business. These were balances on commercial current accounts, which the merchants regarded as reserves available on demand. The bank refrained from acquiring time deposits.

This gap in French banking was seriously felt after Napoleon's coup d'état when the revolutionary moods of the preceding period gave way to a condition of social apathy and the predominance of strictly business pursuits. Capital accumulation now made rapid strides and provided the foundation for the development of deposit banking. In 1859 the government sanctioned the founding of the first real deposit and loan bank in France, the Crédit Industriel et Commercial. To protect the safety of deposits all operations in the least speculative in character were forbidden. During the following years several other banks modeled after the Crédit Industriel were founded in France.

After the failure of the Crédit Mobilier, the Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France, founded in 1864, gave France a general bank of the type which had stood the test in Germany for years. The Société Générale was not to be merely a deposit and loan bank; from the outset it also planned to engage in the promotion of commercial and industrial enterprises and in all other types of private and public financing. The commercial and investment features of its banking operations were to be mutually supplementary. Soon the Société Générale, acting in the interest of French business, extended strong support to a number of enterprises in various countries. As early as 1868 it founded a branch institution, the Crédit Général Ottoman, especially to serve enterprises in Turkey.

At this same time a large new banking enterprise, the Crédit Lyonnais, was established in the provinces and soon entered into successful competition with the large banks of the metropolis. Founded in Lyons in 1863 with an original capital of 20 million francs, it is today probably the best known French commercial bank. In the early period of its existence this bank engaged in both commercial and investment banking but its sphere of influence was long confined to Lyons and its environs.

After the war of 1870 the wave of promotion which swept over the business world affected the French as well as most other European

banks. There was a mushroom growth of new banks which disappeared as rapidly as they had come. Even the Crédit Lyonnais and the Société Générale were hard hit by the crisis; they soon recovered, however, and were stronger and more active than before. The Comptoir d'Escompte survived these difficult years more successfully than all the other banks, and next to the Bank of France was considered the leading credit institution of the country. Unlike the other large banks, however, it was not stimulated by the crisis to improve its organization, apparently believing that to stand still could never involve retrogression. Such a belief was to prove fatal, because the institution neglected its further development. As a result of the vigorous competition of rival banks, of the depression following the crisis and of the faulty policy of the management which allowed the discount business, under normal conditions the chief activity of the Comptoir, to suffer a continuous decline, the institution collapsed ignominiously in 1889. With the help of other banks and a fresh supply of capital the remnants of the Comptoir were reorganized under the old name and adopted the principles of the other large deposit and loan banks of France.

The success of the large banks, which gradually established a network of branches, has materially affected the business fortunes of the small provincial banks. In France more than elsewhere, however, they have succeeded in strengthening their forces by combination. The French provincial and local banks have formed the Syndicat des Banques de Province largely for the purpose of facilitating their participation in the promotion of industrial and commercial concerns, in the marketing of securities at their own risk or on a commission basis, and in the underwriting of stock issues.

II. The Twentieth Century. Within a few decades the extreme decentralization of banking in Germany has given way to a strongly centralized system, with Berlin as its headquarters. It centers in a few large institutions some of which were mentioned above: the Berliner Handels-Gesellschaft and the four large "D" banks—the Darmstädter und Nationalbank, the Discontogesellschaft (which shortly before the war absorbed the Bankverein of A. Schaffhausen), the Dresdner Bank (1872) and the Deutsche Bank. The Kommerz- und Privatbank of Hamburg has been generally regarded as belonging to the same group. These large banks control at present about 90 percent of all the German joint stock banks, excluding the banks of issue and the mortgage banks, and only a few provincial institutions of medium size have been able to remain outside the direct sphere of their influence. The driving force that makes for centralization is undoubtedly an economic one. The gigantic scale of modern industry and commerce requires such enormous loans that the resources of only a very large institution are sufficient to meet the need. Scarcely less important is the fact that capital ownership is dispersed widely throughout the country, whereas the use of capital for business is concentrated in a few centers especially adapted to commerce and industry. It is therefore necessary to shift funds from localities where they are relatively in excess to those where they are needed, and this can be done most effectively by a centralized banking system. Moreover experience has shown that, other things being equal, the risk of doing business is less for a large bank than for a small or a medium sized institution. The more thorough examination of the general situation, which a large bank is in a position to make, is in itself the surest way of reducing risk. The loss arising from individual failures, which cannot be avoided in business life, can be easily absorbed by a large institution whereas it may almost destroy a small bank. Also it is by no means an unimportant factor that a large bank has facilities for floating stock issues, and when loans on current account go beyond a certain point it is able to transfer risks to the public by issuing stocks or bonds. Such a means of escape is closed to medium sized and smaller institutions. Centralization also brings with it an improvement in the bank's reputation which is advantageous in attracting deposits and business on current account and particularly in floating stock issues. It is therefore easy to understand why the heads of large banks are induced to widen the sphere of influence of their organizations.

In all the large German banks commercial credit receives just as much attention as industrial credit. The banks grant long term industrial loans just as they do short term commercial loans, with the single exception that industrial loans demand a higher rate because of the infrequent turnover and the greater risk. The fact that long term industrial credit is extended by the general banks has given rise to much criticism and to the fear that deposits may thus be too easily endangered. It should be borne in mind, however, that these loans on current ac-

count provide the basis for the banks' development of stock flotations as a means of distributing the risks, and that at least in German experience this practise has eliminated the usual excesses of the business of promotion. Since banks begin with long term loans on current account they are in a position to examine the basis for stock or bond issues much more carefully and to gauge the actual conditions much more correctly than would be possible if such loans were prohibited and a sharp distinction drawn between commercial and investment banking. As a matter of fact the experience of decades proves that German banking methods are decidedly conducive to general economic progress and that depositors run no more risk then they must necessarily assume in dealing with strictly commercial banks. Moreover the well developed system of German savings banks offers the so-called "small people" ample opportunity to place their money outside the large banks with safety and at a suitable rate of interest.

German banks take into account the factor of risk involved in making long term loans on current account. When circumstances warrant it they make such adjustments in their procedure as will reduce the risk to the lowest degree possible. For example, when it was found that the economic development of certain areas was dependent upon the construction of a closely knit system of narrow gauge small and branch railroads, and the banks realized that they could not refuse assistance in an undertaking of such public importance, they devised a way to insure themselves against the risk of insecure returns and the tying up of capital over unusually long periods of time. They organized separate investment corporations (*Übernahmegesellschaften*), the capital of which could be devoted entirely to permanent investments and which at the same time relieved the parent organization of part of the risk. In times of crisis these companies divert the risks of dangerous investments to themselves and thus spare the parent institution. Even though the subsidiary company may collapse under the pressure of adverse conditions the incidence of such a failure in the community is undoubtedly less serious than if a large commercial bank were to suspend payments. Just as the banks found ways and means to protect themselves against the danger of holding securities already issued, without losing at the same time their controlling influence over the concerns involved, so they also sought to lessen the risk of floating new issues by creating certain affiliated organizations. Such a step was necessary if for no other reason than that some banks had in certain respects reached the limits of possible expansion within the same organization. The enormous extent of their business would have made impossible effective supervision of their infinitely complicated and varied affairs. By assigning certain specific fields to a subsidiary organization the whole controlling mechanism is simplified. It also becomes possible to insure expert handling of special problems by trained officials of this specialized institution. An example of such a finance company (*Finanzierungsgesellschaft*) is the bank for electrical enterprises founded in Zurich under the aegis of the Deutsche Bank.

The large German banks have rightfully enjoyed a special reputation for extending vigorous support to German business in international commerce. In the face of powerful older competitors Germany would certainly not have been so successful in the world's markets if the banks had not devoted equal attention to foreign transactions. But here too they had sufficient insight to realize that they must plan as well as dare, to remember that expansion must be accompanied by the strengthening and broadening of the foundation. In order that foreign transactions should not interfere too seriously with domestic business new organizations were created for the special purpose of serving foreign commerce. The Deutsche Bank had been a pioneer in this direction ever since the seventies. Other banks followed in the course of the ensuing decades. In South America and in the Near and Far East German overseas banks reached a high degree of development. In comparison with other German banking interests in foreign countries, these institutions enjoyed certain advantages during and after the war. Some of them were located in neutral countries; and even in some belligerent countries, such as Brazil, they were allowed to continue functioning because of their importance in the economic system of the country in question. Almost everywhere conditions were favorable for a rapid resumption of pre-war business. In 1928 German overseas banks were once again functioning in 74 foreign trade centers.

In France a position similar to that occupied by the six large German banks is held by the three Paris institutions, the Société Générale, the Crédit Lyonnais and the Comptoir National d'Escompte, which before the war represented a

type intermediate between the English deposit banks and the German general banks. Although the large French banks generally apply their savings accounts toward permanent investments through their own stock issues, the flotation of loans in pre-war France was not as important a form of banking activity as the extension of commercial loans. Even when they head an underwriting syndicate or appear as sole contractors, the French banks attempt to minimize risk as much as possible by taking up only a small portion of each individual issue. Their cooperation is frequently limited to merely provisional placing of the securities about to be issued. Before the war it was assumed that French banking investments were relatively safer and more liquid than those of other countries because of the greater conservatism of French practise and the comparatively greater capital wealth of the country. It was thought that loans against merchandise were more readily realizable and that loans on current account included fewer long term loans than was the case with the large Berlin banks. On the other hand their security holdings comprised relatively fewer liquid assets than did those of the Berlin institutions. There is no doubt that the difference between the German and the French banks has recently been lessened. French banking enterprise has become more active, while the large Berlin banks require greater safety of investment. It is to be borne in mind, however, that a sound judgment on the scope and character of activity of the large French commercial banks is extremely difficult because their statements and reports are hopelessly incomplete.

It is of some interest that the large French banking houses in their industrial and foreign business have in recent years occasionally engaged in joint enterprises on a scale larger than before the war. As early as 1925 the Crédit Lyonnais joined with the Société Générale in founding the Banque Française des Pays Balcaniques in Belgrade. The latest instance of this tendency is found in the Union pour le Crédit à l'Industrie Nationale organized jointly by the Crédit Lyonnais and the Comptoir National early in 1929.

The Société Générale de Belgique is preeminent among the commercial banks in Belgium. Its capital stock was increased to a billion francs in 1929, it has 1500 branches and local agencies, participates extensively in financing home industry and commerce and has large interests in the Belgian Congo. The Banque Belge pour l'Étranger, which was founded by the Société and is actually only a branch of the parent institution, has numerous foreign branches and interests extending to all European countries and the Orient. By participating in the founding of the Banque Italo-Belge in Brazil, the Société entered into business relations also with the South American countries. In 1928 the large and highly reputed Banque d'Outremer became part of the Société, thereby increasing materially the business power of the latter. The only other important organization is the Banque de Bruxelles, which since the war has advanced considerably toward the position of a general bank. It increased its participation in industrial and commercial enterprises from approximately 4 million francs in the year 1919 to approximately 100 million francs in the year 1926. It has been said that this organization engaged so intensively in investment operations that the development of its regular commercial banking business was hampered.

Probably no other country possessed such a variety of types of banking organization as the Netherlands in the nineteenth century. In the twentieth century general banks gained a constantly increasing ascendency. The Nederlandsche Handel-Maatschappij, founded in 1824 to succeed the Dutch East India Company and still heavily interested in the Indian business, is the oldest and best known of Dutch general banks. The tendency toward the type of general bank received a strong stimulus from the war, since foreign capital in large amounts was transferred to Dutch banks, which had to seek opportunities of investing it. Short term bank loans at an acceptable rate of interest were scarcely satisfactory when long term investments offered so much more alluring prospects of profit. In this situation some of the Dutch banks overreached themselves, so that when the war was over a considerable portion of the loans could not be repaid. Numerous Dutch mercantile and shipping firms got into serious difficulties. In addition to important private banks, one large banking enterprise, the Bank Associatie in Amsterdam, was compelled to suspend payments in 1922. In 1924 one of the very largest and oldest commercial banks, the Rotterdamsche Bankvereeniging, founded in 1863, became involved in such a serious predicament that a catastrophe was averted only by the government's quick decision, made without consulting the legislature, to guarantee a considerable portion of the bank's obligations. The bank

prepared for a reorganization which was actually carried out in 1927.

Aside from the Nederlandsche Handel-Maatschappij and the Nederlandsch-Indische Handelsbank, whose business is primarily with India, the leading Dutch banks are the Amsterdamsche Bank and the Twentsche Bank in Amsterdam and the Rotterdamsche Bankvereeniging in Rotterdam, all three of which are distinctly general banks with interests and connections extending far beyond the Dutch border. The history and operations of the Twentsche Bank are somewhat different from those of the other institutions. It was founded in 1861 to further exports from the important textile region of Twentsche. The method employed was mainly acceptance loans, for which a London branch was soon founded. A certain percentage of the loans which it grants are underwritten on the basis of joint responsibility by the members of the Creditvereeniging, formed by a majority of its borrowers. This bank has also evolved a method of controlling numerous industrial enterprises without in any way affecting the liquidity of its own assets. Instead of owning securities outright it borrows them from their holders for a long term, extending to one year or more. It pays 1/2 percent as a loan fee in addition to refunding the dividends on the day they fall due.

In Switzerland the apparent decentralization of banking is counteracted to some extent by the existence of banking cartels formed to look after common interests. Such cartels are formed by the eight large banks, by the cantonal banks, which are of regional importance, and by the savings and loan institutions serving local needs. The leading banks also control through security ownership a number of apparently independent banks. Thus the Schweizerische Kreditanstalt in Zurich, which is the largest Swiss bank, has a controlling interest in the Lucerne Bank, the Zurich Bank and the bank for electrical enterprises in Zurich. The Schweizerischer Bankverein, the second largest bank, with a capital of over one million francs, is heavily interested in Leu and Company of Zurich, itself one of the eight largest Swiss banks, as well as in the Schweizerische Gesellschaft für Anlagewerte and in the Crédit Commercial de France in Paris. Like the German banks the Swiss institutions engage extensively in security flotation. The apparent soundness of the combination of security flotation with regular commercial banking may be inferred from the excellent record of the Schweizerische Kreditanstalt, which paid dividends of 8 percent for very nearly forty years. At present the only foreign branch of Swiss banks is that maintained in London since the late nineties by the Schweizerischer Bankverein.

The large Italian commercial banks which at present enjoy international repute are of recent origin. The first to be established was the Banca Commerciale Italiana in Milan; with German assistance it was modeled after the German banks. Primarily interested in the electrical industry and in the manufacture of artificial silk which has rapidly attained importance in Italy, it also cultivates the foreign business growing out of these interests. A number of other banks were later founded along the lines of the Banca Commerciale. The Credito Italiano in Genoa was the first of the large Italian banks to engage systematically in regular deposit and loan banking. It developed a comprehensive system of branches and in proportion to its capital stock has considerably larger deposits today than the otherwise more important Banca Commerciale. It is supported largely by the Genoa shipping and wharf industry and by the industry of Turin. The other large banks in Italy are the Banco di Roma, which had to weather a very severe crisis in 1921–23, and the Banca Nazionale di Credito in Milan. Recently the Credito Maritimo in Rome has begun to attract public attention. The rise of Fascism has placed the Italian banks under strong government influence, which is exerted particularly with reference to the extent and methods of their business with foreign countries. As a result there appears an appreciable weakening of competition and an increasing uniformity of banking methods.

ADOLF WEBER

United States. For some twenty years after the establishment of the first bank in the United States, the Bank of North America, in Philadelphia in 1781, banking development followed a course which, could it have continued, would have given the country a strong and efficient system of commercial credit. The general economic situation was one favorable to the conduct of banking along safe lines. The settling of the country and the developing of its resources were still proceeding at the same slow rate which had been characteristic of the colonial period and gave no irresistible impulse to widespread enterprise and speculation. The few banks that were organized were located in the

seaport towns and cities where commercial business provided a good type of transaction on which to base bank loans. Charters by special legislative enactments, required in each instance, were not granted freely; in general they could be secured only by applicants of recognized financial responsibility. Moreover by the establishment under a federal charter of the First Bank of the United States in 1791 the country now had an institution which, like similar banks elsewhere, would doubtless have limited itself in the course of time to the special functions of a central bank. The field of operation of the First Bank of the United States was nation wide, with head offices at Philadelphia and eight branches extending from Boston to New Orleans. It served the federal government as fiscal agent and although it conducted a general commercial banking business, as did at that time its prototype, the Bank of England, the conservative policies which its management seems consistently to have maintained exerted a restraining influence upon the operations of other banks.

Shortly after the beginning of the nineteenth century the tempo of American economic activity became increasingly rapid. The boundless natural resources of the Mississippi valley awakened a venturesome pioneering spirit which was intolerant of the limitations of conservative banking practises and positively antagonistic to them when imposed from a distant city. Throughout the century an enterprising population, impressed by the possibilities of its surroundings, was eager to employ far more than the readily available supply of capital and was therefore predisposed to favor measures and policies which might give command of additional resources. Bank credit freely administered by local banks seemed to provide a ready substitute for actual capital since it gave the individual borrower and the community the command of resources during such time as the banks in one locality succeeded in expanding credit more rapidly than did banks in other localities with which the community maintained close business relations. The neutralizing effect of the upward movement of prices consequent upon such credit expansion is not immediate; it was therefore unlikely to receive general recognition. With the establishment of banks outside the commercial centers, in communities whose economic activities failed to provide liquid employment for banking funds, it was also inevitable that such funds should have been employed in making loans for the purchase of land and in general for the provision of fixed assets. The persistent endeavor to secure resources through the operations of banks was reflected in the numerous instances of local ownership and management of banks not found in equal measure in any other country. Here perhaps is to be found the explanation of an apparent anomaly—legislative restrictions and even the prohibition of branch banking in a country characterized in general by a laissez faire policy toward business activities and organization.

Between 1800 and 1811 the number of banks increased from 28 to 88 and by 1836 it had reached 713. During these years special charters were granted more readily than in the earlier period and in one state after another general laws were passed permitting the organization of banks under conditions which were by no means exacting. The possibilities of credit expansion by any one of these banks or by all of the banks of any given locality were restricted if other banks promptly presented their notes for redemption and checks drawn upon them for settlement. The First Bank of the United States, much larger than any other bank, operating throughout the country and receiving in the ordinary course of business as fiscal agent of the government notes and checks payable by other banks, adopted a conservative policy and imposed a similar course upon them. A distant bank which made no loans locally but continually presented notes and checks for immediate payment was naturally regarded with hostility in rural banking circles. This antagonism was perhaps almost as acute among the more conservative bankers of the cities, since the commercial banking business of the First Bank of the United States brought it into direct competition with them for business of the most desirable character. Banking sentiment was consequently not favorable to the First Bank of the United States; it failed to secure a renewal of its charter and was liquidated in 1812. Four years later, however, a similar institution, the Second Bank of the United States, was established. This reversal of policy was a direct outcome of the inability of the local state banks to handle successfully the fiscal operations of the government during the War of 1812. But after twenty years of generally effective banking service the Second Bank of the United States met the fate of its predecessor, fundamentally for similar reasons although the tactless political activities of its president were superficially responsible. For nearly eighty years thereafter, until the establishment of the

Federal Reserve system in 1914, the banking system of the United States was deprived of any agency responsible for the maintenance of the credit structure upon a solid foundation or possessing a reserve of lending power for use in emergencies.

From 1837 until the organization of the national banking system in 1863 banking in the United States was handled exclusively by banks organized under the laws of the various states; by the time of the outbreak of the Civil War in 1861 the number of banking institutions had increased to more than 1600. Experience with the working of these banks disclosed three defects of major consequence: the presence of many weak and badly managed banks, excessive credit expansion during periods of business activity, and inability to cope with situations of severe financial strain. During these years dissatisfaction with the banking system was widespread and although constant efforts were made to improve it through voluntary action by bankers and through legislation the problem was never examined in comprehensive fashion. Fundamental defects of organization, such as the multiplicity of banks and the absence of some sort of central banking agency, were overlooked and attention was fixed now upon one and now upon another of the diverse particular manifestations of the faulty management or mechanism of banking credit.

To the general public the losses and inconvenience incident to issues of banknotes by numerous scattered banks, large and small, were a matter of overshadowing concern. The currency thus provided had none of the qualities that belong to a satisfactory circulating medium. Because of a lack of uniformity in design it was easily counterfeited in notes which were a source of universal irritation. Aside from New England, where through the Suffolk Bank of Boston arrangements for the regular redemption of bank notes were in operation, the notes of even the strongest banks were often at a discount in localities distant from the office of the issuing bank. Above all, in the frequent cases of failure undeserved loss fell in haphazard fashion upon scattered individuals having no means of knowing the conditions of the various banks whose notes they might receive in the ordinary course of making and receiving payments. Down to the time of the Civil War there was little or no improvement in the situation with regard to the circulation of counterfeit notes and the acceptance of notes at a discount, but there was decided progress in the direction of adequate protection of noteholders. In addition to measures which were equally advantageous to both noteholders and depositors there was much legislation concerned exclusively with arrangements designed to make the banknote absolutely secure regardless of the fate of the issuing banks. The limitation of the amount issued to the capital of the bank was frequent; but the safeguard which by 1860 had been most generally adopted among the states and which it seemed likely would soon become universal was the deposit of approved securities presumably of sufficient value to protect the outstanding notes. In other words the American banknotes tended to become a bond secured currency.

During the same period in one state after another elaborate banking codes were developed covering the entire field of banking organization and practise and providing for governmental supervision and examination. These codes included provisions relating to the minimum amount and payment of capital, restrictions on loans—in particular limiting or excluding loans on real estate and limiting also the amount that might be lent to any one borrower—and the establishment of required minimum ratios of reserves to note and deposit liabilities. Although such legislation may well have lessened the mortality rate among banks, the rate has nevertheless remained high ever since. Restrictions on banking operations sufficiently drastic to confine the transactions of incapable bankers within safe limits would at the same time narrowly circumscribe the service which well managed banks regularly provide. The unfortunate tradition persisted that a large number of banks was desirable, and the unrestricted granting of charters continued; the average bank was small in size and had little economic diversification in its loans.

A striking but not fundamental change in the banking situation came with the passage of the National Bank Act in 1863. Although the various provisions of this act and of subsequent amendments were in some respects more exacting than those to be found in most, if not in all, of the states, they were of the same general character. The most certain advance related to the currency. In 1865 a prohibitive tax of 10 percent was imposed upon the note issues of state banks and thereafter the country enjoyed in the note issue of the national banks a currency which possessed the advantages of uniformity in design and also in value since all national banks were

obliged to accept the notes at par. Absolute safety was attained by limiting the amount of notes issued by any bank to the amount of its capital and by requiring a deposit of United States government bonds taken at 90 percent of par (after 1900 at par). Like the issues which it superseded, however, the national banknote lacked one desirable characteristic—elasticity. The amount of the notes in circulation at any time tended to fluctuate with the price of government bonds rather than with the community's varying requirements for currency.

The important place still occupied by note issue as a means of extending bank credit, especially in the case of country banks, and even more the high yield from government bonds induced most of the state banks to enter the national system after the imposition of the 10 percent tax; but within less than twenty years thereafter the organization of banking institutions under state laws again became attractive. Government bonds advanced to high levels and the power to issue notes became less essential with the increasing employment of checks. The requirements of state laws with regard to minimum capital, to loans (in particular to those secured by real estate) and to reserves were less exacting. Moreover in many of the states chartered institutions, known as trust companies, were authorized to undertake in addition to regular banking operations a variety of fiduciary functions, a field of business that was not open to national banks. Within recent years, however, the relative attractiveness of federal and state charters has become more nearly equal, partly through the strengthening of state laws and partly through a widening of the powers of the national banks.

The establishment of the national banking system did not improve the record of bank failures throughout the country. Years of business recession and economic readjustment have invariably been marked by numerous failures. As in preceding decades charters have been granted far too freely, so that by 1920 there were nearly 30,000 banks in operation; during the past ten years nearly 5000 of these banks have failed. Of those which failed the majority were small banks established in communities in which there was little economic diversity and consequently little opportunity for loan diversification. Under these circumstances legislation and government supervision, whether federal or state, cannot give the depositor adequate protection. Experience clearly indicates that the country would be more safely and effectively served by a much smaller number of banks.

In the organization of banking as a system no progress whatever was made between 1836, when the charter of the Second Bank of the United States expired, and 1914, when the Federal Reserve Banks were established. The banks of the country were necessarily in intimate relation with one another through the mass of mutual claims in continuous process of collection. The practise followed by the country banks of keeping reserve and surplus funds on deposit in the banks of the large cities, especially of New York, was highly developed and was recognized in legal reserve requirements. But beginning with the crisis of 1837 the banking system, whenever it was subjected to severe strain, ceased to function. In times of financial stringency, such as the panic of 1857, the bank would generally attempt a drastic loan contraction beyond the limits of payment by the business community and thus inevitably compel a general suspension of payments. Even after the banks learned from this experience the necessity for combined local action and issued clearing house loan certificates to make possible further lending, the suspension of cash payments was equally inevitable. Suspension resulted because no bank could feel sure that other banks would remit promptly in settlement of checks and drafts drawn upon them. The fundamental cause of this uncertainty was the lack in the banking system of any available reserve of cash and lending power. All banks endeavored to employ their entire resources at all times and consequently there were no adequate means for coping with emergencies. This serious defect in the banking system of the country was finally overcome by the establishment of the Federal Reserve system in 1914.

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See: STATE BANKS; BANKS, WILDCAT; BANK DEPOSITS, GUARANTY OF; BRANCH BANKING; NATIONAL BANKS, UNITED STATES; FEDERAL RESERVE SYSTEM; LABOR BANKING. See also general cross references at end of article.

Canada. The distinguishing characteristic of the Canadian banking system is the concentration of commercial banking operations, including the issue of banknotes, in the hands of a small and declining number of large institutions. In 1885 there were 41 banks, and as recently as 1900, 36. A series of bank mergers and a number of failures among the smaller banks further decreased

the number so that at present there are 11. Of these, 4 command 80 percent of the entire banking resources.

The number of branch offices and subagencies maintained by the chartered banks is very large. In 1920, at the peak of inflation, it reached the maximum figure of 4676, which was subsequently reduced by about 20 percent. There are several advantages claimed for this nation wide system of branch banking. Not only does it permit the shifting of funds from sections where there is a surplus of deposits to those where there is a deficit, which helps to develop the less wealthy localities, but it also offers the opportunity for a nation wide diversification of bank portfolios, makes for ease and flexibility in the establishment of new offices and facilitates the training of bankers with a national point of view.

The Canadian banks are incorporated under the terms of the Banking Act, which is subject to decennial revisions. It includes more or less detailed provisions relating to incorporation; capital and surplus requirements; the granting of various types of loans; the issue of banknotes; the legal procedure to be followed in the event of mergers, insolvencies and liquidations; and such matters as audits, examinations, inspections and returns. The act does not, however, require the maintenance of fixed reserves against deposits.

There is no central note issuing institution in Canada. Each incorporated bank is allowed to issue notes up to the amount of its paid up capital, which are asset issues not secured by any specific collateral. Since each bank desires to increase its own circulation to a maximum and to present for redemption such notes of the other banks as come into its possession, the notes remain in circulation only as long as they are actually required in facilitating productive processes; they possess, therefore, a high degree of elasticity. Because of the failure of bank capital to increase in proportion to circulation requirements, an amendment to the Bank Act was adopted in 1908 permitting the banks during the crop moving season (September to February inclusive) to issue additional notes not to exceed 15 percent of their paid up capital and surplus; these notes were made subject to a heavy tax to insure rapid contraction. By a further enactment in 1913 the banks were permitted to issue notes beyond the amount of their paid up capital provided that the excess was secured by Dominion notes (government issues) or gold deposited in the central gold reserve which is administered by a board of four trustees. In order to obtain additional amounts of Dominion notes it was provided in 1914, as a war emergency measure which still remains in force, that the banks might hypothecate with the Treasury Board (a body consisting of the minister of finance, the deputy minister of finance and four members of the Privy Council) certain types of bonds and commercial paper. In this arrangement Canada has a rudimentary type of central bank.

BENJAMIN HAGGOTT BECKHART

See: CREDIT; INVESTMENT BANKING; LAND MORTGAGE CREDIT; AGRICULTURAL CREDIT; SAVINGS BANKS; CREDIT COOPERATION; LOANS, PERSONAL; MERCANTILE CREDIT; BANKNOTES; BANK DEPOSITS; CHECK; CLEARING; NEGOTIABLE INSTRUMENTS; BILL OF EXCHANGE; ACCEPTANCE; FOREIGN EXCHANGE; BANK RESERVES; DISCOUNT RATES; CENTRAL BANKS; MONEY MARKET.

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BANKNOTES are promissory notes of banks payable on demand to bearer, issued in various denominations and in convenient form for circulation from hand to hand. Historically they were preceded in many European trading centers by transfers of funds deposited primarily for safe keeping with money changers, transfer banks and merchants and by orders to make payments from such balances. The first important issues were made by a number of firms of London goldsmiths in the third quarter of the seventeenth century, but it was not until after the founding of the Bank of England in 1694 and the Bank of Scotland in 1695 that banknotes became a significant element in the circulating medium. In other countries the banknote does not appear as a permanent monetary factor until toward the close of the eighteenth century, long after this form of bank credit had become thoroughly rooted in British monetary and banking practise.

The banknote combines the characteristics of a bank liability and a circulating medium constituting an important part of the national currency. As a liability of the issuing bank it is similar to the other outstanding form of bank credit, the bank deposit. It is a demand liability, and under certain conditions may be created by the bank in the course of discounting commercial paper or making advances for short time commercial purposes. The fact, however, that it is intended for hand to hand circulation and that it is less apt to be presented for redemption, a consideration which is particularly applicable to notes of small denomination, makes it a more effective instrumentality for enabling the bank to avail itself of the hitherto unutilized resources in the community. Experience has demonstrated that for this very reason an unregulated issue of notes by private banks is dangerous to the stability and normal development of economic processes. After a protracted period of experimenting with unrestricted note issues regulations were introduced in all countries, partly in order to insure noteholders against loss in the event of bank failure and partly to restrain excessive credit expansion and recurring periods of boom prices and depression. It remains true, however, that in the earlier stages of banking development it was through the issue of notes

rather than through the creation of deposits that commercial banks obtained the needed working capital and established themselves as an indispensable part of the country's economic structure.

As a currency instrument the banknote brought with it novel and intricate monetary problems. It did not as is often supposed introduce an economy in the employment of the precious metals, but merely reduced the amount of the precious metals required to maintain any given level of prices. A higher level was made possible but the total amount of gold employed for monetary purposes throughout the world was not reduced. Gold distribution was modified, however, by differences in the conditions of issue and in the volume of notes relative to other means of payment in the various countries. On the other hand the banknote enriched the circulating medium of the country by adding the valuable quality of elasticity, the capacity for expansion in response to genuine need and for contraction with the passing of such need. Until the second half of the nineteenth century government regulations of note issue disregarded the principle of basing notes on regular bank assets—that is, on obligations arising out of bona fide commercial transactions—and of making specific provisions for their redemption. In England the Bank Charter Act of 1844 represented the victory of the "currency principle," which virtually identifies banknotes with a permanent part of the nation's currency and calls therefore for a limitation of notes unprotected by full bullion cover to that amount which would not under normal conditions be presented for redemption. Since then, however, the regulations of other countries have attempted to retain for the banknote as much elasticity as has been thought consonant with the assurance of its constant redeemability in the lawful money of the country.

The danger of inflation and the risk of a general loss of confidence in the value of the banknote, both of which are intimately connected with its elasticity, produced in the course of a long process of development the tendency to confine the issue of notes in each country to a single institution of imposing magnitude, operating in close association with the government. The view that the providing of a currency is a function that properly should be subject to close government supervision contributed to the establishment of this policy. Only in a few countries, notably Scotland and Canada, where banking has always been conducted by a limited number of large institutions all exercising the power of issue, was it possible to develop an elastic and fairly safe circulating medium without resort to such centralization.

In recent years the most significant reason for the centralization of note issue has been found in the power which the enjoyment of this right as an exclusive privilege puts into the hands of the central banks. The special duties of central banks are to provide reserves of available cash and lending power, which are unlikely to be maintained by each one of a large number of competing banks, and to exercise a restraining influence before credit expansion reaches dangerous proportions. It is through the more or less exclusive right of note issue that central banks are in large degree enabled to acquire the resources needed to perform their functions. By the issue of notes a central bank acquires gold that otherwise would be absorbed permanently in circulation, while at the same time additional issues enable it to meet both seasonal and domestic emergency requirements without depletion of its basic gold reserve.

In the exercise of the power of note issue central banks have been subjected to a greater measure of restriction than would appear to be either necessary or desirable. In particular they are generally required to maintain a high, definite minimum ratio of gold to outstanding notes and in many instances against deposit liabilities as well. Such requirements impose a rigid relationship between the volume of bank credit and stocks of monetary gold, thus rendering the quantity of the purchasing medium unduly dependent upon the current output of gold from the mines. Since gold ratios are commonly accepted as the primary test of currency stability there is danger of unhealthy credit expansion in the event of an increase in gold production, and of inability to furnish an adequate volume of credit if supplies of new gold should decline. Legislation that will enable central banks to adjust gold ratios to evident needs for bank credit would appear to be the most important development in the field of banknote issue that the future may have in store.

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See: BANKING, COMMERCIAL; CENTRAL BANKS; BANK RESERVES; MONEY; CURRENCY; PAPER MONEY; BANKS, WILDCAT; STATE BANKS; NATIONAL BANKS, UNITED STATES; FEDERAL RESERVE SYSTEM; LABOR EXCHANGE BANKS; LAND BANK SCHEMES.

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London 1928) ch. vi; Dunbar, C. F., *The Theory and History of Banking* (5th ed. New York 1929); Kilborne, R. D., *Principles of Money and Banking* (Chicago 1927) ch. vi; Bradford, F. A., *Money* (New York 1928) chs. iii and vii; Conant, C. A., *A History of Modern Banks of Issue* (6th ed. New York 1927); Kisch, C. H., and Elkin, W. A., *Central Banks* (London 1928) chs. i and v; *Foreign Banking Systems*, ed. by H. Parker Willis and B. H. Beckhart (New York 1929); Hepburn, A. B., *History of Coinage and Currency in the United States* (New York 1903) chs. iv–vii and xiv–xvi.

BANKRUPTCY. Bankruptcy as it is known today is essentially a device to collect the assets of a debtor (who usually, though not necessarily, must be insolvent) for the purpose of selling them and distributing the proceeds equitably among creditors and, where the conduct of the debtor permits, to make it possible for him to secure release from the unpaid balance of his obligations. The history of bankruptcy reveals no such broad purpose. The first English enactment relating to bankruptcy was passed in 1542, and all other English acts up to the beginning of the eighteenth century were clearly devised to aid creditors in the collection of debts. From the viewpoint of the debtor the acts were harsh codes granting no benefits. The debtor was not entitled to a discharge nor was he allowed to be adjudged bankrupt voluntarily, i.e. on his own initiative. These early statutes were in keeping with the English policy of treating insolvents as criminals. In 1604 it was made an act of bankruptcy to lie in prison six months or more following arrest for debt, which might befall an honest but insolvent person. While only traders could be adjudged bankrupt, non-traders also could be arrested and imprisoned for debt. Bankruptcy did not relieve the situation, as the trader could be kept in jail until his debts were completely satisfied. Another characteristic of these statutes was that creditors played an insignificant role in the bankruptcy proceedings. Although they instituted the action they were not participants in administration, a condition which was consistent with the quasi-criminal nature of the proceedings.

Early in the eighteenth century there were introduced two radical changes marking the beginning of the transformation of bankruptcy from a quasi-criminal proceeding into a strictly liquidating device. The first was the distinction between fraudulent and honest debtors; while the former were treated as felons, the latter were entitled to a discharge, with the consent of the creditors. The second was to allow creditor participation in administration by permitting creditors to elect one of the officials. The first change implied a recognition that business failures were not necessarily fraudulent but often due entirely to economic or social causes. The second recognized that creditors were vitally interested in liquidations since it was chiefly they who would bear the credit loss. The next vital improvement came near the beginning of the nineteenth century when voluntary bankruptcies were permitted. This again reflected the growing opinion that insolvency was merely a pathological condition not necessarily traceable to punishable conduct. But it was not until 1861 that the last step in the evolution of bankruptcy as a liquidating device was taken. At that date non-traders were for the first time allowed the benefits of bankruptcy. This coincided with the trend of public opinion against imprisonment for debt and preceded its abolition by a few years. Honest debtors could now be discharged from their debts and thus secure release from prison.

This evolution of bankruptcy in England closely paralleled the development of that country as a commercial nation. The ascendency of commercial activity called for a system which would not place on failure a penalty so severe as to tend to discourage enterprise. Although the legislative lag was at times considerable there was devised finally a liquidating and rehabilitating system desirable from the business and social viewpoint. Up to the middle of the century bankruptcy in England had had an unsavory taint. As a result of maladministration estates were ruthlessly exploited by officials. The system was so cumbersome that it was impossible for a debtor to receive an expeditious hearing. In fact the adjudication could and did take place secretly, in absence of the debtor. The terror of merchants at the prospect of bankruptcy was so great that the practise developed of liquidating out of court under a voluntary agreement between the debtor and his creditors. In spite of subsequent reforms this stigma on bankruptcy has persisted in part to the present day.

In the United States the first bankruptcy act was passed in 1800 and repealed in 1803. It followed the English act in that it did not allow voluntary bankruptcy and applied to traders only. Like all subsequent acts it provided for a discharge. The next statute was enacted in 1841 and repealed in 1843. With few exceptions it permitted any person to become a voluntary

bankrupt but allowed creditors to proceed only against traders. Under all the acts in this country, except the act of 1841, creditors participated in administration through an official elected by them. Under the act of 1841, however, all officials were appointed by the court. In 1867 another act was passed but was repealed in 1878. It reflected the English statute of 1861 by not restricting the voluntary or involuntary features to traders. The act of 1898, although amended six times, is still in force, thus having been in operation twice as long as the three earlier acts combined. It reflects English experience in most essential respects: it extends to traders and non-traders, allows voluntary and involuntary bankruptcy and provides for creditor participation and discharge of the debtor.

Each of these federal statutes was enacted soon after a period of business depression. The first followed the business disturbances of 1797, the second the panics of 1837 and 1839, the third the chaotic economic conditions following the Civil War, and the present act the panic of 1893 and the subsequent years of depression. Each one of the three earlier acts was repealed either in a period of prosperity or at a time when general business conditions had improved. The significance of this correlation becomes more evident when the purpose of bankruptcy as a liquidating and rehabilitating device is remembered. From the point of view of both creditors and debtors the need for bankruptcy would be most acute in periods of depression. Since 1898 the emergency character of bankruptcy has disappeared. The convenience and need of the system have apparently made it a permanent institution in this country, although attempts are made almost every year to repeal it in toto.

The federal acts were passed by Congress pursuant to the power granted to it by the constitution to establish "uniform laws on the subject of Bankruptcies throughout the United States" (Article 1, §8). But as long as Congress did not exercise the power state bankruptcy acts were valid. Indeed they remained in effect even after the adoption of the federal acts with regard to such matters as Congress had left untouched. From the administrative angle the need for a federal system becomes evident when the periods during which there was no federal act are studied. Then most states had one of two types of statutes usually called "insolvency" laws. Some allowed group action by creditors and discharge to the debtor and hence were basically bankruptcy statutes. Others merely regulated the debtor's distribution of his assets, sometimes permitting a discharge. But difficulties in administration arose. No state could deal effectively with persons and rarely with property outside its jurisdiction. Confusion resulted and the efficiency of the systems broke down. As the commercial development of the nation gave rise to an increasing number of absentee creditors a system not hampered by state boundaries became necessary. The same troubled condition still exists in European commercial states with the result that the problem of the conflicts of laws in bankruptcy has been very prominent, attempts being made to solve it to some extent by international conventions.

A comparison of the bankruptcy systems of various countries is very difficult. It is far more profitable to speak in terms of basic ideas than of exact statutory prescriptions. Despite similarities in fundamentals even England and the United States show many divergencies. Still greater variation is found when England and the United States are contrasted with continental countries and others deriving their law through them. Speaking very generally, one may say that the Germanic countries more nearly approach the rather liberal American and English practise, whereas the Latin countries are more stringent, showing greater survivals of the old attitude toward bankruptcy.

The two basic principles in the bankruptcy systems of England and the United States—creditor participation in the conduct of the proceedings and in the administration of the estate, and some form of discharge—are present in most systems. In England and the United States a discharge may be granted by the court. In other countries the debtor is left to secure it through a legally controlled bargaining process between himself and the creditors. Thus in France a discharge is not given by the court but a debtor may under a certain procedure turn over to his creditors his assets in payment of the claims. In Germany, too, there is no provision for a discharge, which is the subject of compromise between the debtor and creditors under certain statutory regulations. As far as creditor participation is concerned, as regards both the conduct of the proceedings and the division of the assets, minor differences of detail are, not unnaturally, numerous. Usually in involuntary proceedings a certain number of creditors with claims of a minimum amount must file the petition. The equality of distribu-

tion is preserved by the voidance of fraudulent transfers preceding bankruptcy but on the other hand it is affected by the allowance of preferred claims such as those of wage earners or secured creditors. Moreover, bankruptcy does not reach absolutely all the assets of a debtor, since various exemptions are often allowed.

Differences become even more pronounced upon most other questions of law and administration. The definition of the primary act of bankruptcy is not everywhere the same. Under the American act one cannot be adjudged a bankrupt unless he is actually insolvent, in other words unless the aggregate of his property is not, at a fair evaluation, sufficient in amount to pay his debts. Thus one may be insolvent in the sense of not being able to pay one's debts as they mature and still not be subject to bankruptcy. A person, however, may be adjudged bankrupt on his own petition even if he is not insolvent; also creditors may have him adjudged a bankrupt, though solvent in the bankruptcy sense, if he has admitted in writing his inability to pay his debts and his willingness to be so adjudged, or if he has made a general assignment for the benefit of creditors. In England (when an act of bankruptcy requires insolvency) and in European countries generally, the test of insolvency is inability to meet maturing obligations. The statutes as a rule make a few exceptions with regard to persons who are entitled to the benefits of either voluntary or involuntary bankruptcy. For instance under American law municipal, railroad, insurance and banking corporations are not entitled to either form of bankruptcy, and such persons as wage earners and farmers are not subject to involuntary proceedings. Most countries provide for voluntary and involuntary proceedings. In Canada, however, there is no voluntary bankruptcy. Instead, an authorized assignment by a debtor to his creditor is recognized. This is devised in large part to encourage liquidations out of court through organizations of creditors. It is reported to work well and has gained considerable support in the United States. Many countries have not taken the step of extending the benefits of bankruptcy to non-traders. This is the case in France and Latin countries generally, including those of South America.

It is particularly the mechanics of administration that vary considerably in each country. Usually the administration is supervised by the courts, which appoint all major officers except the representatives of the creditors, normally called trustees. Perhaps the greatest divergence exists in England, where in 1883 the administrative features of bankruptcy were divorced from the judicial by allocating the former to the Board of Trade, a commerce committee of the Privy Council. Another innovation established in England is the special treatment given no-asset or small asset cases (less than £300). The theory of creditor control is apt to break down in such cases, since creditors have little or no incentive to become active. Accordingly the official receiver (an officer of the Board of Trade, usually salaried) takes the place of trustee for creditors; expenses of administration are lowered and liquidation accelerated.

The differences in the bankruptcy regulations of the various countries are determined largely by the prevailing attitude toward business failures. England, Canada, France, Germany and most South American countries have made an attempt to apply the principle of preventive medicine to the field of sick business. Although they have not carried the principle so far as to supervise businesses in danger of insolvency they have taken steps designed to prevent some of the more flagrant abuses and to give some assurance against repetitions of disaster. This is in marked contrast to the American tendency to improve the machinery for salvaging the wreck rather than to prevent it.

In European countries the more stringent attitude toward bankruptcy has manifested itself in the more vigorous controls set up over bankrupts. The penal provisions are very severe and there is strict supervision over the granting of discharges and releases to debtors. Even in England, where the practise more closely resembles the American, it is criminal to have precipitated a bankruptcy by gambling or other hazardous speculations, to have failed to keep proper books of account for two years preceding the bankruptcy or to have been guilty of various practises strictly fraudulent. The law is still harsher in Latin countries, where various types of bankruptcy are recognized with different legal consequences for each. These types may be described as fortuitous or simple bankruptcy, culpable bankruptcy and fraudulent bankruptcy. Debtors are often subject to temporary arrest under suspicious circumstances. In France and other Latin and South American countries there are criminal penalties not only for failure to keep books and gambling but also for incurring excessive personal and household expenses.

Supplementary to the criminal penalties is the

more effective control of discharges. In England they may be refused for violation of any of the penal provisions; moreover, sufficient flexibility is allowed to enable the courts to apply discretion in suspending discharges or in granting them conditionally. In France the creditors may excuse the culpability of the bankrupt except in cases of fraudulent practises, release him from the debts and reinstall him in the management of his business. In South American countries the conditions of discharge are generally difficult, and there is also another procedure, known as rehabilitation, which is distinct from discharge. A discharge merely releases the bankrupt from his debts; rehabilitation is a procedure through which he must go before being restored as an active member of the business community. It is somewhat comparable to the suspended discharge in England.

In the United States the contrast is great. In the first place a discharge must be either refused or granted. The reasons for refusing a discharge are with a few exceptions based upon fraudulent conduct. One such exception applies to a debtor who has received a discharge in bankruptcy within six years; another applies in case the debtor has failed to keep books of account or records from which his financial condition and business transactions might be ascertained, unless the court deemed such failure to have been justified in the light of all the circumstances involved. Apart from the fraudulent practises none of the other bars to a discharge operative in other countries is available in the United States.

In this country the leniency toward debtors is apparent. This leniency is in part due to the prevalent economic and social theory of freedom of opportunity. Many have felt that a nation with such large national resources could afford to let business men experiment even though credit losses increased as a consequence. But there is a growing feeling that while there is room for legitimate experimentation, illegitimate experimentation should be curbed by effective controls. To ask business men to acquire business habits by keeping books is merely to put them and those with whom they deal in a position to make accurate judgments respecting the exact condition of their business at any time. To penalize speculation carried on at the hazard of the business is to aid the business. To quarantine those who have failed because of their own incompetence and to allow those who have failed because of misfortune to make another attempt has been thought to draw the proper distinction between legitimate and illegitimate experimentation. Until a scientific study of the causes of failure is made there will be no factual basis for legislation along the lines of that of other countries.

In this country the equity receivership has been a favorite resort in cases of temporary financial embarrassment. Its use is possible, since normally the legal state of bankruptcy is not reached merely by inability to meet maturing obligations. It is thus a common method for effecting either liquidation or reorganization. Very frequently the receivership is desirable in order to accomplish a sale of the business as a going concern. The bankruptcy court may also appoint a receiver to manage the business until a sale or reorganization is effected. Thus the two devices may be used for the same purposes. Bankruptcy is, however, used primarily as a device to effect immediate liquidation, and a case which started as an equity receivership may be brought into bankruptcy if the receiver was appointed while the debtor was insolvent in the bankruptcy sense.

While these two devices handle the bulk of reorganizations and liquidations, in the last ten years there has been a decided increase in nonjudicial liquidations and reorganizations. This is accomplished through sixty-eight adjustment bureaus organized by the National Association of Credit Men. These bureaus collect and sell the assets and distribute the proceeds, while the debtor is usually released from further payment to his creditors. The claim is made that this liquidation is faster, with lower expenses and higher dividends than in bankruptcy, an assertion which has been challenged by some on the ground that bankruptcy takes all cases, while the group handled by the bureaus is highly selective. Reorganization through creditors' committees was employed quite extensively following the inventory deflation in 1920–21. It has been estimated that three quarters of the business embarrassments of that period were dealt with in this manner. Although creditors' committees had assumed similar roles in preceding years the practise had never before become so universal. Such committees lack the power and authority of courts but their high claim to efficiency and economy in reorganizing businesses is thought to outweigh the advantages gained in legal proceedings. Of course the extreme degree of cooperation which they require makes their widespread use impossible.

Abuse of bankruptcy proceedings is a popular

theme. Frequent investigations have revealed criminal practises among business men, lawyers, judges and other officials. These practises normally consist of secretion of assets by business men and diversion of funds by officials. Any system, however, is susceptible of such abuse and the present act seems fairly well devised to prevent or punish such conduct. In this connection the activity of organized credit men has been commendable; they have cooperated in securing prosecutions of hundreds of persons. One suggested reform is to make stricter the requirement that business men keep books and records, because their failure to do so undoubtedly tends to encourage fraudulent practises. There is also a considerable body of opinion which traces many abuses by debtors to the ease with which the debtor gets credit, and is thus enabled to gamble on success and to escape his obligations by going into bankruptcy in case of failure. The fact that a discharge will be refused if one has been granted within six years does not seem a sufficient deterrent. Another evil is the exploitation of debtors by those who solicit claims and force bankruptcy on individuals so that they may be appointed to act in administration. A vigilant administration can go far toward preventing this. There is also the not uncommon practise of making involuntary proceedings practically voluntary. The lawyer for the debtor may secure a friendly lawyer to represent creditors; the latter obtains assignments from creditors, initiates the action and secures the appointment of a receiver whom he represents. He may also obtain proxies from other creditors, elect a trustee—the creditors' representative—and act as his attorney. Thus the debtor and his lawyer are virtually in control and the administration becomes hostile to the creditors. Some courts have effectively checked this practise. Another evil goes back to the bankruptcy act itself. Congress has devised a legal system with too great a burden of officialdom; for example, under the act three appraisers are necessary, while one appraisal house could do the work more efficiently than the three non-experts frequently appointed. Liquidation is essentially a business problem and as such needs a business technique. A few judges have taken significant steps toward applying this technique to the problem by appointing as receivers banks and trust companies or representatives of trade groups. The former agencies have been intensively tried out in one district and although the practise is still merely an experiment it promises to be successful. In the vast number of districts, however, bankruptcy administration remains essentially legalistic.

Since no thorough study of the subject has been made little is known of the economic and social incidences of bankruptcy. In 1900 there were closed 12,339 cases with liabilities of $177,090,513. About half of the persons involved were farmers and wage earners, and over a fourth merchants; the average dividend payment was about 8 percent. In 1910 there were closed 14,829 cases with liabilities of $225,194,507. Almost a fourth of the debtors were farmers and wage earners and over a third merchants; the average dividend was about 9 percent. In 1920 there were closed 15,622 cases, somewhat less than half of which were those of farmers and wage earners and about a fourth of which were merchants; there were claims of $201,626,264.37 and dividends of about 9 percent. In 1928 53,592 cases were closed, a little more than half of which were those of farmers and wage earners and a little more than one fourth of which were those of merchants; the liabilities totaled $830,788,611 and dividends were about 8 percent.

It is commonly stated that bankruptcy statistics constitute a business barometer. While this may be true in general, it must be remembered that bankruptcy reflects more than merely business failures. In a number of districts preliminary surveys show that a large percentage of bankrupts have been wage earners who have availed themselves of the bankruptcy laws to escape the toils of loan sharks. The correlation between unemployment and bankruptcy of wage earners is not known. Many bankrupts are individuals not in business who seek to avoid payment of judgments, many of which arise out of automobile accidents. No doubt many other irrelevant cases can be eliminated. Even in respect to business failures no scientific correlation can be made until more is known respecting causes of failure. Furthermore, since bankruptcy is merely one of several liquidation or reorganization devices its statistics alone would not accurately represent the true extent of business depression. Concerns with relatively large fixed investments are generally handled in the equity receivership, while the type of business administered in bankruptcy is usually one whose capital is in fairly liquid form. There are of course exceptions, for many state courts administer in receivership enterprises of the latter type and occasionally a business of the former type is re-

organized in bankruptcy. Yet the distinction is of some significance in evaluating bankruptcy statistics as a business barometer since it indicates from the economic point of view the type of business with which bankruptcy deals.

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See: DEBT, IMPRISONMENT FOR; RECEIVERSHIP; CORPORATION FINANCE; ARBITRATION, COMMERCIAL; COURTS, COMMERCIAL; FRAUD; MERCANTILE CREDIT; TRADE ASSOCIATIONS.

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BANKS, WILDCAT. In the course of the development of banking institutions in the United States prior to the Civil War there were three outstanding weaknesses: insufficient capital, fraudulent capitalization and lack of adequate systems for the redemption of notes. The term "wildcat banking" refers specifically to banks which put out irredeemable currency; it had its origin in the operations of irresponsible local banks which took advantage of lax state laws to float excessive note issues in the rural Middle West between 1837 and 1860. As some of these banks were located in remote districts where wildcats were said to be more numerous than human beings, they were derisively called wildcat banks.

From the beginning of the century many banks in the older eastern states put out irredeemable currency, for regulation in early charters was exceedingly loose. In the earliest charters there was no express provision made for the redemption of notes nor was there any penalty for non-redemption. The limitation of note issues to a certain proportion of capital, which was often represented by stock notes of shareholders rather than specie funds, was regarded as of little consequence. Frequently the issue of notes was considered a principal object of a bank's existence, and during the earlier part of the century many considered it improper and injurious to call upon a bank to pay its bills in specie. Objection was made to the cost of guaranteeing redemption because of the expense of transportation. Bills were rated at varying degrees of discount and there developed a class of money brokers whose business it was to exchange currencies at profitable commissions.

Not only was the volume of circulation related to the amount of capital but it was also, in some of the eastern states, related to indebtedness. Fictitious deposits were created in order to increase indebtedness; thus one type of indebtedness, notes, was built up upon the basis of another, deposits. Other devices were employed

by banks to increase circulation and avoid redemption. A fund would be placed in a distant bank to redeem notes and after it became generally known that such notes were at par in that section the bank would issue a new emission in a different shade of ink, at the same time giving secret orders to the correspondent bank not to pay the notes thus signed. In some states banks made their notes payable at a place other than that in which the bank was located. Notes were loaned on agreement that they would not be presented for redemption within a certain time. A most common method was that of putting notes in circulation at distant points. Its extreme form is to be found in the "Saddle-bag Bank" described by Niles in 1820 as a bank where notes were carried about the country in saddle bags to be exchanged with landowners for their notes. Such were some of the evil practises developed in the East and South when banking was comparatively new.

In New England the banks of Boston endeavored to remedy the confusion through what was known as the Suffolk system, forcing the country banks to keep on deposit in Boston sufficient funds to redeem notes. The Second United States Bank (1816–36) also improved the situation by a sound policy of redemption of note issues. When the charter of this bank expired in 1836, however, large numbers of local banks were established, particularly in the West of that day—Michigan, Ohio and Indiana. Here, for ten years or more, wildcat banking flourished.

The "free banking" system inaugurated by New York in 1838 and quickly copied by states to the west afforded easy opportunity for the establishment of new banks. It substituted for the granting of charters by special acts of the legislature, which frequently made of banks the creatures of political factions, the naive democratic device of opening the banking business to all who complied with certain nominal requirements. In order to end partisan corruption New York passed a law authorizing the state comptroller to issue circulating notes to any association organizing itself as a bank and depositing bonds of the United States or of any state or bonds secured by real estate of a certain specified grade. Numerous banks were quickly organized under this provision; but within five years twenty-nine banks failed and the securities deposited for outstanding notes yielded only 74 cents on the dollar. New York quickly changed its law and made such loose banking impossible within its borders; but neighboring states to the west which adopted the free banking system were slower in checking the evil. In Michigan little consideration was given to the quality of the securities. Although the law demanded that a certain percentage of the capital should be paid in specie before the bank opened for business, commissioners who examined banks in 1838 found that a single lot of specie had been passed from bank to bank and that some of the banks had practically no specie at all. According to a contemporary historian, "the Jackson County Bank placed before the commissioners a goodly number of ponderous and well-filled boxes, but on opening them and examining their content the top was found covered with silver dollars, but below was nothing but nails and glass" (Felch, p. 122). In Michigan 36 out of 40 banks failed within two years and in Indiana 51 out of 94 free banks failed before the panic of 1857. Illinois passed a free banking law in 1851. Of 60 banks organized within a few years after its adoption 14 were closed in less than ten years; but owing to stricter regulation than in some states the notes of all these banks with the exception of one were redeemed at par. Notwithstanding this outcome the bank commissioners in 1861 reported that the business of banking had "gone in many cases into the hands of irresponsible and non-resident persons, who having no object of interest except to get their notes into circulation and leave the billholders to take care of them, have located their banks in remote and inaccessible places, where no legitimate business can be done or is expected to be done, and thus the country has become flooded with what is known as wildcat currency" (Garnett, p. 49–50).

The chief sufferers from the issues of these frontier banks were the noteholders. Even when there was ultimate redemption the expense of transmittal not only depreciated the value of the notes of wildcat banks but in addition threw suspicion upon the currency of all banks. It was not until the national banking system was established in 1863 that domestic trade in the Middle West was relieved of this embarrassment.

DAVIS R. DEWEY

See: BANKNOTES; BANKING, COMMERCIAL; STATE BANKS.

Consult: Dewey, D. R., "State Banking Before the Civil War" in U. S. Senate, 61st Cong., 2nd Sess., *Senate Documents*, vol. xxxiv, no. 581 (1910); White, H., *Money and Banking* (5th ed. New York 1914) chs. vi–xii; Knox, J. J., *A History of Banking in the United States* (New York 1900); McMaster, J. B., "Wildcat Banking in its Teens" in *Atlantic Monthly*, vol. lxxii

(1893) 331–43; Felch, A., "Early Banks and Banking in Michigan" in Michigan Pioneer and Historical Society, *Collections*, vol. ii (1877–78) 111–24; Root, L. C., "Early Banks of Issue in Wisconsin" in *Sound Currency*, vol. v (1898) 121–44; Garnett, C. H., *State Banks of Issue in Illinois* (Urbana, Ill. 1898).

BAPTISM. *See* BIRTH CUSTOMS.

BAR. *See* LEGAL PROFESSION.

BAR, KARL LUDWIG VON (1836–1913), German jurist. He taught at a number of German universities and at the time of his death was professor of law at the University of Göttingen. Von Bar made valuable contributions to legal knowledge, covering a very broad field. Although he was particularly interested in criminal law and its reform he will be remembered chiefly for his work in private international law. His treatise, *Das internationale Privat- und Strafrecht* (Hanover 1862), was issued in a second edition as *Theorie und Praxis des internationalen Privatrechts* (2 vols., Hanover 1889); both editions were translated into English by G. R. Gillespie (Edinburgh 1883 and 1892).

During the thirty years preceding his death von Bar was the leader of German thought in private international law. Following Savigny, who first laid down the theory that the proper law to apply to a case is ascertained by a universal principle of law, von Bar maintained that "the state cannot assert the competency of its own legal system in absolute independence of other states." From this universally accepted doctrine an individual state might deviate; but "capricious deviations of this kind generally bring greater disadvantages in their train." He added that such deviations "are not truly law any more than the deviations from the law of nations in its technical sense, i.e. public international law, which a state may allow itself to practise, are law." As the principal representative of one of the three theories of private international law current in our own times, von Bar is important in the history of legal thought. His doctrine has few adherents, however, and his influence on the law of the world is not likely to be a lasting one.

JOSEPH H. BEALE

Consult: Bar, Axelena von, *Verzeichnis der Schriften von Ludwig v. Bar* (Göttingen 1916).

BARBERET, JEAN-JOSEPH (*c.* 1838–1920), French labor leader and journalist. His public life began with strenuous opposition to the Empire and collaboration in Rochefort's newspaper, the *Marseillaise*. He took part in the insurrection of October 31, 1870, which occurred during the siege of Paris, and was later associated with the beginnings of the movement for the Commune. Soon, however, he reverted to more moderate views and after 1873 was the outstanding figure in the reestablishment of the trade unions, which had been destroyed by the events of 1870–71. His program for them stressed technical education, the creation of employment bureaus, the establishment of cooperative enterprises and mutual aid. He advised the formation of joint councils of employers and employees as a means of preventing strikes, which he felt were dangerous for both the working class and the state. The first two labor congresses (Paris 1876 and Lyons 1878) accepted this program, but with the third congress (Marseilles 1879) leadership in the movement passed from the reformers to the revolutionaries and from Barberet to Jules Guesde. He was then appointed by Waldeck-Rousseau head of the bureau of occupational associations regulating both employers' and employees' organizations. He collaborated in preparing the law of March 21, 1884, which legalized the formation of trade unions and of their local and national federations. He was later director of the government bureau for workingmen's insurance and devoted himself energetically to its development. His writings include several historical accounts of the conditions of French industry. The most important of his works is *Le travail en France: Les monographies professionelles* (7 vols., Paris 1886–90), which is a collection of well documented studies of occupational associations in France.

ET. MARTIN ST.-LÉON

Consult: Weill, Georges, *Histoire du mouvement social en France, 1852–1902* (3rd ed. Paris 1924).

BARBON, NICHOLAS (*c.* 1640–98), English writer on economic subjects. He graduated as a doctor of medicine at Utrecht in 1664 and was made an honorary member of the London College of Physicians. Later he pursued a variety of occupations. He took an active part in the rebuilding of London after the Great Fire of 1666, served as one of the founders of the first London Insurance Office in 1681, as a member of Parliament in 1690 and 1695 and as a cofounder in 1695 with John Asgill of the Exeter Exchange Land Bank.

Barbon's economic works, written during the

last fourteen years of his life, included: *A Letter to a Gentleman in the Country Giving an Account of Two Insurance Offices* (London 1684); *Apology for the Builder; or a Discourse Showing the Cause and Effects of the Increase of Building* (published anonymously in 1685 and reprinted in *A Select Collection of Scarce and Valuable Economical Tracts*, ed. by J. R. McCulloch, London 1859). His fame as an economist, however, rests on two remarkable little treatises, his *Discourse of Trade* (London 1690; republished in *A Reprint of Economic Tracts*, ed. by J. H. Hollander, Baltimore 1905) and his *Discourse Concerning Coining the New Money Lighter* (London 1696). The first of these has been hailed as the basis for Adam Smith's *Wealth of Nations* because of its emphasis on the use value of goods and its advocacy of free trade founded on a refutation of the mercantilist balance of trade theory. Barbon reenforces the discussion of value in his second pamphlet, in which he distinguishes clearly between what he calls value and "vertue" and dismisses the idea of intrinsic value. He also applies this theory in defense of the view that because of its use in circulation the value of money is greater than would be warranted by its commodity content. Accordingly he takes the side of Lowndes against Locke in the controversy regarding the higher value of silver crowns which arose in connection with the recoinage of 1696–99.

R. D. RICHARDS

Consult: Bauer, Stephan, "Nicholas Barbon" in *Jahrbücher für Nationalökonomie und Statistik*, n. s., vol. xxi (1890) 561–90; Pfeiffer, E., "Nicholas Barbon" in *Revue d'histoire des doctrines économiques et sociales*, vol. iv (1911) 63–80; Monroe, A. E., *Monetary Theory before Adam Smith* (Cambridge, Mass. 1923); Richards, R. D., *Early History of Banking in England* (London 1929) ch. iv; Scott, W. R., *The Constitution and Finance of English, Scottish and Irish Joint Stock Companies*, 3 vols. (Cambridge, Eng. 1910–12) vol. iii.

BARBOSA, RUY (1849–1923), Brazilian publicist, orator, statesman and jurist. He was a frequent contributor to *O journal do commercio*, the powerful Rio de Janeiro daily, later became managing editor of *O diario do Bahia* and played a prominent part in the agitation for the abolition of slavery. He was an avowed opponent of the imperial regime and upon the overthrow of Dom Pedro II (1889) became a member of the government of Deodoro da Fonseca. In this capacity he rendered most conspicuous service in behalf of constitutionalism in Brazil. The constitution of Brazil as adopted was primarily his work and he was also very influential in establishing the new constitutional regime. His argument in the dismissal case of 1892, in which the national judiciary of Brazil decided that the acts of the national executive as well as those of the national legislature were subject to review by the national judiciary, has become a classic. He championed the independence of municipalities and was a strong opponent of the military in politics. For his opposition to the pretorian rule of the government he was exiled in 1893, but he returned two years later and rose rapidly to national prominence. In 1907 he was elected president of the Senate; he was a candidate for president in the elections of 1910, 1914 and 1919.

As head of the Brazilian delegation to the second Hague conference he championed the rights of small nations and the creation of an international court of arbitration. He maintained, however, that compulsory arbitration should in no way interfere with the internal affairs of a nation or deprive the parties of the right to choose the arbitral body. Believing that any debtor nation refusing to abide by arbitral award should be compelled by force of arms to pay its debts, he supported the Porter resolution. Barbosa was a staunch champion of the Allied cause during the World War. Later he was elected to membership in the Permanent Court of International Justice, and remained a member of this court to the end of his life.

N. ANDREW N. CLEVEN

Important works: *Os actos inconstituciones do congresso e do executivo ante a justiça federal* (Rio de Janeiro 1893); *O art. 6 da Constituticâo e a intervenção de 1920 na Bahia*, 2 vols. (Rio de Janeiro 1920); *Queda do imperio: "Diario de noticias,"* 2 vols. (Rio de Janeiro 1921).

Consult: Lapradelle, A. de, "Le rôle de Ruy Barbosa au Brésil et dans le monde" in *La vie des peuples*, vol. ix (1923) 1045–65; James, Herman G., *The Constitutional System of Brazil*, Carnegie Institution, Publication no. 334 (Washington 1923); Martin, Percy A., *Latin America and the War* (Baltimore 1925) ch. i.

BARCLAY, WILLIAM (1546–1608), political theorist. He was born in Scotland but in 1573 he emigrated to France, where he studied law and became professor of civil law, first at the University of Pont-à-Mousson and later at the University of Angers. Throughout his life he remained a devout Catholic.

Barclay's chief works, *De regno et regali potestate* (Paris 1600) and *De potestate papae* (London? 1609; English translation London 1611),

although unoriginal, are significant as summarizing and systematizing the arguments in behalf of the divine right of kings, around which French political controversy was already beginning to center. They represent the point of view of the Gallican monarchic *Politiques* and thus are equally hostile to the pro-papal doctrine of popular sovereignty set forth by Bellarmine and other Jesuits and to the antimonarchical doctrine of the Calvinists. Barclay presents three basic theses. Authority to command is derived from God alone, who granted it to the rulers of the chosen people, intending it to remain perpetually in kings. The universal obligation to obey without qualification this unlimited authority is the sole foundation of social tranquillity; since men will refuse to yield absolute obedience to any authority created by themselves, rebellion must result in anarchy and is practically never justified. Finally, the spiritual and temporal spheres are entirely distinct and the church may not limit the monarchy even through the exercise of its spiritual power.

C. H. DRIVER

Consult: Smith, D. B., in *Scottish Historical Review*, vol. xi (1914) 136–63; Dubois, Ernest, in Académie de Stanislas, *Mémoires*, 4th ser., vol. iv (1872) 59–176; Allen, J. W., *A History of Political Thought in the Sixteenth Century* (London 1928) p. 386–93; Figgis, J. N., *The Divine Right of Kings* (2nd ed. Cambridge, Eng. 1914) p. 130–31.

BARDI, a Florentine merchant family whose name was given to a mercantile and financial firm, partnership in which was not restricted to the members of the family. At the beginning of the fourteenth century the Bardi company numbered fifteen partners, five of whom lived in England, six in Flanders and four in France; ten of the partners were members of the Bardi family.

The prosperity of the Bardi dates from 1294 when they began to deal with the king of Naples, count of Provence. They lent him money for wars and supplied his armaments, obtaining in return permission to export the grain of Provence and of Apulia as well as fruits and dairy products of the latter region. Later the Bardi also sold French textiles and the scarlet cloth of Ypres.

From 1303 they were, along with the Cerchi and the Chiarenti, one of the three Guelph firms whom Benedict XI charged with the care of apostolic finances. They remitted to the Curia the sums which the papal nuncios collected in England, France and elsewhere. Through them the papal treasurer at Avignon placed credits at the disposal of the papal magistrate in Perugia and remitted to Cyprus and Armenia funds for the defense of these states. They loaned money to the nephews of Pope John XXII, to cardinals, to French and Italian bishops and to monasteries.

Their business was particularly active in England where they were the first of the Italian firms to establish branches and the first to pay with the proceeds of Peter's pence for the wool required in the Tuscan workshops. By 1345 the crown owed them 900,000 florins. The Bardi also remitted funds for private accounts to and from England. Thus in 1311 they paid the Florentine representative of two English students at Bologna ninety-seven and a half florins which had been deposited with their English agents. In 1312 the archdeacon of Exeter received from them 300 florins in the course of a similar transaction.

About 1310 they had succeeded in surpassing their two great rivals, the Peruzzi and the Acciaiuoli. From the preserved fragments of their books it is possible to estimate that their joint stock capital amounted in 1320 to 149,796 Parisian livres and deposits in 1312, exclusive of those in branches, to 25,751 livres. On these deposits they paid interest, disguised as *donum*, from 6 to 7 percent and a share in profits which in 1312–13 was 6 percent. The total profits for the period 1310–30 averaged about 20 percent, but they declined from 33⅓ percent in 1316–18 to 13 percent after 1322 and to about 10 percent by 1330.

On account of their prominent international position and large holdings of real property the Bardi resisted political and financial crises in Florence longer than any of the other financial houses. Nevertheless they were affected by the failure of the Scali in 1326 and by the difficulties with Venice in 1329, where they suffered seizures and reprisals in spite of the intervention of the king of France. But above all they were victimized by the bad faith of their royal debtors. Joanna of Naples repudiated a half of the debt contracted by Robert. The Bardi stores in England were sacked and burned by a mob incensed at their "usury," and the bankruptcy of Edward III led to the collapse (1345–46) of both the Bardi and the Peruzzi. The English branch of the Bardi survived the crisis, however, and reestablished its position as banker and merchant. Walter Bardi, the head of the branch after 1362, was for many years the

king's moneyer. A final settlement of the debts of the crown took place under Richard II in 1391.

HENRI HAUSER

Consult: Peruzzi, S. L., *Storia del commercio e dei banchieri di Firenze in tutto il mondo conosciuto dal 1200 al 1343* (Florence 1868); Sapori, Armando, *La crisi delle compagnie mercantili dei Bardi e dei Peruzzi*, Biblioteca Storica Toscana, vol. iii (Florence 1926), and "Le compagnie dei Bardi e dei Peruzzi in Inghilterra nei secoli XIII e XIV" in *Archivio storico italiano*, vol. lxxx (Florence 1926) 5–63; Meltzing, O., *Das Bankhaus der Medici und seine Vorläufer*, Volkswirtschaftliche und wirtschaftsgeschichtliche Abhandlungen, n. s., no. 6 (Jena 1906) p. 55–72; Yver, G., *Le commerce et les marchands dans l'Italie méridionale au XIIIe et au XIVe siècles* (Paris 1903); Schneider, Georg, *Die finanziellen Beziehungen der florentinischen Bankiers zur Kirche von 1285 bis 1304* (Leipsic 1899); Russell, Ephraim, "The Societies of the Bardi and the Peruzzi in their Dealings with Edward III, 1327–1345" in *Finance and Trade under Edward III*, ed. by G. Unwin (Manchester 1918) p. 93–135; Bearwood, Alice, "Alien Merchants and the English Crown in the Later Fourteenth Century" in *Economic History Review*, vol. ii (1929–30) 229–60.

BARÈRE DE VIEUZAC, BERTRAND (1755–1841), leader and orator of the French Revolution. On the eve of the revolution Barère was well established at the bar in Toulouse. His *mariage de convenance* into the lesser nobility in 1785 had failed to give him a footing in noble society and had probably accelerated a natural tendency to accept the revolutionary ideology of his age. Elected to the Estates General as a deputy of the third estate of Bigorre, Barère became one of the most useful members of the Constituent Assembly (1789–91) and published a faithful account of its debates in the *Point du jour*, which he had founded in 1789. To his native characteristics of moderation and compromise this apprenticeship added the pliancy of the professional politician, which at a later date frequently bordered on chicanery and dishonesty. But both in the Constituent Assembly and later in the National Convention his tortuous, shifting tactics were redeemed by his uncompromising loyalty to the basic revolutionary concepts and by his ardent nationalism. His career in the National Convention falls into three periods: the first, from September, 1792, to July, 1793, during which he attempted unsuccessfully to mediate between the Jacobins, with whom he voted on the death of the king and other questions, and the Girondins, with whom he strove to preserve the integrity of the convention; the second, from July, 1793, to July, 1794, during which he was the spokesman of the governmental policy and the habitual military reporter of the Committee of Public Safety; the third, from the overthrow of Robespierre, whose downfall encompassed his own, to April, 1795, when an order for his immediate deportation was signed. No account of the social economic policy of the Terror government can be written without constant reference to Barère's activities. Among his most significant reports are those dealing with the Law of the Maximum, poor relief, extirpation of begging, the levy in mass, the teaching of the French language and the establishment of the École de Mars. His career after the Terror was marked by great vicissitudes of fortune.

LEO GERSHOY

Consult: *Mémoires de B. Barère*, ed. by Hippolyte Carnot and David d'Angers, 4 vols. (Paris 1842–44), tr. by De V. Payen-Payne (London 1896), posthumous and inaccurate, but a mine of information; Kuscinski, Auguste, in *Dictionnaire des Conventionnels* (Paris 1916–19) p. 23–29; Gershoy, Leo, "Barère, Champion of Nationalism in the French Revolution" in *Political Science Quarterly*, vol. xlii (1927) 419–30, and "Barère, Anacreon of the Guillotine" in *South Atlantic Quarterly*, vol. xxvi (1927) 266–79.

BARGAINING POWER does not emerge as a distinct subject for economic theory until legal support is furnished for concerted economic action. The two principal methods of concerted action are the corporate and the regulative. In the corporate form, individuals authorize a board of directors and a manager to make the bargains which legally bind the shareholders. Individual bargaining is thus eliminated. In the regulative method, however, the participants, whether individuals or corporations, yield to the rules, laws or regulations which limit their individual or corporate bargaining power. Individual bargaining continues, but is limited.

The premises of the individualistic economists did not include that of concerted bargaining power. Adam Smith, in basing his economic theory on the legal rights of the individual to liberty, equality and property, strongly opposed both forms of concerted action. As against them he set up an impersonal, quasi-mechanical competition which controlled individuals in their bargaining. The "corporations" which Smith so vigorously criticized were of the regulative kind, such as the guilds which imposed limits upon the individual bargaining of their members. He opposed even more strenuously the tariffs, bounties and trade privileges of mercantilism, representing other instances of the

regulative form of concerted economic action. Smith's individualistic and mechanistic presupposition dominated the classical and psychological economists and was carried to the extreme by the anarchists. On the other hand it was abolished by the communistic economists whose premises eliminated bargaining, both individual and concerted, by substituting its antithesis, rationing. As long as these doctrines prevailed there could be no scientific theory of that intermediate process between the individual and society which is the concerted bargaining power of individuals. All such action was denounced as monopolistic by the individualists and anarchists or as merely palliative by the communists.

Meanwhile in the decade 1850–60, unforeseen by Smith, Marx or Proudhon and unnoticed by later economists and courts, a new legal right in addition to the rights of liberty, equality and property was recognized by the legislatures both in England and America—the universal right of association. Corporations were not prohibited, as Adam Smith and the anti-monopolists demanded, but were universalized by general corporation laws rather than granted, as formerly, by special acts of legislatures. During the same period labor organizations, revivals of the guilds, abandoned their ideas of cooperative production or socialism and adopted the ideas of concerted bargaining.

The right to incorporate was granted to all who chose to do so, not because this device would increase their bargaining power, but because it would increase their productive power by enabling them to attract capital with the promise of limited liability. Likewise unions were suffered to exist, and not until twenty or thirty years later was it found that they had thereby acquired new bargaining power. By this time it was evident that the corporations also, by concerted action, had acquired a similar increase in bargaining power. As a result the end of the nineteenth century in America witnessed the enactment of antitrust laws applied to both corporations and unions.

After a period of vigorous prosecutions under these laws the courts finally discovered that in the effort drastically to abolish these devices for concerted action they were striking at the very base of property and liberty, the right to withhold from others what they need but do not own. This peculiar right of property had itself not been discovered by the Supreme Court until several years after the Slaughter House cases (16 Wall 36, 1872), the case of Munn *v.* Illinois (94 U. S. 113, 1876) and the so-called Granger cases (94 U. S. 155, 164, 179 and 180, in 1876). In the latter cases the states had reduced the prices which railway corporations were permitted to charge for transportation and had required the companies to furnish their services at these lower rates. The court at first held that this reduction of prices was not "taking property without due process of law" because their interpretation of property at that time was corporeal property, which evidently was not "taken." But afterwards (C. M. and St. P. Ry. Co. *v.* Minn., 134 U. S. 418, 1890) the court held that reducing prices was "taking property" and that the right to charge such prices as the owner might choose and to refuse to furnish service unless these prices were paid was one of the original rights of property of which the owner could not be deprived without a judicial hearing upon the reasonableness of the deprivation. This right of property came to be known as "intangible property," distinguished from the older "corporeal property" and "incorporeal property," the latter being debts. Bargaining power thus became a right of property because it turned on the right to withhold services unless the price was paid.

It is obvious that bargaining power, since it did not emerge distinctly until the regime of concerted action, could have no place in the classical and psychological economic theories which were based on corporeal property and free competition of individuals. But even during the earlier period dissatisfaction was already felt among economists themselves in regard to such assumptions of orthodox theory as "perfect competition," "higgling and bargaining," "marginal producer," "marginal utility," "natural law" and so on. The reality of these assumptions was questioned in the controversy over labor unions and it became even more apparent when industry, agriculture and banking began to imitate the concerted bargaining of trade unions.

The right to withhold services was recognized by the courts as a property right only if it was reasonably exercised. But a treatment different from that of public utilities was necessary in the case of manufacturing and commercial corporations, where price fixing was not acceptable. Hence in 1911 the concept of "reasonable restraint of trade" which had arisen as a regulative device in the seventeenth century reemerged and was introduced into the decisions (Standard Oil Co. *v.* U. S., 221 U. S. 1, and U. S. *v.*

American Tobacco Co., 221 U. S. 106). When in 1920, in the dissolution suit against the United States Steel Corporation (251 U. S. 417), it was found that this corporation had practised only reasonable restraint of trade, the legal recognition of bargaining power was further advanced. It came to a more specific determination in the Price Maintenance cases (Great Atlantic and Pacific Tea Co. *v.* Cream of Wheat Co., 224 Fed. 566 in 1915; U. S. *v.* Colgate and Co., 250 U. S. 300 in 1919; and Federal Trade Commission *v.* Beech Nut Packing Co., 257 U. S. 441 in 1922) where it was found that if the prohibition of price maintenance were carried to its effective limit the corporation would then be compelled to deliver its commodities to any buyer who might come along—a situation which would involve price fixing by the government. However, the right to withhold was limited in these decisions by restricting it to reasonable restraint of trade.

A similar discovery had previously been made in the case of laborers. It had been found that to prohibit laborers, by decrees of specific performance, from withholding their services even though they had contracted to work was a denial of the personal liberty guaranteed under the Thirteenth Amendment to the constitution. Business enterprises might, without such violation of the constitution, be compelled to specific performance if they had made contracts to deliver commodities; but they could not lawfully, except in the case of public utilities, be compelled to make such contracts. Thus, with the power to withhold commodities and services finally recognized in law, reasonable restraint of trade, according to the court's ideas of reasonableness but contrary to the antitrust laws, came to have a standing in law and its equivalent, bargaining power, a standing in economics.

During the past twenty years, distinguished as the period during which the process of reasonable bargaining power was admitted into the domain of law and economics, the process itself has obtained popular appeal under such names as stabilization of industry, stabilization of prices, orderly marketing and stabilization of employment. Such stabilization results from the wish for restraint against unlimited individual bargaining. In its connotations it is similar to that process which in labor economics was formerly known as "equalization of bargaining power over the competitive area." The purpose in the latter instance was to prevent the individual bargaining between competing employers and competing laborers from reducing wages and increasing hours of labor to the disadvantage of their competitors who paid higher wages or worked less hours per day. Extended to the business community under such names as business ethics, the purpose of this stabilization process is to prevent that individual bargaining of competitors which steals customers by cutting prices or steals labor by raising wages. The idea that both the purchasing power of the public and the supply of labor power are limited, although it was not contemplated by the early economists, is now gaining credence; therefore, according to the new ethical doctrine of "live-and-let-live," the proper procedure is to get only a reasonable share of that limited purchasing power or limited labor power. This cannot be done without stabilization and reasonable restraint of trade.

Historically the spread of the doctrine of reasonable bargaining power followed clearly distinguishable stages. Labor organizations were the first to move toward this doctrine, because they were the first to feel the pinch of the limited number of jobs and of the resulting discriminations and destructive competition. Soon railways and other public utilities were forced by law to come under the doctrine, because the supply of their services was evidently limited and their huge corporate form enabled them to set their own rules and prices for individual shippers and passengers. Manufacturing industries next came within the theory, the issue in their case culminating in the cases cited above. Then the banking industry was admitted to the process under the Federal Reserve Act which authorized concerted action of ten thousand banks in regulating the prices to be charged and the volume of bank credit to be issued. Finally the farmers, by enlarging the meaning of cooperation from cooperative production to cooperative marketing, aided by federal and state legislation, are in the process of obtaining a larger share of the world's limited purchasing power by their own concerted bargaining power.

In all of these cases there may be observed a shift of varying degree from concerted action directed toward an increase in the production of wealth, and highly favored by the economists and courts, to the concerted action directed toward restriction of the production of wealth, and highly disfavored. We have noted this shift in the case of business corporations and labor unions. A similar process may be also inferred

from the change of the objectives of farmers' cooperation from improvement of scientific agriculture to improvement of bargaining power. The Federal Reserve system was created in 1913 for the "accommodation of business and commerce," but in 1922 it shifted to restrictions upon the free granting of credit in the private transactions of member banks.

This increasing emphasis on bargaining power has found expression in a shift not only toward the corporate form of action but even more toward the regulative form of fixing maximum or minimum standards for the individual and corporate bargains of buying, selling, lending, hiring and excluding competition. The regulative form of bargaining power was established in some cases by positive governmental action; in others it was made possible by the negative government action of permitting that to be done which was deemed reasonable or indifferent. With the grant of permission by the government concerted action required for its effectiveness only such economic sanctions as profit, loss, exclusion from markets, loss of employment, etc., which might be brought to bear upon those recalcitrants who attempted to break away and act independently. Permission to impose these economic sanctions was granted by the Federal Trade Commission Act which included the proviso that it should not be deemed unlawful to "meet competition." According to this proviso it is not unreasonable restraint of trade to obtain leadership by the use of economic power in cutting prices below the level at which the small competitor can live. Under these circumstances the independent action of a competitor was likely to become even more economically destructive to himself than obedience to the practises and prices observed by the others. Thus the economic coercive sanctions of bargaining power, merely in its regulative form, became increasingly effective even without resorting to the corporate form.

Bargaining power with its sanctions of economic coercion rises to a preeminence even more comprehensive and world wide than the formerly dreaded political power with its physical coercion. Indeed the state either by its own direct act or by its permission of concerted action becomes one of the instruments of bargaining power. Through the use of this political instrument the struggle for bargaining power reaches its eminence. The economic theories of free competition and laissez faire, deductively worked out from the presuppositions of liberty, equality, self-interest, individual property and the mechanism of competition, give way to pragmatic theories of the reasonable use under all the circumstances of that bargaining power by concerted action which may be equally or unequally shared by individuals, classes or nations. These latter day theories of bargaining power come before the courts and economists under four groupings: unfair discrimination, or unequal opportunity for individual bargaining; fair competition instead of free competition; reasonable price instead of normal or natural price; and the equal or unequal treatment of the different kinds of bargaining power of public utilities, manufacturers, farmers, laborers, merchants and bankers. It is the emergence of these issues out of the new predominance of bargaining power that has recently centered the attention of economists and courts upon ethical theories of prices, values, practises and transactions.

JOHN R. COMMONS

See: ECONOMIC ORGANIZATION; PROPERTY; CORPORATION; CONTRACT; COMPETITION; LABOR CONTRACT; COLLECTIVE BARGAINING; COMBINATIONS, INDUSTRIAL; MONOPOLY; TRUSTS; FREEDOM OF CONTRACT; UNFAIR COMPETITION; RESALE PRICE MAINTENANCE; FEDERAL TRADE COMMISSION; CONTROL, SOCIAL; ECONOMICS.

Consult: Davidson, John, *The Bargain Theory of Wages* (New York 1898); Veblen, T. B., *The Theory of Business Enterprise* (New York 1904), and *The Place of Science in Modern Civilization* (New York 1919); Commons, J. R., *Legal Foundations of Capitalism* (New York 1924).

BARNARD, HENRY (1811–1900), one of the foremost American educators. He was graduated from Yale in 1830 and was subsequently admitted to the bar of Connecticut. He served one year as principal of the academy at Wellsboro, Pennsylvania, and spent fifteen months in travel and in the study of European educational institutions.

In 1837 he was elected a member of the Connecticut legislature and served as chairman of the legislative committee on education which organized the state board of education with Barnard as its first secretary (1838–42). He held a similar post in Rhode Island (1843–49) and again in Connecticut (1850–55). In both offices his reforms were practically coextensive with the establishment of the state school systems. Together with the work of Horace Mann in Massachusetts they constitute the beginnings of the public school system as we know it. Bar-

nard organized town libraries, the first teachers' institutes and the first classes for the professional training of teachers in America. He represented the United States at an international congress of education in London (1854) and was the moving spirit in the organization of the American Association for the Advancement of Education (1855), of which he was the first president. He was also instrumental in creating the office of Federal Commissioner of Education and was its first incumbent (1860–70).

Barnard's work as editor and author constituted the earliest literature of education in America and his greatest contribution to education. The *Connecticut Common School Journal* (vols. i–iv, 1846–49, and vol. x, 1855) is the most widely known among his prolific official publications. The *American Journal of Education* (32 vols., 1856–82) was largely his single handed effort and a veritable cyclopaedia in the theory and history of pedagogy. His more strictly original writings cover a wide field and include twenty-three volumes.

WILL S. MONROE

Important works: *Reformatory Education* (Hartford 1857); *Normal Schools* (Hartford 1851); *School Architecture* (Hartford 1842, 5th ed. Cincinnati 1855); *Pestalozzi and Pestalozzianism* (New York 1859, 2nd ed. 1862); *German Schools and Pedagogy* (New York 1861); *National Education in Europe* (New York 1854).

Consult: "In Memoriam Dr. Henry Barnard" in National Education Association, *Proceedings and Addresses*, vol. xl (1901) 390–438; Monroe, Will S., *The Educational Labors of Henry Barnard* (Syracuse 1893), and *Bibliography of Henry Barnard* (Boston 1897), containing a detailed list of Henry Barnard's own works and of works about him; Steiner, B. C., *Life of Henry Barnard* (Washington 1919); Philbrick, J. D., "Henry Barnard's Labors in Connecticut and Rhode Island" in *American Journal of Education*, vol. i (1856) 659–738.

BARNARDO, THOMAS (1845–1905), English pioneer in the cause of dependent and neglected children. He had intended at first to become a medical missionary to China but while he was in training at the London Hospital this interest gave way before the needs of London waifs, and his first philanthropic effort, a "Ragged School" of missionary character, was started while he was still an interne. The Earl of Shaftesbury and other wealthy men became interested in his schemes, which were eventually carried out by the organization which was later known as the National Waifs Association Inc. (better known as Dr. Barnardo's Homes). This association, which Barnardo founded and directed for many years, became an enormous organization for the care of homeless children; it managed two children's villages and fifty-five local homes and institutions, thirty-three of which were established during his lifetime. In 1882 he initiated a movement for the emigration of dependent children to the colonies, principally Canada, as a partial solution for their overcrowding in urban centers. Both boys and girls were equipped with a trade before they were sent out and after their arrival were given counsel until they reached the age of eighteen. A few years later, acting on his observation that children under two years of age do not thrive well under institutional care, he started to place out dependent infants in carefully inspected foster homes. He also reorganized the current methods of caring for physically handicapped children, putting them in the same group with normal children on the theory that this would sustain normality on both sides. The first effective English legislation concerning the guardianship of minors was achieved by his efforts; he carried a case through the House of Lords and aroused public attention to the possibility of abuse by parents of the rights of their children.

While some of Barnardo's methods have since been amended in the light of the subsequent experience of England and other countries, many of them have become recognized as fundamentally sound. His evangelical zeal, his dynamic personality and his remarkable executive ability contributed greatly toward popularizing the idea of child welfare.

ETHEL TAYLOR

Consult: Neuman, A. R., *Dr. Barnardo, As I Knew Him* (London 1914); Batt, J. H., *Dr. Barnardo, the Foster Father of "Nobody's Children"* (London 1904); Anon., *Children Reclaimed for Life, the Story of Dr. Barnardo's Work in London* (London 1874).

BARNAVE, ANTOINE PIERRE JOSEPH MARIE (1761–93), political figure of the French Revolution. After a violent campaign against the decrees of Loménie de Brienne he played an important role in the revolutionary manifestations in the Vizille Assembly of 1788 and was sent to the Estates General as a representative of the third estate. Both in the Estates General and in the Constituent Assembly his talent for oratory, second only to that of Mirabeau, made him an important figure in debates on all the great questions of his day. As the spokesman of the famous triumvirate he advocated the suspensory veto, the one chamber

system and jury trial in civil cases. It was upon his motion that the assembly voted to reserve to itself the right of war and peace. He was one of the founders of the Jacobin Society and opposed the pro-Negro measures of the Société des Amis des Noirs. Barnave was one of the three commissioners who were charged with conducting the royal family from Varennes back to Paris at the end of June, 1791. The trip strengthened his royalist sympathies and was the beginning of a series of interviews with Marie Antoinette which soon placed him under suspicion. On August 15, 1792, he was accused of intriguing with the court. He was brought before the revolutionary tribunal on November 28, 1793, and executed the following day.

Barnave was a typical representative of the bourgeoisie which, after having launched the revolution, tried to stay its course and limit its consequences. His aim was to give to the middle class the place which the aristocracy had formerly occupied in the central government and to exclude all other classes. In the course of the republican movement of July, 1792, he declared that the abolition of monarchy could mean ultimately the abolition of property. In his "Introduction à la Révolution française" (in *Oeuvres*, ed. by Bérenger de la Drôme, Paris 1843, vol. i, p. 98–110) Barnave concluded that the revolution had been prepared over a period of centuries by the slow evolution of the industrial middle class. His perception of the economic basis of all political change distinguishes him according to Jaurès as a precursor of Marx.

GEORGES BOURGIN

Consult: Bradby, E. D., *The Life of Barnave*, 2 vols. (Oxford 1915); *Marie-Antoinette, Fersen et Barnave; leur correspondance*, ed. by O. G. von Heidenstam (Paris 1913), tr. by Winifred Stephens and Mrs. Wilfrid Jackson (London 1926); Jaurès, Jean, *La constituante (1789–1791)*, Histoire Socialiste, vol. i (Paris 1901) p. 98–108.

BARNETT, SAMUEL AUGUSTUS (1844–1913), English social reformer, a pioneer in the founding of social settlements. Barnett belonged to the generation whose conscience was deeply moved by such results of the industrial revolution as the prevalence of squalor and want in large city areas. Like Arnold Toynbee he did not believe in the adequacy of the solutions offered by the revolutionary socialists or by the followers of Henry George. In 1872, after an apprenticeship with W. H. Freemantle and Octavia Hill, he settled with his young wife as vicar of St. Jude's in the Whitechapel slum section of London. Encouraged by Benjamin Jowett, T. H. Green and Alfred (afterwards Lord) Milner, a number of Oxford students, deeply impressed with the contrast between their own luxurious surroundings and the neglected state of the East End population and attracted by Barnett's gospel of Christian neighborliness, took up their residence with him. This was the nucleus which gave rise to Toynbee Hall, founded in 1884 as a residence with a library, lecture and reception rooms. The program of the settlement directed by Barnett included not only educational activities but also projects for model dwellings and other social reforms. The movement for university settlements spread rapidly to English provincial cities and to the United States; it was assisted by the University Settlements Association organized at the initiative of Barnett. In his later years as canon of Westminster he preached in the Abbey to large congregations which recognized him as a leader in the new interpretation of Christian charity. There is scarcely any modern movement for social betterment—health visitation, slum clearance, old age pensions, city planning, workers' education—which was not anticipated in Barnett's plans and work.

J. H. MUIRHEAD

Important works: *Practicable Socialism* (London 1888, 2nd ed. 1894), in collaboration with his wife; *The Service of God* (London 1897); *Religion and Progress* (London 1907); *Towards Social Reform* (London 1909), in collaboration with his wife; *Religion and Politics* (London 1911).

Consult: Barnett, H. O., *Canon Barnett: His Life, Work and Friends* (London 1918).

BARNEVELD, JOHN OF. *See* OLDENBARNEVELDT, JOHAN VAN.

BARONDESS, JOSEPH (1867–1928), American-Jewish labor leader and communal worker. Barondess was born in Russia and came to New York City in 1888, where he became employed as a knee-pants maker. He joined the struggle carried on by Jewish socialists and anarchists to abolish the sweat shop system which was then prevalent in the needle trades, and helped to organize the workers into unions. Impetuous, zealous, a good orator and a vivid figure, he soon attained a commanding position among the cloak makers and was their outstanding leader during the formative period of unionism in the nineties. He became especially prominent as leader of the great "lockout-strike" of the New York cloak

makers in 1890, which for the first time revealed to the general American public the frightful conditions under which immigrant workers labored.

In the earlier years of his career Barondess was a militant radical and exponent of the revolutionary class struggle. Later he became one of the first Jewish labor leaders to advocate the trade agreement. As manager of the Cloakmakers' Union during the nineties Barondess was frequently the center of factional strife. Opposition to him was particularly violent from members of the Socialist Labor party. They resented his inclination to work with the anarchists and claimed that the manner in which he first jumped his bail and later obtained his pardon after being imprisoned in connection with a strike unfitted him for leadership. These and other attacks and recriminations and the failure of the general strike of 1895 which he led caused Barondess' withdrawal from active participation in the labor movement.

In his later years he became an insurance broker. He played an important role in Jewish communal affairs, in social work, in education and in the Zionist movement. He was instrumental in bringing about a closer working together of the new immigrants from eastern Europe and the older German-Jewish elements. In 1919 he was a member of the Jewish delegation which secured from the Peace Conference minority rights for the Jews of eastern Europe.

DAVID SHUB

Consult: Lorwin, Lewis L. (Louis Levine), *The Women's Garment Workers* (New York 1924) chs. vii–xii; Weinstein, B., *Die yiddishe unions in Amerika* (New York 1929) in Yiddish; Cahan, A., *Bletter fun mayn leben* (Reminiscences), 4 vols. (New York 1926–28) in Yiddish, vol. iii, chs. i–iii.

BARONE, ENRICO (1859–1924), Italian mathematical economist. He showed an early interest in mathematics and was trained for a military career, attaining the rank of colonel on the Italian general staff. Barone gained distinction by a number of important works on military history. He first became interested in economics in the early nineties, when social science in Italy was undergoing a process of reorientation under the influence of the German historical schools and of Menger and Walras. In 1907 he left the army to become a professor of economics, and in the following year he published his *Principii di economia politica* (Rome 1908; German translation with an introduction by Josef Schumpeter, Bonn 1927), a remarkably lucid textbook of mathematical economics. His subsequent publications include a number of theoretical articles in the *Giornale degli economisti*, a book of lectures on colonies and commerce delivered at the Higher School of Commerce in Rome, a report on the limitation of output by the combined Sicilian sulphur producers (1909), a brilliant essay on industrial combinations published in *Problèmes actuels de l'économique* (Paris 1921) and *Hallesismo* (Rome 1924), a destructive criticism of the gigantic plan for an international bank which later went into bankruptcy. Barone's original contributions to mathematical economics are not numerous. He developed and extended Pareto's work on the theory of production. He elaborated the theory of limited competition or imperfect monopoly and applied it to a study of trade union policies and of transportation rates. He used the methods of pure theory in considering taxation as a procedure for distributing joint costs. Barone professed to be a disciple of Walras and Pareto, but he was really an eclectic. He dealt not only with general equilibrium theory but also with particular equilibria of Marshall's type. In the history of mathematical economics in Italy Barone ranks third, after Pareto and Pantaleoni.

G. H. BOUSQUET

Consult: Spinedi, Francesco, "Di un metodo nello studio della scienza economica" in *Rivista internazionale di scienze sociali e discipline ausiliarie*, vol. xcix (1924) 193–206 and 273–84; Del Vecchio, Gustavo, "L'opera scientifica di Enrico Barone" in *Giornale degli economisti*, vol. lxv (1925) 573–78.

BARONIUS, CESAR (1538–1607), Catholic church historian. From his native Naples he went to Rome to study law but, influenced by St. Philip Neri, he entered the church and became first a member of the community of San Girolano and then in 1575 a member of the Oratory, of which he was head for six years. At the instigation of Philip Neri he undertook to write for the Roman church a monumental ecclesiastical history similar to that written for the Lutheran church by the centuriators of Magdeburg. The result was his *Annales ecclesiastici* (12 vols., Rome 1588–1607), which carries the story of the church down to 1198. Baronius maintained that in the writing of history no source of any kind should be despised, even if it were apocryphal or heretical, and accordingly he relied on texts and archaeological evidence in his search for historical accuracy. He also

had confidence in "human reason" and was thus complacent in recording the instances in which the Catholics submitted to the judgment of pagan authorities their conflicts with the heretics. He was one of the first to recognize the importance of the catacombs of Rome for a study of the Christian church. Baronius was a cardinal and a candidate for the papal throne at the conclave of 1606. In 1745 he was declared Venerable by Benedict XIV.

GEORGES GOYAU

Consult: Kerr, Amabel, *Life of Cesare Card. Baronius* (London 1898); Goyau, Georges, *Le catholicisme et l'histoire, Ecclesia* (Paris 1927); Baur, F. C., *Die Epochen der kirchlichen Geschichtschreibung* (Tübingen 1852) p. 72–84.

BARRÈS, MAURICE (1862–1923), French novelist and publicist. After graduating from the lycée of Nancy, Barrès went to Paris in 1883 to study law but devoted most of his time to journalism. In 1889, a year after he published the first novel of the trilogy *Culte du moi* (complete ed. Paris 1892), he became a member of the Chamber of Deputies as a follower of Boulanger. The nationalist fervor which was heightened in the nineties by the Panama scandals and the Dreyfus affair found in Barrès one of its earliest and most inspired interpreters. *Les déracinés* (Paris 1897) and the other two volumes of the trilogy *Le roman de l'énergie nationale* were followed by the great *Les scènes et doctrines du nationalisme* (Paris 1902) and later by a number of works which on the eve of the World War emphasized the cultural differences separating France and Germany. His daily articles in the *Écho de Paris* during the war breathed the same spirit and were widely read.

Out of the intellectual and moral nihilism of his first youth one fact had been revealed to Barrès as indisputable, his own existence. He had clutched it with all the ardor of desperation and had constructed upon it a system of complete individualism. Underneath this cloak of ideas Barrès remained a patriot; the memory of the humiliating invasion which Lorraine had endured in his childhood still quickened his inmost sympathies and evoked a ready response. When, intellectually still unsatisfied, still questioning the oracle of his ego, he came at last face to face with those larger, more enduring realities —the nation, the province—he abruptly forsook his earlier doctrine and became a "convert" to nationalism. Believing that he had discovered in the "soil" and the "dead" the obscure forces which determine the life of the individual, he made of them a cult in which tradition, order, the family, the province, the native land all became objects of worship. Barrès continued to elaborate his doctrine of nationalism until the victory of France in 1918 brought about a new expansion of his sympathies and released in him a spirit of generosity toward all humanity. The change was signalized by the *Génie du Rhin* (Paris 1921), which revealed his discovery of a common Franco-German tradition through whose healing offices the grievances of the two nations might be obliterated. Thus his influence was twofold. The nationalism of his earlier period had been accepted and developed by the Action Française (*q.v.*) and had deeply affected the intellectual attitude of French youth in the early twentieth century, while the outlook characteristic of his later period is not unrelated to the French policy of *rapprochement* with Germany.

RENÉ GILLOUIN

Consult: Thibaudet, A., *La vie de Maurice Barrès* (2nd ed. Paris 1921); Curtius, E. R., *Maurice Barrès und die geistigen Grundlagen des französischen Nationalismus* (Bonn 1921); Parodi, D., *Traditionalisme et démocratie* (2nd ed. Paris 1923) p. 109–40; Gillouin, René, *Essais de critique littéraire et philosophique* (Paris 1913) p. 99–170.

BARRIOS, JUSTO RUFINO (1835–85), Guatemalan statesman. Barrios joined the liberal anticlerical movement, becoming one of its outstanding military leaders. In March, 1873, as acting president of Guatemala he abolished the clerical privilege of immunity from the jurisdiction of civil courts and proclaimed freedom of religious worship. Soon after his inauguration as president in June, 1873, he announced that all ecclesiastical endowments were to be merged in a national bank and that marriages solemnized between foreigners in Guatemala in accordance with laws of their own country should be valid. By later decrees he abolished all convents, divested cemeteries of their religious character and stipulated that a civil ceremony should be the only legal form of marriage. He also fostered the cause of education and aided in the development of railway and telegraphic communications. Barrios long cherished the plan of restoring the Federation of Central American States, which had dissolved about 1839. After his second election as president he issued on February 28, 1885, a decree proclaiming that a Central American Union was established. This ambitious announcement provoked bitter opposition

in some quarters, especially in Nicaragua and Salvador. Dictator Barrios led his army into Salvador and fell in battle on April 2, 1885. He died fighting for an ideal that was not yet acceptable to all the Central American republics. That ideal ignored the fact that the jealousies of local politicians, the heterogeneity of the population, the lack of a common monetary system and the difficulty of intercommunication were grave obstacles to the permanent establishment of a Central American Union.

WILLIAM SPENCE ROBERTSON

Consult: Burgess, P., *Justo Rufino Barrios* (Philadelphia 1926); Bancroft, H. H., *History of Central America 1501–1887*, 3 vols. (San Francisco 1882–87) vol. iii, chs. xx–xxi.

BARRON, CLARENCE WALKER (1855–1928), American financial journalist and newspaper owner. He was born in Boston and began his career as stenographer for a court reporter. He soon obtained reportorial appointments on various newspapers, and finally joined the staff of the Boston *Transcript* (1874). He took charge of the financial department of this newspaper and became especially concerned with the development of new methods of obtaining information, quick transmission of news and publication of exact facts instead of impressions or rumors on financial topics. In 1887 Barron instituted a news bulletin service in the Boston financial district; this service supplied information to subscribers by means of a series of slips, first typewritten or mimeographed, then printed. Later it developed into a daily financial newspaper, the Boston *News Bureau*. In 1897 he established a similar service in Philadelphia, the Philadelphia *News Bureau*. For both cities he had a working arrangement for the interchange of news with Dow Jones and Company of New York City. In 1902 Barron purchased this business, which included a local bulletin system, a ticker for transmitting news instantaneously by wire, and a newspaper, the *Wall Street Journal*; he thus consolidated the three principal financial news organizations in the East. He enlarged and developed both the ticker service and the financial news getting system of the enterprise generally, and by establishing more satisfactory relations with the patentees who controlled the ticker he insured an effective working agreement between them and the newspaper. As a reporter and newspaper owner Barron made an important contribution to the development of financial journalism by building up a more complete and essentially factual way of treating current events in the field of finance and speculation.

H. PARKER WILLIS

BARROS, JOÃO DE (1496–1570), Portuguese historian and colonial administrator. Barros' romance of chivalry, *Clarimundo* (Coimbra 1520), attracted the attention of the king and led to his being commissioned to write the history of the Portuguese in India. The king's death interrupted the project, but his successor, John III, appointed Barros general agent for the Portuguese colonies in 1533, and his long residence in India and close contact with colonial affairs enabled him to collect the documents and data for this history. It was favorably received throughout Europe and caused Barros to be known as the "Portuguese Livy." It was characterized by an impartiality somewhat marred by a patriotic tone and lack of critical spirit. But it stamps Barros as the first modern Portuguese historian. Besides providing a vast amount of new data in the best style of the age it was the first book to dissipate the absurd contemporary legends regarding Asia. From it Camoens drew the inspiration for his *Lusiadas*. Through the wide circulation of his chief work and also through his *Grammatica de lingua portugueza* (Lisbon 1540) Barros was very influential in fixing the Portuguese language. He was also the author of various moral essays (some of which received the approval of the Inquisition) defending traditional ethical principles against opportunism and self-interest. Some of his unpublished manuscripts deal with the history, geography and natural history of India and Africa.

L. L. BERNARD

Important works: *Asia de Ioam de Barros, dos fectos que os portuguezes fizeram no descobrimento e conquista dos mares e terras do Oriente* (first 3 vols. Lisbon 1552–63, 4th vol. Madrid 1615); the work was completed by Diego de Couto, 12 vols. (Lisbon 1602–73), and the whole edited in 24 vols. by Severim de Faria (Lisbon 1778–88) with a life of Barros.

Consult: Severim de Faria, M., in *Varios discursos politicos* (Lisbon 1791) p. 171–245; Barbosa Machado, D., *Bibliotheca lusitana*, 4 vols. (Lisbon 1741–59); Bell, A. F. G., *Portuguese Literature* (Oxford 1922) p. 192–98.

BARROT, CAMILLE HYACINTHE ODILON (1791–1873), French political figure. Under the Restoration he acquired a reputation as a lawyer and won the admiration of the

liberals by upholding the right of Protestants to leave their homes undecorated during Catholic processions. He became a leader of the society "Aide-toi, le-ciel-t'aidera," the object of which was to arouse the middle classes against the Restoration government. After the Revolution of 1830, in which he supported Lafayette, Barrot became leader of the dynastic opposition, the left wing of the monarchist party, in the Chamber of Deputies and directed the force of his brilliant though pompous oratory against the policies of the conservatives. He eventually joined the republicans in their demand for an extension of the franchise and took a conspicuous part in the banquet campaign which was the immediate cause of the Revolution of 1848. Alarmed at this unforeseen consequence Barrot made an unsuccessful attempt on the twenty-fourth of February to save the monarchy. When Louis Napoleon Bonaparte became president of the Republic he chose Barrot to preside over the Council of Ministers, but soon dismissed him as an ineffective politician. After the coup d'état of 1851 Barrot remained in retirement until Thiers appointed him president of the Council of State under the Third Republic. In *De la centralisation et de ses effets* (Paris 1861) Barrot advocated the fostering of municipal and departmental liberty as a means of creating a check upon the recurrent revolutions in Paris.

GEORGES WEILL

Consult: Barrot, C. H. O., *Mémoires posthumes*, ed. by Duvergier de Hauranne, 4 vols. (2nd ed. Paris 1875–76); Lyon-Caen, C., "Notice sur la vie et les travaux de Odilon Barrot" in Académie des Sciences Morales et Politiques, *Séances et travaux*, vol. lxxxviii, pt. i (1928) 27–60; Thureau-Dangin, P., *Histoire de la monarchie de juillet*, 7 vols. (2nd ed. Paris 1888).

BARROWS, SAMUEL JUNE (1845–1909), American prison reformer. He was editor of the *Christian Register*, the Unitarian organ, from 1880 to 1896. During this period he became identified with many liberal reform movements and developed a lasting interest in work for the condemned criminal. He had long been active in prison reform when he was chosen secretary of the New York Prison Association (1899). In his ten years of service he studied many aspects of prison reform and advocated better prison construction, work and recreation for prisoners, state control of prisons and the abolition of the fee system for sheriffs. Barrows was primarily concerned, however, with the substitution of treatment for punishment in the care of criminals through the use of parole, probation, the indeterminate sentence and the reformatory. He was instrumental in securing the passage of the New York probation law of 1901, the reformatory and probation laws of Oklahoma and the federal parole law. Barrows was appointed American member of the International Prison Commission in 1896; he also served as the first American president of the International Prison Congress. He wrote many magazine articles on prison reform and drew up numerous reports including several for the International Prison Association.

FRANK J. BRUNO

Consult: Barrows, Isabel C., *A Sunny Life* (Boston 1913); Kellogg, Paul U., "Samuel June Barrows" in *The Survey*, vol. xxii (1909) 307–13.

BARTER. The word barter in its simplest use means exchange. The sense in which the term is now commonly used is the exchanging of goods for goods as a stage in the development of economic relations. Hildebrand's well known stages of barter, money and credit economy were valuable, but further study by two generations of scholars has added material for alteration at some points and for refinement at others. At present we must consider in connection with early development four different categories or stages: gift economy, gift barter economy, pure barter and money barter. Of course these stages should not be considered universal or inevitable; the various categories would always overlap.

Among the most primitive men there was no barter, but there was a practise of making gifts. Some of the gifts were somewhat instinctive as in the giving food to the young, religious as in offerings to the spirits or simply social as in scores of different kinship and other relations, formal and informal.

When men began to consider returning gift for gift, a new stage, gift barter, was developing. No exact notion of equivalents probably existed; it was enough, at least at first, that a good will gift be followed by a return gift. The gift had become reciprocal, often accompanied by elaborate ceremonial. Indeed early human existence was shot through with a heavy burden of relations worked out by means of gifts. One of the most interesting examples of gift barter economy is the kula of the Trobriand Islanders, so fascinatingly described by Malinowski. The kula was a well ordered practise of exchanging ornaments. Necklaces of red shells were passed from one to another in a clockwise rotation; armlets of white shells were passed counterwise.

An individual had kula brothers to whom he sent necklaces and from whom he received armlets, and others to whom he sent armlets and from whom he received necklaces. Magic and ceremony were closely intertwined with the exchange. Kula brothers exchanged ornaments within the tribe or between tribes without regard to the friendship or enmity of their tribes. Probably this is an unusual institution when considered in its entirety. However, what is most interesting in this instance is the fact that along with the social intercourse went a dawning sense of objective values. The ornaments were valued in themselves in so far as they were worn or as the mere possession of them gave distinction. But the fortunes of men fluctuated as commonplace or highly prized ornaments came their way, soon in turn to be passed on to another.

Pure barter finally came upon the scene as an exchange of goods with a developing sense of equivalents, not of good intentions but of commodities. Closely connected with the kula, for example, is an open barter of goods. One bunch of taro may be worth one bundle of fish; one lime pot, a dozen cocoanuts or two pieces of sago. In early Irish history eight sheep were commonly worth one cow. Pure barter probably developed through silent trade. Among various African tribes it has long been customary for people to leave on their boundary some of their surplus products, expecting to find a suitable article in return. At times what is expected may be expressed in so many beans or pebbles laid nearby. If too much is looked for, no exchange may take place. In this dumb barter we have goods exchanged for goods. In the process there is no social intercourse and even a little danger if one party feels aggrieved. The whole transaction is based upon objective values. Of course no money is used; it is purely a matter of truck.

In money barter economy goods are still bartered for goods but in terms of a common measure of value. The almost classic *locus* is the Island of Yap, where goods are exchanged in terms of heavy circular flat stones resting in the native's yard or at the bottom of the sea if lost in transit. Other illustrations are found among peoples using metals by weight, especially iron and copper, which are obviously too clumsy to be much used in exchange.

The existence of money barter as an intermediate stage between pure barter and money exchange presupposes the evolution of a commodity into a common measure of value for other commodities before it is generally used as a medium of exchange. This is contrary to the traditional view according to which the development of a medium of exchange precedes that of a common measure of value. The latter hypothesis is consistent with the emphasis on the circulatory power rather than on the standard of value function of money, which naturally prevailed at the time when writers were chiefly interested in coined money. It minimizes the amount of barter by assuming that early trade was carried on not between individuals within the group, but only between groups. This view was supported by the contemporary notion of community of property.

The concept of barter was employed in economic theory as a method of simplifying the analysis where it was desirable to go beneath the "money surface" of economic phenomena. It found its uses in the assumed "rude state" of society in classical discussions of value and hypothetical explanations of the origin of money. It has done yeoman's service in marginal utility economics and is still widely used in the neoclassical theory of international trade. Since in the latter case gold bullion is implicitly involved as a measure of value, the concept used is that of money barter rather than of pure barter.

N. S. B. GRAS

See: MARKET; VALUE; MONEY; COMMERCE; INTERNATIONAL TRADE.

Consult: Hildebrand, Bruno, "Natural- Geld- und Creditwirtschaft" in *Jahrbücher fur Nationalökonomie und Statistik*, vol. ii (1864) 1–24, reprinted in his *Nationalökonomie und andere Schriften* (Jena 1922) p. 325–57; Bücher, Karl, *Die Entstehung der Volkswirtschaft* (Tübingen 1893), tr. by S. M. Wickett as *Industrial Evolution* (New York 1901) chs. i–v; Oppenheimer, Franz, *Theorie der reinen und politischen Ökonomie*, in *Das System der Soziologie*, vols. i–iv (Jena 1922–29) vol. iii, pt. i, p. 277–301; Hoyt, Elizabeth E., *Primitive Trade; Its Psychology and Economics* (London 1926); Grierson, P. J. H., *The Silent Trade* (Edinburgh 1903); Malinowski, Bronislaw, "The Primitive Economics of the Trobriand Islanders" in *Economic Journal*, vol. xxxi (1921) 1–16, and *Argonauts of the Western Pacific* (London 1922); Mauss, Marcel, "Essai sur le don" in *L'année sociologique*, n. s., vol. i (1923–24) 30–186; Firth, Raymond, *Primitive Economics of the New Zealand Maori* (New York 1929) ch. xii.

BARTH, PAUL (1858–1922), one of the founders of historical sociology in Germany. He was trained in philosophy under Richard Avenarius, Max Heinze and Wilhelm Wundt at the University of Leipsic. As a young school teacher he was struck by the cleavage between the official German historiography of the neo-

Rankians and the other great branch of Hegelian philosophy of history, the Marxian materialism, that was getting hold of the lower classes of his country. Admitted as a *Privatdocent* at Leipsic on the basis of his dissertation, *Die Geschichtsphilosophie Hegels und der Hegelianer* (Leipsic 1890, 2nd ed. 1925), he began to look for a healing of this cleavage through the adoption of the new sociology of Comte and Spencer, for the reception of which his university had been prepared by the work of Wundt and Karl Lamprecht. Accordingly in his work *Die Philosophie der Geschichte als Soziologie* (Leipsic 1897, 4th ed. 1922) he came to identify what he conceived to be the real scientific task of history, as opposed to mere fact finding and artistic narrative, with the task of sociology. Although strictly opposed to the economic one-sidedness of historical materialism he was no less convinced of the strict applicability of the standards of natural science to historical knowledge and combated sharply the distinction made between "nomothetic" science and "ideographic" history by the philosophical school of Windelband and Rickert. As a pupil of Wundt he also upheld against this school the connection between the psychology of history and society and the new scientific and experimental psychology which was then invading the preserves of German academic philosophy. He objected to American sociology on account of its prevalent interest in modern and practical, as distinct from historical and theoretical, questions. But conversely it may be said of himself that too close an association with the problems of contemporary historiography prevented him from fully realizing the specific and systematic possibilities of sociological methods.

Barth was one of the first in Germany to base on the new experimental psychology a sociological pedagogy, by which he meant to supplant the system of Herbart so long prevalent there. His *Die Elemente der Erziehungs- und Unterrichtslehre* (Leipsic 1906, 10th ed. 1923) was translated into Russian, Spanish and Swedish. In his later works, such as *Die Notwendigkeit eines systematischen Moralunterrichts* (Leipsic 1919, 2nd ed. 1920) and *Ethische Jugendführung* (Leipsic 1919), he again advocated socio-ethical education based on moral values common to all ethical and religious systems.

CARL BRINKMANN

Consult: Barth's autobiography in *Die deutsche Philosophie der Gegenwart in Selbstdarstellungen*, ed. by Raymund Schmidt, vol. i (Leipsic 1921) p. 1–20.

BARTH, THEODOR (1849–1909), German politician and publicist. As syndic of the Bremen chamber of commerce in 1879 he fought in the Bundesrat against Bismarck's tariff reform. From 1881 to 1903, save for a brief interruption, he was a member of the German Reichstag. With the founding of the *Nation* in 1883 he created the Circle of Liberal Politicians, members of which had left the National Liberal party in 1880. During a quarter of a century (until 1907) the *Nation* was the best informed and most distinguished of German periodicals. Barth was a brilliant writer and enthusiastic speaker and in his mobile temperament was the exact opposite of Eugen Richter, from whom he separated in 1893 after nine years of collaboration. He was the most consistent protagonist of free trade, an early advocate of democratic parliamentarianism and of adequate international understanding. Although he was decidedly antisocialist, from 1903 on he sided with Naumann in urging a tactical coalition of Liberal and Social Democratic parties. When Chancellor Bülow succeeded in forming a conservative-liberal coalition in 1908, Barth was deeply disappointed and withdrew from the party of which he had been the leader and standard bearer for so many years. As a political type he was akin to Carl Schurz in his idealistic conception of political and social problems. He looked with apprehension upon the rise of imperialism among the nations and worked with a noble zeal to clarify international relations.

THEODOR HEUSS

Consult: Gygax, Paul, "Theodor Barth" in *Schweizerische Blätter fur Wirtschafts- und Sozialpolitik*, vol. xvii (1909) 480–500; Feder, Ernst, *Theodor Barth und der demokratische Gedanke* (Gotha 1919).

BARTOLISTS. *See* COMMENTATORS.

BARTOLUS OF SASSOFERRATO (1314–57), mediaeval jurist. He took his doctor's degree at Bologna at the age of twenty and taught at Pisa and Perugia until his early death. His immense reputation as the "prince of jurists" rests wholly upon his enormous literary output during his short but productive life.

Bartolus was primarily a practising jurist who attempted to bring order into the confusion resulting from the competing systems of the Roman, canon, feudal and customary law of his time. His teaching upon the theory of statutes is the real beginning of analysis upon the conflict of laws. He conceded universality to the Roman law but held certain statutes to be

restricted in their operation to the persons and things under the jurisdiction of the sovereignty which enacted them. Fundamentally he thus taught that there are laws which do not have exterritorial effect—a great departure in the Middle Ages which tended to exalt personal law. The Dutch and French statutists who succeeded him, as well as more modern theorists, have been unable to impair the essential force and value of his doctrines. He may thus be regarded as the founder of private international law in the same way that Grotius is considered the founder of public international law.

Of wider interest is Bartolus' conception of jurisprudence. To him *civilis sapientia*, which may well be translated "social science," was, next to theology, the highest of human interests. The supreme office of the jurist was to interpret law in such ways as would conduce to the greatest good of society as an organic whole. While he taught the highest respect for all authority, human and divine, he claimed the right of individual judgment in applying this authority to practical social needs. It was this independence of judgment that gave to the opinions of Bartolus an importance second only to that of the original sources of the law themselves.

The political theory of Bartolus, as expressed in his treatise *De regimine civitatis*, had a profound influence upon later discussion, seen notably in Rousseau and Montesquieu. He accepts the Aristotelian division of governments into monarchy, aristocracy and democracy, but only as a general scheme. He amplifies this classification in two practical ways: first, by showing the probable perversions of government into tyranny, oligarchy and demagogy, and second, by noting its special applications to small, large and medium sized communities. Thus democracy is suited only for the small, monarchy only for the large, and a modification of both for the medium sized, governments. There is no absolute standard. This many sided freedom from a priori dogmatism was Bartolus' great contribution to the clearing away of mediaeval obstacles to straight thinking upon the deepest problems of social organization.

EPHRAIM EMERTON

Works: Collected works of Bartolus appeared in 1563 (Lyons, 7 vols.), 1577 (Turin), 1588–89 (Basel, 11 vols.), 1590 (Venice, 11 vols.) and 1602 (Venice). English translations of some of Bartolus' works are *Humanism and Tyranny; Studies in the Italian Trecento*, ed. by Ephraim Emerton (Cambridge, Mass. 1925); and *Bartolus on the Conflict of Laws*, tr. by Joseph H. Beale (Cambridge, Mass. 1914).

Consult: Woolf, C. N. S., *Bartolus of Sassoferrato* (Cambridge, Eng. 1913); *Great Jurists of the World*, ed. by John Macdonell and Edward Manson (Boston 1914) p. 45–57; Figgis, J. N., "Bartolus and the Development of European Political Ideas" in Royal Historical Society, *Transactions*, n. s., vol. xix (1905) 147–68; Savigny, F. C. von, *Geschichte des römischen Rechts im Mittelalter*, 7 vols. (2nd ed. Heidelberg 1843–51) vol. vi, ch. liii; Lainé, Armand, *Introduction au droit international privé*, 2 vols. (Paris 1888–92) vol. i, p. 131–63; Meili, Friedrich, "Die theoretischen Abhandlungen von Bartolus und Baldus über das internationale Privat- und Strafrecht" in *Niemeyers Zeitschrift für internationales Recht*, vol. iv (1894) 258–69, 340–46 and 446–73.

BARTON, CLARA (1821–1912), the founder of the American branch of the Red Cross. She was born in Oxford, Massachusetts, began to teach at the age of fifteen and continued until 1854 when she became a clerk in the Patent Office at Washington. One of the first women to hold a regular government clerkship with the same work and salary as a man, she was an early supporter of woman's suffrage and equal pay for equal work.

At the outbreak of the Civil War she volunteered her services to wounded soldiers in Washington, soliciting hospital supplies from Massachusetts friends. Later she secured permission to go to the front and arranged to have supplies follow her. She cooperated cordially with the Sanitary Commission but went as a free lance; an individualist by nature she found it difficult to work under supervision. Making Washington her headquarters she moved whenever news of a battle reached the capital. Finally she became superintendent of the department of nurses for the Army of the James and took charge of the hospitals of an entire army corps.

When the Franco-Prussian War broke out Miss Barton was in Europe and again gave her services. There she saw the Red Cross in action. Later she published a small pamphlet, *The Red Cross of the Geneva Convention, What It Is* (Washington 1878), and secured the interest of President Garfield in American adhesion to the Red Cross treaty. In 1881 when the American National Society of the Red Cross was organized in Washington she became its president. Her new organization found a great opportunity for service in national calamities. In its first year she conducted the disaster relief work of the Red Cross after the Michigan forest fires. She directed relief in the Mississippi floods of 1883 and 1884, the Texas famine of 1885, the Charleston earthquake (1886), the Johnstown

flood (1889), the Armenian massacre of 1896 in Turkey and the Galveston tornado and flood of 1900. In 1898 she went to Cuba with a cargo of supplies for the *reconcentrados* and was here when the *Maine* was blown up. She then organized Red Cross service on the battlefields and in the hospitals.

The American Red Cross was reincorporated in 1900 by a new act of Congress and two years later Miss Barton was elected president for life. She did not occupy this office for long, however, for an unhappy controversy arose in the Red Cross during the years 1902–04 which led to her retirement in 1904. She was then well past eighty and in many ways her methods were still individualistic when a highly organized system had become necessary. But her devoted service of nearly a quarter of a century had left the Red Cross with a wide popular appeal and noble traditions of humanitarian service from which a great organization has developed.

EDITH ABBOTT

Consult: Barton, W. E., *The Life of Clara Barton*, 2 vols. (Boston 1922); Epler, P. H., *The Life of Clara Barton* (New York 1915); United States, House of Representatives, 64th Cong., 1st and 2nd Sess., Committee on the Library, *Memorial to Clara Barton. Hearings on H. R. 16606* (Washington 1917).

BARTON, JOHN (dates of birth and death unknown), early nineteenth century English economist. He is remembered chiefly for his pamphlet entitled *Observations on the Circumstances which influence the Condition of the Labouring Classes of Society* (London 1817). In it Barton pointed out the fallacy implicit in the 1817 report of the Select Committee on Poor Law, which assumed that every increase in capital necessarily sets in motion a proportionately increased amount of labor. He held, on the contrary, that an increase of capital at the disposal of the employer leads to the introduction of labor saving machinery and so diminishes rather than augments the demand for labor. Since periods of unemployment are inevitable, he advocated a program of public relief. In his chapter on machinery, added to the third edition of the *Principles*, Ricardo conceded Barton's point to the extent of admitting that an increase of capital will be followed by an increased demand for labor "in a diminishing ratio." Malthus' answer to Barton reduced itself to the assertion that in general "the use of fixed capital is extremely favorable to the abundance of circulating capital" (*Principles of Political Economy*, London 1820, p. 261–65). In specific refutation of Barton, McCulloch argues in an appendix to his *Principles* that the introduction of machines lowers costs and enables consumers to use the unspent income in buying other goods. In spite of these criticisms Barton secured general recognition for the notion that the portion of capital providing the demand for labor might vary independently of variations in total capital.

W. H. DAWSON

Consult: Cannan, Edwin, *A History of the Theories of Production and Distribution* (2nd ed. London 1903) p. 114–16, 259.

BASEDOW, JOHANN BERNHARD (1724–90), German educator. After a restless youth and a period of theological studies he became in 1749 a private tutor. In this capacity he tested the "natural method" of instruction in Latin, a subject on which he wrote his doctor's thesis. For a number of years his pedagogical career was interrupted by extended controversies in which his theological writings involved him. He reverted to pedagogy, however, with the publication of the *Vorstellungen an Menschenfreunde* (Bremen 1768; later ed. by T. Fritzsch, Universal-Bibliothek, Leipsic 1903–06), a proselytizing work in which he advocated nonsectarian, practical instruction by the play method. His appeal aroused wide interest and procured the financial support that made possible the publication of the *Elementarbuch*, an elementary textbook, and the *Methodenbuch*, which were combined to form the *Elementarwerk* (3 vols., Dessau 1774; critical ed. by T. Fritzsch, Leipsic 1909). In 1774 Basedow founded a model school in Dessau which was called the Philanthropin. The chief features of the school were plain loose uniforms, physical exercise, walking trips, manual training and handicraft, a humane and spontaneous atmosphere and a "natural" mode of life, but it also provided for the active stimulation of ambition through orders of merit. The contrast to the traditional pedantic school methods attracted such able pedagogues as Campe, Guts Muths, Olivier, Salzmann, Trapp and Wolke. Basedow's restless and contentious temperament combined with other unpleasant traits made all his colleagues leave him and caused serious crises in the life of the Philanthropin. Shortly before his death Basedow withdrew, and in spite of clever advertising, good teachers and recognized results the school closed in 1793.

In his early works Basedow anticipated Rous-

seau as the herald of a rationalistic pedagogy. While *Émile* cannot have failed to influence him, he went beyond Rousseau in requiring that education be conducted in a community of students and that they be instructed at an early age in religious and sexual matters. He became the first rallying point of philanthropinism—the school of German educational thought in which "reason" and "nature" were used as concepts underlying a demand for reform in school organization and methods of instruction. This reform called for state schools under state supervision with departmental separation, objective instruction and the substitution of conversation for grammar and memorized vocabularies as a method of teaching.

HELMUT WIESE

Consult: Diestelmann, Richard, *Johann Bernhard Basedow*, Grosse Erzieher series, vol. ii (Leipsic 1897); Basedow, Armin, "Johann Bernhard Basedow 1724–1790" in *Friedrich Manns pädagogisches Magazin*, vol. cmxcv (Langensalza 1924), containing a bibliography; Piazzi, Alfredo, *L'educazione filantropica. nella dottrina e nell' opera di Giovanni Bernardo Basedow* (Milan 1920).

BASING POINT PRICES are delivered prices calculated by adding together the established price at some point, called the basing point, and specified freight charges from such point to the several points for which these prices are made, this formula being applied irrespective of actual origin of shipments or of actual freight incurred. There may be a single basing point, as Pittsburgh formerly was for rolled steel, or multiple basing points, as there are now for many steel products, cement and other commodities. In the latter case the basing point price for any given locality is the lowest sum of price at basing point plus freight therefrom, all basing points considered. Zone prices, as the term is commonly used, are a form of single basing point prices. The zone price is uniform for each of a series of specified areas or zones and is the sum of a price for basing point plus some sort of average of freight rates therefrom to various points in the zone. Zone prices for steel based upon Pittsburgh were common prior to 1903. The practise of equalizing freight or of allowing to the buyer freight in excess of that from the mill nearest to destination freightwise is a variant of the multiple basing point system. This practise rests on the theory of substantially uniform mill prices for standardized commodities shipped by mills variously located. Although prices are f. o. b. mill, freight equalized, if all mill prices are uniform, the formula results in a price for a given destination likewise uniform for all mills and made up of the mill price plus the lowest freight, all mills considered. The terms basing point and basing line are used also in connection with railroad rates.

Conspicuous as an example of basing point practise in the manufacturing field and illustrative of its nature, economic effects and legal status is the so-called Pittsburgh-plus system. Steel manufactured by mills outside Pittsburgh was quoted f. o. b. Pittsburgh, but was actually sold only (with certain minor exceptions) at a delivered price, i.e. the price f. o. b. Pittsburgh plus the all rail freight therefrom. This practise, which occurred sporadically prior to 1901, had by 1904 become general in rolled steel and was shown in the action by the Federal Trade Commission against the United States Steel Corporation, 1921–24, to have been an adjunct of the associations, agreements, pools, understandings and like devices for fixing and maintaining prices common to the steel industry prior to 1903 and for some time thereafter. It served the purpose of stabilizing the industry because it made the price of steel throughout the country depend upon a single variable: the price at Pittsburgh as established by the Steel Corporation. On September 1, 1917, the War Industries Board established a Chicago base price on plates, shapes and bars equal to the Pittsburgh base, but restored the exclusive Pittsburgh base on July 1, 1918.

In the first two decades of the century, steel fabricators outside Pittsburgh complained from time to time of discrimination in favor of Pittsburgh users. They were not, however, seriously affected while railway rates remained low. The increase in railway rates, however, during and since the war aroused western fabricators to action. On August 1, 1919, following the organization of several hundred steel fabricators into the Western Association of Rolled Steel Consumers, application was made by this association to the Federal Trade Commission for complaint against the United States Steel Corporation and certain of its subsidiaries, alleging that Pittsburgh-plus violated Section 5 of the Federal Trade Commission Act forbidding unfair methods of competition and Section 2 of the Clayton Act with respect to discriminatory prices. On April 26, 1921, complaint was issued by the commission.

In defense of Pittsburgh-plus it was asserted that Pittsburgh produced more steel than was

required for local consumption, while other manufacturing points produced less. The surplus moving to points of deficit, even though they were producing points, would command the Pittsburgh price plus the freight. This would result in the apparently discriminatory net mill prices for steel shipped from mills at points of deficit; but it was contended that this was a discrimination in good faith to meet competition and was permitted by Section 2 of the Clayton Act. This reasoning failed, however, to make clear why, if competition prevailed and there was a deficit production, for example, at Chicago, steel should be shipped therefrom at a net price lower than could be secured by supplying the Chicago demand. In fact the testimony and statistics furnished by steel manufacturers seemed to prove conclusively that Chicago produced much more steel than was required for local consumption. This surplus production coupled with costs actually below those at Pittsburgh made unreasonable the prices at Chicago, which were higher than those at Pittsburgh by substantially the amount of the freight.

The statement of the complainants, supported by the testimony of three economists, W. Z. Ripley, F. A. Fetter and J. R. Commons, contended that if steel were sold under freely competitive conditions its sale would be made f. o. b. producing mill, the f. o. b. mill price being uniform for all destinations. They held that the abolition of Pittsburgh-plus would have beneficial results in the decentralization of steel fabrication to points of relatively low cost production and large demand, in the substantial reduction of uneconomic freighting and finally in a reduction in prices to the ultimate consumers by an amount which would not only represent the Pittsburgh freight but also the existing increase in fabricators' and dealers' overhead due to increased cost of material and restricted volume.

On July 21, 1924, the commission ordered the defendants to cease and desist from quoting or selling in interstate commerce rolled steel products upon a Pittsburgh base price (unless shipped from Pittsburgh) or upon the price of any basing point other than that from which they were actually shipped. In 1922 the defendants had announced partial discontinuance of the Pittsburgh-plus practise and on September 16, 1924, they filed with the commission a report stating they would conform to the commission's orders as far as practicable.

While in this case the steel corporation had undisputed control of prices and the only charge was that of discrimination against non-Pittsburgh users of steel, the legality of which practise under the Clayton and Federal Trade Commission Acts has never been decided by the Supreme Court, another case involving the use of the single basing point in the attempt to induce competing manufacturers to quote uniform delivered prices came before the Supreme Court on a charge of violation of the Sherman Anti-Trust Act. In this case, that of the Maple Flooring Manufacturers Association (268 U. S. 563, June, 1925), the court found that the publication of "average costs" and of the freight rate book listing rates from basing point (Cadillac, Michigan) to destination cannot as such be taken as evidence of the existence of an agreement for fixing and maintaining prices and does not constitute an unlawful restraint of commerce.

Where the industry is not localized in a relatively small area the multiple basing point system appears to be more practicable than the single basing point in bringing manufacturers variously located to sell in a given locality at uniform delivered prices. It operates more easily under the guise of active competition, and while the general average of its delivered prices may be lower it is not necessarily so. Moreover it maintains the uniformity of prices at the destination point with all the rigor of the single basing point system. The legality of this practise was questioned on the basis of the Sherman Anti-Trust Act. In the Cement Manufacturers Protective Association case (268 U. S. 588, June, 1925) the Supreme Court ruled that the compilation and distribution to members of the association of freight rate books listing rates from established basing points to consuming cities did not imply a purpose to control prices and was not in itself an unlawful restraint of commerce.

When the basing point practise is generally observed by an industry, a definite price for each locality is fixed through the automatic operation of a formula method of selling, and all competition in price in such localities is thereby eliminated. The general level of delivered prices for the industry is forced above that of a freely competitive system by at least the amount of the cross freighting. Moreover under the multiple as well as the single basing point sales are made by the same manufacturer at the same time at different net prices

such as apparently to constitute discrimination within the meaning of the Pittsburgh-plus decision.

G. A. STEPHENS

See: DISCRIMINATIONS, PRICE; RAILROAD RATES; TRUSTS; IRON AND STEEL INDUSTRY.

Consult: Commons, J. R., "Delivered Price Practice in the Steel Market" in *American Economic Review*, vol. xiv (1924) 505–19; Fetter, F. A., "The Economic Law of Market Areas" in *Quarterly Journal of Economics*, vol. xxxviii (1923–24) 520–29; United States, Federal Trade Commission, *Decisions*, vol. viii (July 21, 1924–March 22, 1925) 1–65.

BASNAGE, JACQUES CHRÉTIEN (1653–1725), Protestant theologian and historian. Forced to leave France after the revocation of the Edict of Nantes, Basnage emigrated to Holland, where he was minister successively at Rotterdam and The Hague. Among his twenty-five works, mainly of theological interest, the most important is *L'histoire et la religion des juifs depuis Jésus Christ jusqu'à présent* (5 vols., Rotterdam 1706–11; new ed., 15 vols., The Hague 1716–26; tr. by T. Taylor, London 1706, abr. 1708). This work, intended as a supplement to Josephus, purports to deal with literary and intellectual as well as political history. Basnage was ignorant of Hebrew and his work is therefore based principally on the writings of Christian theologians together with those Hebrew classics which were accessible in Latin translations and a few more recent works in Spanish and Portuguese. In his acceptance of authorities Basnage was uncritical, not to say credulous. But he was the first historian, whether Jew or Gentile, to envisage Jewish history as a comprehensive whole from the Biblical age down to modern times and to draw upon secular as well as Hebraic sources for the reconstruction of the course of events. Hence Basnage's *magnum opus* rapidly attained semi-classical status among Jews as well as among Christians. It was considered by Gibbon and Voltaire the fundamental authority on the subject and was translated into English, Italian and even Hebrew. Not until the nineteenth century was well advanced was it superseded by Jost's *Geschichte der Israeliten*, which was based upon it.

CECIL ROTH

Consult: Mailhet, E. A., *Jacques Basnage, théologien, controversiste, diplomate, et historien* (Geneva 1880).

BASSERMANN, ERNST (1854–1917), leader of the German National-Liberal party. He began his career as a practising lawyer and as a member of the municipal council in his native Mannheim. In 1893, as a candidate of the National-Liberal party, he was elected to the Reichstag, where he served except for brief interruptions until his death. When Bennigsen retired in 1898 Bassermann succeeded him as party leader and, despite the pressure from one side to join the Conservatives and from the other to cooperate more closely with the parties of the Left, he effectively maintained the unity of his party. In 1902 he helped to put through the new protective tariff. He was a close friend of Chancellor Bülow and in 1907 he readily joined the conservative-liberal bloc led by Bülow in opposition to the coalition of the Center and Social Democratic parties. He was not in accord with Bülow's successor, Bethmann-Hollweg, whose handling of foreign affairs he considered unfortunate. Bassermann later became convinced of the necessity of political reform through the grant of wider powers to the Reichstag. After 1912 he therefore tended more toward the Left although he still refused to cooperate with the Social Democrats. During the war he was pessimistic about the future international position of Germany. Serious heart trouble prevented him from taking part in the movement for political reform which began in 1917.

Bassermann's speeches on foreign policy were collected and edited by Franz Mittelmann (Berlin 1914).

LUDWIG BERGSTRÄSSER

Consult: Roon, E. von, *Ernst Bassermann* (Berlin 1925); Goldschmidt, Hans, "Ernst Bassermann" in *Deutsches biographisches Jahrbuch*, vol. ii (1928) 13–18; Eschenburg, Theodor, *Das Kaiserreich am Scheideweg* (Berlin 1929).

BASSETT, JOHN SPENCER (1867–1928), American historian and publicist. As professor of history at Trinity College (1893–1906), now Duke University, and at Smith College (1906–28) he stimulated interest in the collection and publication of historical material; and as founder and editor (1902–05) of the *South Atlantic Quarterly* he exerted himself to quicken and broaden the intellectual life of the South. His essay, "Stirring up the Fires of Race Antipathy" (*South Atlantic Quarterly*, vol. ii, 1903, 297–305), provoked a public agitation of the race question. The feeling aroused by this incident involved Bassett in a controversy over academic freedom.

Bassett edited several collections of personal documents illustrative of American history at

different periods, in connection with which an essay on the life and times of the Byrd family of Virginia is especially important, and wrote a number of important monographs on the history of North Carolina. His most notable historical publications, however, were a *Life of Andrew Jackson* (2 vols., New York 1911; new ed. 1 vol., 1916), valuable chiefly for the period before Jackson's presidency; *The Middle Group of American Historians* (New York 1917), which remains the standard contribution to that field of historiography; and *The Correspondence of Andrew Jackson* (vols. i–iv, Washington 1926–29; vols. v and vi to be published). Under the inspiration of President Wilson's address of January 22, 1917, on the essential terms of peace, he wrote *The Lost Fruits of Waterloo* (New York 1918, 2nd ed. 1919), a discussion of the outlook for world peace and a league of nations. His last work, *The League of Nations: a Chapter in World Politics* (New York 1928), is a critical but sympathetic history of the league, of which he had become an enthusiastic supporter.

WILLIAM MACDONALD

Consult: *Smith College Alumnae Quarterly*, vol. xix (1928) 269–74; *South Atlantic Quarterly*, vol. xxvii (1928) 113–16; *American Historical Review*, vol. xxxiv (1928–29) 483–84.

BASTIAN, ADOLF (1826–1905), German anthropologist. Bastian has been called the father of ethnography, the first naturalist of *homo sapiens*. He traveled widely to collect his specimens; between 1850 and 1880 he visited Peru, Mexico, North America, China, Japan, Mongolia, Siberia, India, Australia, the South Seas and Africa. Bastian described his findings in such works as *Der Mensch in der Geschichte* (3 vols., Leipsic 1860), the first detailed descriptive account of exotic civilizations by one who had seen and heard for himself; *Die Völker des östlichen Asien* (6 vols., Leipsic 1866–71); and *Die Culturländer des alten America* (3 vols., Berlin 1878–89). In 1886 he became director of the Berlin Ethnological Museum, then exhibiting for the most part Bastian's own collections. Three years later he left for Russia and the East, where he spent the greater part of his remaining years in travel and study.

Although Bastian was a traveling naturalist he always remained a true spiritual son of the German philosophers. The basic concepts of his ethnological system were his "elemental ideas" (*Elementargedanken*) set forth in *Ethnische Elementargedanken in der Lehre vom Menschen* (Berlin 1895), his "folk-ideas" (*Völkergedanken*) set forth in his *Der Völkergedanke . . . und seine Begründung auf ethnologische Sammlungen* (Berlin 1881) and his "geographical provinces" set forth in *Zur Lehre von den geographischen Provinzen* (Berlin 1886). The "elemental ideas," although common to mankind, express themselves in varying forms through the "folk-ideas" tied to geographical provinces in which environmental factors and historical processes—including importations from without—cooperate in shaping local cultures. In these germinal ideas some anticipations of modern anthropological concepts may be discerned. The "elemental ideas" apply to the original nature of man, the "folk-ideas" are now discussed as culture, while the geographical provinces foreshadow the "culture areas" of American anthropologists. Bastian unfortunately did not clarify his thought by examples. Even the "elemental ideas" were nowhere enumerated. His literary habits were distracting and his lively and imaginative style was vitiated by obscurities. Interminable quotations, which bear witness to an amazing erudition and a stupendous memory, parentheses within parentheses, finally became so overwhelming that even Bastian's friends and disciples could no longer read him. His mind died not of decay but of involution.

ALEXANDER GOLDENWEISER

Consult: For his life, Steinen, Karl von den, "Gedächtnisrede auf Adolf Bastian" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 236–49. For a complete bibliography of his writings up to 1896, *Internationales Archiv für Ethnographie*, supplement to vol. ix (1896). For his ideas: *Man*, vol. v (1905) 139–43; Schwarz, Richard, *Adolf Bastians Lehre von Elementar- und Völkergedanken* (Leipsic 1909); Hönigsheim, Paul, "Adolf Bastian und die Entwicklung der ethnologischen Soziologie" in *Kölner Vierteljahrschrift für Soziologie*, vol. vi (1926–27) 61–76; Preuss, K. Th., "Adolf Bastian und die heutige Völkerkunde" in *Ipek 1927*, p. 82–91.

BASTIAT, FRÉDÉRIC (1801–50), French economist and social philosopher. He occupied a position of considerable importance in his native *département* of Landes in his earlier years, having inherited a competence, engaged in agriculture, written on topics of provincial interest and served as local magistrate. In 1844 Bastiat attained more general distinction with the publication of his brilliant article in defense of free trade, "De l'influence des tarifs français et anglais sur l'avenir des deux peuples" in the *Journal des économistes* (vol. ix, 1844, p. 244–

71). Encouraged by Cobden's example he attempted the organization of Associations pour la Liberté des Échanges with slight success and became secretary of the Paris association. His reputation was greatly enhanced by the periodical appearance of his *sophismes économiques* and *petits pamphlets*, popular essays attacking protectionism and other forms of economic privilege as well as socialism.

Although primarily interested in controversial questions of public policy he began shortly before his death a systematic exposition of economic doctrines, of which his *Harmonies économiques* is the first volume. In this work he appears as the most ardent and complete continental exponent of economic liberalism. His thought is dominated by an optimistic naturalism reminiscent of the eighteenth century and by a belief in final causes which tend to produce "the indefinite approximation of all classes toward a level, which steadily rises—in other words, the equalization of individuals in the general amelioration." Like the physiocrats he clothed his work in the garment of the *jus naturae*. Starting from such implicit postulates his doctrinal system becomes of necessity an argument for freedom rather than a scientific interpretation of economic data. The book is built around a central antithesis between coercive and restraining institutions and those which arise spontaneously to adjust the reciprocal relations between individuals and the society in which they live.

His originality of doctrine, deriving somewhat from Dunoyer, is to be found mainly in his value theory. Departing from the Ricardian emphasis upon costs and sacrifice he traces value to a foundation of services rendered, exchange values thus representing a ratio between services. His theory of rent, directed at the socialistic modification of the Ricardian theory, translates the income from land into a reward for expenditures in making land productive and excludes the gifts of nature as a possible field of private appropriation. The similarity of his doctrines to those of H. C. Carey led to charges of plagiarism by the latter.

His somewhat cavalier treatment of facts to fit them into his value theory, and in particular the logical impasse in which his theory of rent involved him, provoked severe criticism both from the socialists and from such economists as Cairnes, Marshall and Böhm-Bawerk. In spite of his sincerity, enthusiasm and felicity of expression he failed to leave much mark upon the development of economic thought, a failure due perhaps as much to the instability of his philosophical position as to the weaknesses of his doctrinal system. Bastiat's works have nevertheless retained considerable popularity in France; the English translations of his controversial writings were often used for the purposes of antiprotectionist propaganda in the United States.

PAUL T. HOMAN

Works: *Oeuvres complètes*, ed. by P. Paillottet with biography by R. de Fontenay, 7 vols. (2nd ed. Paris 1862–64).

Consult: Gide, Charles, and Rist, Charles, *Histoire des doctrines économiques* (5th ed. Paris 1926), English tr. from 2nd ed. by W. Smart and R. Richards (Boston 1915) bk. iii, ch. i.

BATEMAN, ALFRED EDMUND (1844–1929), English statistician and civil servant. From 1865 to 1903 he was an official of the British Board of Trade. At an early stage of his service he became engaged in statistical work, and although he wrote little as a private person he had an important share in the development of the official trade statistics of his country. He was an active member of the Royal Statistical Society after 1877 and took a prominent part in the work of the International Institute of Statistics.

Bateman's main public service, however, was in the domain of commercial relations and overseas trade. From Sir Louis Mallet, his first chief in the old Commercial Department, he inherited the tradition of vigilant and active commercial diplomacy on behalf of British trade. Bateman was in large measure responsible for preserving this tradition through a time of great difficulty and apathy and for reviving eventually the practise of vigorous assistance to commerce through departmental and diplomatic action. He steadily refused to admit that the absence of a "bargaining counter" in the shape of a tariff was a sufficient ground for abstaining from direct participation in commercial negotiations, and although in this matter he was in some respects in advance of his time he lived to see his doctrine fully recognized. In 1897 he played an important part in initiating the Commercial Intelligence Branch which was the germ of the now flourishing Department of Overseas Trade.

A shrewd and tenacious negotiator, Bateman rendered distinguished service in the field of commercial diplomacy; he took part in numerous international negotiations such as the International Sugar Conferences of 1887–89 and the

conferences on industrial property (1911) and on exhibitions (1912). He was also a member of many domestic conferences and commissions which dealt with a wide range of subjects including commercial treaties, foreign and dominion trade, foodstuffs in war time and shipping rings.

H. LLEWELLYN SMITH

Consult: Royal Statistical Society, *Journal*, vol. xcii (1929) 641–43.

BATESON, MARY (1865–1906), English historian. She was educated at Newnham College, Cambridge, where she became a fellow and lecturer. Under the influence of Bishop Creighton, then professor of ecclesiastical history, she turned her attention to monastic history, on which she published several important articles in the *English Historical Review*. However, she soon discovered that her real interests lay in the field of municipal history. She was a rapid worker and in her short life produced an astonishing amount of valuable and original work in this field. The *Records of the Borough of Leicester* (3 vols., London 1899–1905) rank among the few "really adequately edited collections of English municipal documents." Her brilliant articles contributed to the *English Historical Review* (vols. xv–xvii, 1900–02) on "The Laws of Breteuil" threw an entirely new light on the development of English boroughs by tracing the origin of many of the borough customs hitherto regarded as indigenous to English soil to the Norman *bourg* of Breteuil. Her most mature and important work was *Borough Customs* (2 vols., Selden Society Publications, vols. xviii and xxi, London 1904–06), a careful classification of borough customs, supplemented by masterful introductions which dealt with the relation of borough law to common law and revealed the origin of many of its features in both folk customs and royal administrative law.

AUSTIN L. POOLE

Consult: Poole, Reginald L., in *English Historical Review*, vol. xxii (1907) 64–68.

BATESON, WILLIAM (1861–1926), British geneticist. Educated at Rugby and at St. John's College, Cambridge, Bateson became in 1908 professor of biology at Cambridge and two years later director of the John Innes Horticultural Institute at Merton. He made notable contributions to the study of variation and promoted the acceptance and elaboration of Mendelism. He also wrote on educational and social problems.

In his addresses before the British Association for the Advancement of Science and in other lectures Bateson frequently stressed the scientists' ignorance of the causes of mutations and hence of the way evolution occurs. His Toronto address before the American Association for the Advancement of Science in 1922 was, with utter misapprehension, hailed by anti-evolutionists in the United States as a vindication of their obscurantism. Bateson repeatedly emphasized the supreme importance of men of genius and of changes in the quality of the population in relation to cultural changes; but he did not view all race mixture as evil, holding that "everything turns on the nature of the ingredients." Deeply impressed with the social significance of individual differences he thought democracy unstable because it was not in harmony with biology. While he favored efforts to reduce the number of defectives he was skeptical of positive eugenic measures, present knowledge of human heredity being inadequate. Yet he feared lest popular education should impoverish genetically the lower classes when the upper classes are foregoing reproduction.

FRANK H. HANKINS

Important works: *Materials for the Study of Variation* (London 1894); *Mendel's Principles of Heredity* (Cambridge, Eng. 1909, 3rd impression with additions 1913); *Problems of Genetics* (New Haven 1913); *Essays and Addresses together with a Short Account of His Life*, ed. by Beatrice Bateson (Cambridge, Eng. 1928); *Scientific Papers*, ed. by R. C. Punnett, 2 vols. (Cambridge, Eng. 1928), containing also a complete bibliography.

Consult: Punnett, R. C., in *Edinburgh Review*, vol. ccxxiv (1926) 71–86; Morgan, T. H., in *Science*, vol. lxiii (1926) 531–35.

BATIFFOL, PIERRE (1861–1929), French historian of early Christianity. Batiffol studied in Paris under Hogan and the celebrated Hellenist, Tournier, and prepared for scientific theology under the direction of Duchesne and of the archaeologist, de Rossi. In 1898 he became rector of the Institut Catholique of Toulouse and with Mathieu founded the *Bulletin de littérature ecclésiastique*, which under his direction (1899–1907) became widely influential. He was forced out of his position as rector in 1908 through an accusation of adhering to modernism. He became chaplain of the Collège Sainte-Barbe, titular canon of Notre Dame of Paris and died suddenly as he was about to be admitted to the Institut de France.

Batiffol sought to discourage the clergy from striving after mere eloquence; in its place he urged them to substitute the scientific research of "positive theology." His eminent standing as a historian is assured by his fine, although perhaps too sharp, sense of discrimination and by his distinctly individual faculty for shedding new light on a problem through more exact interpretation of the literary and archaeological texts. Of his prolific works his vast researches into the origins of Catholicism are of primary importance: *L'église naissante et le catholicisme* (Paris 1908, 11th ed. 1929; tr. by H. L. Brianceau as *Primitive Catholicism* New York 1911); *La paix constantinienne et le catholicisme* (Paris 1914); *Le catholicisme de Saint Augustin* (Paris 1920); *Le siège apostolique* (Paris 1924). Opposing the thesis developed by Ritschl, Harnack, Sohm and Sabatier that the Christian community had been for a long period inorganic, bound together only by a common faith and brotherhood, Batiffol conceived of a Christian community in which from its very beginnings authority played its role both in doctrine and in administrative machinery. In his last volumes he emphasized particularly the dominion of the bishop of Rome. Although Batiffol's synthesis leaves something to be desired from the point of view of factual systematization and of its implicit philosophic basis, it remains of high quality. Even Harnack (*Theologische Literaturzeitung*, vol. xxxiv, 1909, p. 51–53) had the fairness to acknowledge it as epoch making.

PIERRE DE LABRIOLLE

Consult: Rivière, Jean, *Monseigneur Batiffol* (Paris 1929); Carrière, Victor, "Monseigneur Pierre Batiffol" in *Revue d'histoire de l'église de France*, vol. xv (1929) 126–29.

BATLLE Y ORDÓÑEZ, JOSÉ (1856–1929), Uruguayan statesman. After completing his education in Europe he returned to Uruguay, became editor of *La razón* and later founded the newspaper, *El día*, in which he attacked prevailing political abuses and irregularities. He served as the *jefe político* of Minas, became deputy for El Salto in 1891, member of the Council of State in 1898 and president of the Senate and provisional executive in 1899. In 1903 he was elected president of Uruguay and again in 1911, serving each time for four years.

Batlle y Ordóñez was one of the outstanding liberals who contributed to the social regeneration of Uruguay. He was a Social Democrat, an advanced and fearless reformer, and his radical social and political philosophy is often referred to as "Batllismo." Under his administration the government began to take a greater interest in the social and economic welfare of the masses, and legislation, modern in type, was enacted regarding hours of work, pensions, inheritance taxes and the nationalization of the telegraph and telephone service. His political reforms included putting elections on a fairer basis and countenancing political opposition. One of his most important projects was the reform of the constitution. He realized that a single strong executive gave rise to much of Uruguay's political upheavals and proposed the creation of a collegiate executive. This and other constitutional changes which he advocated were incorporated in the new constitution of Uruguay promulgated in 1919.

PAUL VANORDEN SHAW

Consult: Parker, W. B., *Uruguayans of To-Day* (London 1921) p. 57–62; Zum Felde, Alberto, *Proceso histórico del Uruguay* (Montevideo 1919) ch. viii; Testena, Folco, "El innovador: José Batlle y Ordóñez" in *Nosotros*, vol. xxviii (1918) 455–62.

BAUDEAU, NICOLAS, ABBÉ (1730–*c.* 1792), French economist. In 1765 he founded the *Ephémérides du citoyen* in order to defend the interests of "humanism" and to urge the abolition of slavery, but he used it also to combat the economic doctrines of Quesnay and his school. In 1766, however, Baudeau was suddenly converted from his liberal mercantilism, tinged with a more or less socialistic populationism, to physiocracy; from 1767 to 1772 his paper served as the official party organ of the physiocrats. The *Ephémérides* was suppressed in 1772 but from December, 1774, to June, 1776, and again in 1788 it reappeared under the title *Nouvelles ephémérides économiques*. A clever journalist, Baudeau could discuss with clarity a wide range of subjects. He gave currency to the new term physiocracy, and in his *Première introduction à la philosophie économique ou analyse des états policés* (Paris 1771; reprinted by A. Dubois, Paris 1910) furnished an exposition of the system, which although frequently considered most authoritative is really rather loose and superficial. His boldness as a propagandist proved his undoing. He indiscreetly reproached Turgot for diffidence in reform and compromised him by preferring rash charges against one of his colleagues. A plot of financiers brought about the suppression of the magazine in 1776 and the exile of its editor to the prov-

inces. A decade later Baudeau took an active part in the pre-revolutionary fiscal discussion and published *Les vrais principes de l'administration des finances opposés à ceux de M. Necker* (n. p. 1785) and *Idées d'un citoyen presque sexagénaire sur l'état actuel du royaume de France* (Paris 1787).

G. WEULERSSE

Consult: A. Dubois' introduction to his printing of Baudeau's *Première introduction* (Paris 1910); Weulersse, Georges, *Le mouvement physiocratique en France de 1756 à 1770*, 2 vols. (Paris 1910) vol. i, p. 103–06.

BAUDOUIN, FRANÇOIS (Franciscus Balduinus) (1520–73), jurist and humanist. He was born in Arras, then a part of the empire, and was educated at the University of Louvain. In 1540 he went to Paris, where he associated with Dumoulin and other eminent jurists. From 1548 to 1555 he held the chair of Roman law at Bourges. In Strasbourg he assisted Sturm in his Protestantisches Gymnasium and at Heidelberg he lectured at the university (1556–61).

Baudouin played a prominent part in the bitter religious conflicts of the sixteenth century. He was a zealous advocate of church reform without violence or schism and made several attempts at conciliation, including a plan for a series of public discussions between leaders of the different religious factions. His efforts in this direction failed, however, and resulted in his being distrusted and attacked by the Protestants and denounced as a heretic by the Catholics. His quarrels with his juristic colleagues, especially Duaren and Hotman, and the acrimony of his disputes with Calvin and Beza indicate a spirit less tolerant than that of his contemporary, Erasmus. But he maintained the lofty tradition of Papinian in that he declined to be one of Alva's judges and refused to defend the Massacre of St. Bartholomew.

Baudouin's writings were historical investigations rather than purely legal discussions. The celebrated pamphlet on the necessity of the historical method in law, entitled *De institutione historiae universae et ejus cum jurisprudentia conjunctione* (Paris 1561) established him as one of the founders of the historical school of jurisprudence. He coined the phrase "sine historia caecam esse jurisprudentiam." Baudouin's edition of the *Institutes* of Justinian was a notable illustration of his method, which was to interpret the texts in the light of ancient history and literature. Through Christian Thomasius and Heineccius his influence was maintained in Germany until it found expression in the school of Savigny and Puchta.

MAX RADIN

Important works: Baudouin's legal writings are contained in *Jurisprudentia romana et attica*, ed. by J. G. Heineccius, vol. i (Lyons 1738).

Consult: Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–1910) vol. i, p. 382–83; Duquesne, Joseph, "François Baudouin et la réforme" in Académie Delphinale, *Bulletin*, 5th ser., vol. ix (1917) 55–108.

BAUDRILLART, HENRI JOSEPH LÉON (1821–92), French economist. A pupil of Victor Cousin, he began his academic career by teaching philosophy but soon shifted his attention to economics. In 1852 he was appointed professor at the Collège de France, where he lectured on the history of economic doctrines. He was also professor of economics at the École des Ponts et Chaussées and delivered popular lectures to working class audiences in Paris. During the years 1855–65 he was editor of *Journal des économistes*. In 1863 he was elected to membership in the Académie des Sciences Morales et Politiques.

At the age of twenty-five Baudrillart published *Éloge de Turgot* (Paris 1846) and several years later a thorough study of Bodin (*Jean Bodin et son temps*, Paris 1853). His principal work is *L'histoire du luxe privé et public* (4 vols., Paris 1878–80; 2nd ed. 1880–81). It is a discussion of the ethical and economic aspects of luxury in historical civilizations and demonstrates the ineffectiveness of sumptuary legislation. In 1878 he was put in charge of an investigation of the agricultural population of France, conducted by the academy. His reports describing the history and contemporary condition of peasantry in each province were first printed in the *Séances et travaux* of the academy and later republished separately (*Les populations agricoles de la France*, 3 vols., Paris 1885–93). He was also the author of an economic text (*Manuel d'économie politique*, Paris 1857; 5th ed. 1883) and of *Études de philosophie morale et d'économie politique* (2 vols., Paris 1858).

Baudrillart was one of the leaders of the French liberal school. He opposed protectionism and other forms of government regulation except in a few instances such as protection of women and children in industry. He believed that the productivity of labor depends upon its intellectual and moral development and that the lot of the working class can be improved through

education. This emphasis on moral factors is characteristic of Baudrillart's thought.

ED. ESMONIN

Consult: *Journal des économistes*, 5th ser., vol. ix (1892) 254–60; Waha, Raymund de, *Die Nationalökonomie in Frankreich* (Stuttgart 1910) p. 51–56.

BAUER, BRUNO (1809–82), German philosopher and theologian. Bauer was dismissed from his post at the University of Bonn for his *Kritik der evangelischen Geschichte der Synoptiker* (2 vols., Leipsic 1841), which denied not only the divinity of Christ but His historicity, and classified the evangelists with Homer and Hesiod. One of the leading spirits of the young Hegelians, Bauer substituted for the "absolute" of Hegel the "infinite self-consciousness" which spun the world out of itself by a process of immanent criticism. This was an inverted expression of an ethical rationalism, revolutionary in theory only, directed against the contemporary church and state. Emphasizing the centrality of consciousness, Bauer developed a heroic conception of history according to which the ideas of great personalities were regarded as the exclusive factor in all development. Since true criticism meant freedom from all presuppositions, he espoused an absolute philosophical nihilism which rejected republicanism and socialism as half way measures. Although Bauer influenced Stirner and Nietzsche, he was severely criticized by Marx on the ground that his apotheosis of self-consciousness was essentially just as much an expression of Christian philosophical idealism as the system of Hegel and logically led to historical fatalism. Marx claimed that Bauer's presumably classless, presuppositionless standpoint resulted, despite his militant atheism, in dangerous political romanticism. For example, Bauer opposed the political emancipation of the Jews, maintaining that they were not yet free from religious delusions. In later life he served Bismarck and reaction.

SIDNEY HOOK

Consult: Kegel, Martin, *Bruno Bauer und seine Theorien über die Entstehung des Christentums* (Leipsic 1908); Barnikol, Ernst, *Das entdeckte Christentum in Vormärz* (Jena 1927); Mauthner, F., *Der Atheismus und seine Geschichte im Abendlande*, 4 vols. (Stuttgart 1920–23); Mehring, Franz, *Geschichte der deutschen Sozialdemokratie*, 2 vols. (9th ed. Stuttgart 1919) vol. i, p. 125–28, 130–33, 192–96 and 209–12.

BAUER, GEORG. *See* AGRICOLA.

BAUMES LAW. *See* RECIDIVISM.

BAUMSTARK, EDUARD (1807–89), German economist. He studied at Heidelberg, where he attained distinction by writing a prize essay, *Des Herzogs von Sully Verdienste um das französische Finanzwesen* (Mannheim 1828). After serving as a *Privatdocent* in Heidelberg from 1829 to 1838 he became professor of cameral and political sciences at Greifswald, where he remained until his death. At the same time he was also director of the Eldena academy (1843–76) and thus played an important part in German agricultural education. His course of lectures in this field was published as *Einleitung in das wissenschaftliche Studium der Landwirtschaft* (Berlin 1858).

Baumstark belongs to the generation of Rau, Hermann and Lotz. As the "last cameralist" he produced the first systematic textbook of the old model, *Kameralistische Encyclopädie* (Heidelberg 1835), in which he stressed the historical rather than the practical approach. He was an early disciple of Ricardo and produced the first accurate translation of the latter's work, *David Ricardo's Grundgesetze der Volkswirtschaft und Besteuerung* (2 vols., Leipsic 1837–38; 2nd ed. of vol. i, Leipsic 1877), the second volume of which consists of eleven essays furnishing a commentary on Ricardo's system. Baumstark's economic liberalism is also reflected in his *Staatswissenschaftliche Versuche über Staatskredit, Staatsschulden und Staatspapiere* (Heidelberg 1833), in which he expressed his adherence to the doctrine of international division of labor and criticized protectionism. As a quantity theorist he opposed the prohibition of bullion export and an increase in circulating medium through reminting. He considered that the credit of a state is not affected by the form of its government or by the size of its army; reasonable laws securing internal peace and cultural progress constitute the determining factor.

KURT ZIELENZIGER

Consult: Mucke, Richard, "Eduard Baumstark" in *Jahrbücher für Nationalökonomie und Statistik*, vol. xxxi (1878) 363–79.

BAUR, FERDINAND CHRISTIAN (1792–1860), German theologian and head of the so-called Tübingen school. His reputation as the founder of scientific research in the field of early Christianity is based primarily on his comprehensive work *Paulus, der Apostel Jesu Christi* (Stuttgart 1845, 2nd ed. Leipsic 1866–67; tr. by A. Menzies, 2 vols., London 1875–76).

His works cover the entire field of church history and, as in *Die christliche Lehre von der Versöhnung* (Tübingen 1838) and *Von der Dreieinigkeit und Menschwerdung Gottes* (Tübingen 1841–43), place particular emphasis on the history of dogma. Baur's *Epochen der kirchlichen Geschichtschreibung* (Tübingen 1852) is a critical examination of earlier work in the field. In his *Lehrbuch der christlichen Dogmengeschichte* (Stuttgart 1846, 3rd ed. Leipsic 1867) and the *Geschichte der christlichen Kirche* (5 vols., Tübingen 1853–63; vol. i, 3rd ed., vol. ii, 2nd ed. 1863; vol. i tr. by A. Menzies from 3rd ed., 2 vols., London 1878–79) he attempted under the influence of Hegelian philosophy to show that the course of church history was determined largely by the development of ideas according to the scheme of the triad. Thus he explained the early Catholic church as the synthesis of Judaic Christianity, the thesis, and pagan Christianity, the antithesis. Catholicism appeared to him as the union of the idea of the church with the reality of the world of experience; Protestantism as the dissociation of the idea of the church from the visible church. Baur clearly acknowledged the significance of established legal and social institutions for the entire course of church development and repeatedly stressed the influence of the church in molding social life. He characterized church organization, alongside of dogma, as one of "the two principal forms in which the idea of the church realizes itself." Nevertheless church history for Baur remained intellectual history primarily. Baur gathered around him a band of disciples and coworkers who together formed the "Tübingen School." Among the more prominent members of this school were Eduard Zeller, Albert Schwegler, Karl Planck and Karl Köstlin.

KARL VÖLKER

Consult: Fraedrich, G., *Ferdinand Christian Baur, der Begründer der Tübinger Schule, als Theologe, Schriftsteller und Charakter* (Gotha 1909); Pfleiderer, Otto, *The Development of Theology in Germany since Kant and its Progress in Great Britain since 1825* (London 1890) p. 224–35, 284–98.

BAX, ERNEST BELFORT (1854–1926), English socialist, social historian and philosopher. Bax was one of the earliest students of Marx in Great Britain and continued throughout his life to work at the literary and philosophical exposition of socialist principles. Shocked by the fate of the Paris Communards he was led thereby to a study of revolutionary theory and ultimately in 1879 to the elucidation of Marx's *Das Kapital*, the doctrines of which he began to expound in review articles which gave great satisfaction to Marx himself. When the Democratic Federation (later called the Social Democratic Federation), founded by H. M. Hyndman in 1881, developed in a socialist direction he joined it. Later in 1884, however, when that body split on the question of political action he allied himself with William Morris, holding that the effort of the federation should be purely educational. Bax collaborated with Morris during the years 1886–88 in a series of articles on *Socialism: Its Growth and Outcome* (later published in book form, London 1893), which appeared in their journal, the *Commonweal*. In these articles the doctrines of the Communist Manifesto were adapted to English conditions. Bax was the economic and philosophical theorist of Morris' Socialist League, but when in 1890 the league was captured by the anarchists he returned to the Social Democratic Federation. He followed Hyndman in taking the patriotic side in the controversy which split the federation in 1915 and remained in association with him until Hyndman's death in 1921.

In addition to his socialist activities and writings Bax is known for an antifeminism which is to be found most forcefully expressed in his books, *The Legal Subjection of Men* (London 1896, new ed. 1908) and *The Fraud of Feminism* (London 1913), and for a materialist rationalism as shown in *The Problem of Reality* (London 1892, rev. ed. 1914). In both respects his position was distinctive in the British socialist movement. His work on German history, *The Social Side of the Reformation in Germany* (3 vols., London 1894–1903, originally published as three separate studies), is valuable for its social emphasis.

MAURICE B. RECKITT

Consult: Bax, Ernest Belfort, *Reminiscences and Reflexions of a mid- and late Victorian* (London 1918); Arch, Robert, *Bax, Thinker and Pioneer* (London 1927); Gould, F. J., *Hyndman: Prophet of Socialism, 1842–1921* (London 1928).

BAXTER, RICHARD (1615–91), English nonconformist clergyman. He has been called the greatest of English Presbyterians. After his ordination by the Bishop of Worcester, Baxter was assigned in 1641 to the parish of Kidderminster where he remained until 1660. During these troubled years of civil war the power and eloquence of his sermons brought him renown

as a great preacher. Warning landlords against a peasants' uprising, Baxter suggested that as a deterrent they present to each of their tenants a copy of his work, *The Poor Man's Family Book* (London 1674, 5th ed. 1684). His *Poor Husbandman's Advocate* (available only in MS) offers constructive recommendations for reforms. "Negroes and other slaves" gave him deep concern. He expresses no disapproval of enslavement for debt or as a result of the mischances of war, but "to go as pirates and catch poor negroes or people of another land that never forfeited life or liberty, and to make them slaves, and sell them, is one of the worst kinds of thievery in the world." In politics the subtlety of his mind always led him to favor a middle course. He gloried in the ancient monarchy of England, had no faith in the ability of common people to govern, and still argued for the rights of Parliament. In Kidderminster, in London, in prison or in retirement to escape the persecution of the governments of Charles and of James, Baxter worked steadily on a voluminous series of books which are a conspicuous part of that long line of popular Christian literature, the vogue of which has lasted even to the present day.

CAROLINE FRANCIS RICHARDSON

Consult: Baxter, Richard, *Autobiography*, edited with introduction, appendices and notes by J. M. Lloyd Thomas (London 1925); Powicke, F. J., *A Life of the Reverend Richard Baxter, 1615–1691* (London 1924); Stephen, James, *Essays in Ecclesiastical Biography*, 2 vols. (London 1907) vol. ii, ch. i.

BAXTER, ROBERT DUDLEY (1827–75), English statistician and economist. His works on population, national income and wealth, public debts, local taxation and railway economics were valuable for his time because of the clear and informative presentation of statistical data. Baxter's treatises on public finance contain elements of permanent value. He contested the view that long standing taxes on real property were rent charges belonging to the state, maintaining that they must rank as bona fide taxation. He held that the current taxation of land and working class income was proportionally greater than that of the larger industrial incomes, and opposed Goschen by asserting that real property taxation had increased during the past generation. He preached retrenchment in national expenditure, caution in borrowing, and lowering of taxes, so as to conserve the national resources for great emergencies. He propounded a scheme for paying off the national debt by the formation of a sinking fund out of the proceeds of the railway duty which should be invested annually in railway securities. For local taxation Baxter advocated the creation of larger urban units of taxation in order to equalize the burden; the levying of a small surtax upon personal income to relieve the poor rate on land; and the division of the rates between owners and small tenants. The principle, to "look at taxation as a whole," which he consistently followed, gave special value to all he wrote.

W. H. DAWSON

Important works: *The Budget and the Income Tax* (London 1860); *Results of Railway Extension* (London 1866); *National Income: the United Kingdom* (London 1868); *The Taxation of the United Kingdom* (London 1869); *National Debts* (London 1871); *Local Government and Taxation* (London 1874); "The Recent Progress of National Debts" in Royal Statistical Society, *Journal*, vol. xxxvii (1874) 1–14.

Consult: For a description and appraisal of Baxter's work on national income, Stamp, J. C., *British Incomes and Property* (London 1916) p. 432–36.

BAYLE, PIERRE (1647–1706), French publicist and *philosophe*. Bayle was professor of philosophy at the Protestant Academy of Sedan, but when this institution was suppressed in 1681 he was forced to leave France and went to teach at Rotterdam. From there also he was expelled in 1693 as a consequence of his quarrels with the minister Jurieu. As a liberal and an apostle of tolerance Bayle was in fact the butt of the attacks of the dogmatists in the ranks both of Calvinism and Catholicism. His *Pensées sur la comète* (1683), his *Critique générale de l'histoire du calvinisme* (1682), a criticism of a book by P. Maimbourg and his establishment of the *Nouvelles de la république des lettres* (1684–87), a truly international review, gave him considerable prominence; but his greatest work was the *Dictionnaire historique et critique* (1697), which was widely read during the eighteenth century.

These works have established Bayle as one of the pioneers in historical criticism, a great figure in the history of rationalist thought and a precursor of sociological positivism. A follower of Montaigne and Descartes, he applied the canons of historical evidence to the history of systematic philosophy and of religious beliefs and moral ideas, especially as exemplified in the Bible, in the doctrines of Greek philosophy, in the works of Spinoza and other philosophers

of his time and in the writings of the theologians. At the same time he proclaimed that morals were independent of religion and found a basis for them in natural conscience and social utility. Bayle considered that an absolute and universal criterion of morals was provided by reason, which was primarily important as a faculty of practical judgment. As a speculative faculty, however, reason was for Bayle, who was neither mathematician nor natural scientist, an instrument of limited and relative value leading to the construction of merely hypothetical systems of thought. Thus is explained his opposition to all forms of dogmatism and his justification of tolerance. Bayle imparted to the thought of the early eighteenth century the intellectual attitude from which were later to emerge the positive sciences of man and society. From his works Voltaire and the *encyclopédistes* derived most of their arguments against the theologians and metaphysicians.

RENÉ HUBERT

Works: *Oeuvres diverses*, 4 vols. (The Hague 1725–27) containing a complete collection of Bayle's works, with the exception of the *Dictionnaire historique et critique* (which was originally published in 2 vols., Rotterdam 1697; reprinted in several later French editions, of which the best was that by Desmaiseaux, 4 vols., Amsterdam 1740; English translation by the author, 4 vols., London 1710 and by Desmaiseaux, 5 vols., London 1734–38). There is a recent critical edition of *Pensées sur la comète* by A. Prat, 2 vols. (Paris 1911–12).

Consult: Delvolvé, Jean, *Religion, critique et philosophie positive chez Pierre Bayle* (Paris 1906); Fabre, Joseph, *Les pères de la révolution* (Paris 1910) p. 4–38; Delbos, Victor, *La philosophie française* (Paris 1921) p. 145–52; Vorländer, Franz, *Geschichte der philosophischen Moral, Rechts- und Staats-Lehre der Engländer und Franzosen* (Marburg 1855) p. 563–83; Sée, Henri, *Les idées politiques en France au xviie siècle* (Paris 1923); Martin, Kingsley, *French Liberal Thought in the Eighteenth Century: A Study of Political Ideas from Bayle to Condorcet* (London 1929).

BAZARD, SAINT-AMAND (1791–1832), French Carbonaro and Saint-Simonian. In his poverty stricken youth he was comforted by the conviction that he had "a mission in the world." Under the influence of his father-in-law he was an active supporter of the Empire and later joined the opposition to the reactionary policy of the Restoration. With his brother-in-law Joubert, with Buchez and Flotard, he founded in 1818 the lodge of the Amis de la Vérité. The object of this secret society, which soon numbered a thousand members, was to overthrow the monarchy and establish a virtual republic. After May, 1821, Bazard devoted himself entirely to the Carbonari movement in France and played an important part in the conspiracies of 1821 and 1822. The failure of the Belfort uprising and of his later attempts to propagate Carbonarism in the western provinces discouraged him. He presided over the congresses at Bordeaux which put an end to the activity of the society.

In the leisure which followed this disillusionment Bazard turned to the study of Saint-Simonianism and found in it the "germ of the new world" he had been seeking. Joining Enfantin and Rodrigues in their efforts to spread the doctrine, he founded the *Producteur* in 1825 and the *Organisateur* in 1829. In 1830 appeared his *Exposition de la doctrine de St. Simon* (2 vols., Paris; republished by C. Bouglé and E. Halévy, Paris 1924), the most important philosophical work of the Saint-Simonians, in which he collaborated with Enfantin. In this book Bazard developed the Saint-Simonian philosophy of history, and he attacked individualism with a vigor that was in part a reaction from his study of Jeremy Bentham, whose *Defense of Usury* he translated in 1828. Enfantin and Bazard collaborated in a *Manifeste aux Français* (Paris 1829), in which they attempted to state the principles of Saint-Simonian mysticism. When this work had been denounced in the Chamber (1830) as heralding nationalization of property and women, they replied with a letter to the president of the Chamber which was a vigorous statement of the tenets of Saint-Simonian religion. Before he died Bazard quarreled with Enfantin and tried to found a new school.

GEORGES BOURGIN

Consult: Spühler, Willy, *Der Saint-Simonismus. Lehre und Leben von Saint-Amand Bazard*, Züricher volkswirtschaftliche Forschungen, no. 7 (Zurich 1926); D'Allemagne, H. R., *Les Saint-Simoniens, 1827–1837* (Paris 1930). See also the bibliography for SAINT-SIMON AND SAINT-SIMONIANISM.

BEACONSFIELD, EARL OF, BENJAMIN DISRAELI (1804–81), British statesman and author. Disraeli was one of the principal creators of modern British Conservatism and the founder of what is known as Tory Democracy. He was the grandson of a well-to-do Jewish financier who had migrated from Italy to England in 1748, and the son of Isaac D'Israeli, who had won note as a collector of literary curiosities. His father's formal abandonment of

Judaism in 1817 and his own baptism into the Church of England the same year opened to him avenues of public life which were closed to non-Christians. He hesitated for some time between careers of business, literature and politics, but when he recognized that his genius lay in action he decided to seek power and fame in Parliament. His first effort to secure election was made in 1832, the year in which the great Reform Bill became law. He stood as an Independent because he dissented from both the major political parties: he hated the Whigs as enemies of the crown, subverters of the church and exploiters of the people; he disapproved of the Tories as merely reactionary, bent on defending obsolete privileges and devoid of constructive policy. He failed, however, to achieve success as an Independent. Hence after three defeats he gave his adherence to the Tories in 1835. His way to do so was made clear by the transference of the Tory leadership from the repressive Wellington to the progressive Peel. As a Tory he was elected member for Maidstone in 1837. For six years he faithfully and effectively supported Peel in Parliament. Then in 1843 he became critical and made a close alliance with a "Young England" group of Tory members who dissented from Peel's policy in respect of Ireland, the Poor Law, the Near East and the West Indies. Finally he broke into open revolt as head of a strong party of country Tories who resented Peel's abandonment of the Corn Laws in 1846. Although he could not save the Corn Laws he secured Peel's overthrow immediately after the repeal had been accomplished. By dint of consummate ability, courage and patience Disraeli worked and fought his way to the headship of the Tory party. He became its leader in the House of Commons in 1849; chancellor of the exchequer in 1852; and prime minister in 1868 and from 1874 to 1880, his terms of office being characterized by severe struggles with the Liberals under Gladstone. In 1876 he was created Earl of Beaconsfield by Queen Victoria.

A man of outstanding genius, Disraeli was singularly rich in political ideas. They are embodied in multitudinous speeches, in numerous newspaper articles, in a few formal treatises, but above all in his ten remarkable novels, of which the most important are *Coningsby* (1844), *Sybil* (1845) and *Tancred* (1847). In so far as he drew from sources outside himself, his masters were Bolingbroke and Burke. He emphasized the religious basis of society, the organic nature of the state, the solidarity of the community and the need for a balance of powers and interests in politics. He weaned the Tories from protection and won them over to moderate parliamentary reform as expressed in the Reform Act of 1867. He made the "condition of England" one of their main concerns and led his party to carry a number of health, housing, trade union and factory acts. He restored the prestige of Britain abroad and, largely through his constructive political imagination, which operated on an imperial scale, he took important steps toward the consolidation of the British Empire. His influence is still one of the most active elements in Conservatism.

F. J. C. HEARNSHAW

Works: *Selected Speeches of the Late Right Honourable the Earl of Beaconsfield*, ed. by T. E. Kebbel, 2 vols. (London 1882); Bradenham edition of the novels of Disraeli, ed. by Philip Guedalla (London 1926–27).

Consult: Monypenny, W. F., and Buckle, G. E., *The Life of Benjamin Disraeli*, 6 vols. (New York 1910–20); Murray, D. L., *Disraeli* (London 1927); Maurois, André, *La vie de Disraëli* (46th ed. Paris 1927), tr. by Hamish Miles (London 1927); Brandes, G. M. C., *Benjamin Disraeli, Jarl af Beaconsfield: en litteraer Charakteristik* (Copenhagen 1878), tr. by Mrs. George Sturge as *Lord Beaconsfield: A Study* (New York 1880); Sichel, Walter, *Disraeli, A Study in Personality and Ideas* (London 1904); Wilkinson, Wm. J., *Tory Democracy* (New York 1925); Hearnshaw, F. J. C., "Benjamin Disraeli" in *The Political Principles of Some Notable Prime Ministers of the Nineteenth Century*, ed. by F. J. C. Hearnshaw (London 1926) p. 177–228.

BEAUFORT, LOUIS DE (died 1795), historian of classical antiquity. Beaufort, about whose life almost nothing is known, was apparently a Dutch or German scholar of Huguenot ancestry. Directly inspired by L. J. Levesque de Pouilly's "Dissertation sur l'incertitude de l'histoire des quatres premiers siècles de Rome" (in Académie Royale des Inscriptions et Belles-Lettres, *Mémoires*, vol. vi, 1729, p. 14–29)—for he had not read Perizonius when the first edition of his own work appeared—he wrote his *Dissertation sur l'incertitude des cinq premiers siècles de l'histoire romain* (Utrecht 1738; 2nd ed. revised, The Hague 1750, and reprinted by A. Blot, Paris 1866; English translation London 1740), the first successful demolition of the traditional history. He gave as the principal reasons for his skepticism: the lateness and unreliability of even the earliest annals and of the first historian, Fabius Pictor; the loss of most of the records when the city was captured by the Gauls; the uncertainty about the early his-

tory of all modern states; the supernatural element, partisan bias and irrationality of the traditions and the way in which these are contradicted both by one another and by later authors of the best reputation. Beaufort's influence was considerable, and his wholly negative critique prepared the way for the positive reconstruction by Niebuhr, although the latter had not seen Beaufort's history until after his own was written. Beaufort's other works, which are of considerably less importance, were *Histoire de César Germanicus* (Leyden 1741) and *La république romaine* (2 vols., The Hague 1766).

W. A. OLDFATHER

Consult: Taine, H., *Essai sur Tite Live* (2nd ed. Paris 1874) p. 88–106; Blot, A., introduction to the 1866 edition of the *Dissertation*, p. iv–xiv.

BEAUJON, ANTON (1853–90), Dutch economist and statistician. While employed in the ministry of finance he wrote in preparation for the International Fisheries Exhibition held in London a *History of the Dutch Seafisheries* (London 1883) in which he showed among other things that Dutch fisheries revived after the removal of protection. When in 1884 the Dutch statistical society organized an institute and created a chair of statistics at the University of Amsterdam, Beaujon was put in charge of the institute and appointed professor. In the next year he succeeded N. G. Pierson to the chair of economics in the same university. In his *Handel en handelspolitiek* (Harlem 1888, 2nd ed. 1927), a systematic treatise on international trade, Beaujon maintained that the course of trade is determined by comparative costs and that countries with high costs of production are more prosperous, provided that high money wages in such countries are due to natural causes. He was strongly opposed to protection in any form and especially to "educational" and "wage-raising" tariffs.

He edited the *Bijdragen* of the institute, in which appeared most of his statistical papers, including the well known study of marriages since 1873. He also managed the publication of *Jaarcijfers*, the statistical annual of the Netherlands (and since 1889 of its colonies), which he reorganized on the model of Giffen's *Statistical Abstracts*.

P. LIEFTINCK

Consult: Verrijn Stuart, C. A., in Statistisch Instituut, *Bijdragen*, vol. vii (1891) 1–20, and in *Allgemeines statistisches Archiv*, vol. i (1890) 766–67.

BEAUMANOIR, PHILIPPE DE REMI, SIRE DE (*c.* 1246–96), French mediaeval jurist. He visited England and Scotland, held the royal offices of *bailli* and seneschal and was charged with a papal mission in 1289. His literary works, consisting of *chansons* and *contes*, are not above the level of the writings of his contemporaries. His real claim to distinction is his book *Li livres des coustumes et des usages de Beauvoisins* (written in 1280–83 and revised in 1289–90), which was frequently recopied, abridged and cited in legal histories even after the official publication of the *coutumes* in the sixteenth century.

Beaumanoir is conceded to be the greatest French jurist of the feudal period. In *Esprit des lois* Montesquieu called him "la lumière de son temps . . . et une grande lumière." Unlike his contemporaries, who were mere compilers, he was a writer of distinction and originality. He did not restrict himself to a clear formulation of the rules, but deduced their applications and the principles underlying them. He was an ingenious yet discreet innovator, imbued with the spirit of equity and kindness and with that concern for the unfortunate which was characteristic of his time. Some of his doctrines are famous, especially his propositions concerning the relation between legislation and custom and between temporal and spiritual powers, and his teaching on the subject of serfdom and guardianship of minors by the overlord. He knew how to provide vaguely grounded custom with a strong, subtly constructed, Roman-canonical foundation. The sources of his profound, intelligent erudition, his teachers, his models are unknown.

ED. MEYNIAL

Works: The two modern editions of the *Coustumes* are by Comte Beugnot in the series of *Société de l'histoire de France*, 2 vols. (Paris 1842), and by Am. Salmon in the *Collection de textes pour servir à l'étude et à l'enseignement de l'histoire*, vols. xxiv and xxx, 2 vols. (Paris 1899–1900).

Consult: Bordier, H. L., *Philippe de Remi, sire de Beaumanoir*, 2 vols. (Paris 1869–73); Beugnot's and Salmon's notes on Beaumanoir's life in their editions of the *Coustumes*; Carlyle, R. W. and A. J., *Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–28) vol. iii, p. 48–51 and 62–66.

BEAUMARCHAIS, PIERRE AUGUSTIN CARON DE (1732–99), French dramatist. He began his adventurous career as a watch maker, his father's calling, but a fortunate marriage in 1756 gave him access to the court. By sheer force of native intelligence and daring, coupled with

literary talent and a passion for intrigue, he developed into one of the most striking personalities of the late eighteenth century. He was playwright, pamphleteer, secret agent of Louis XV and Louis XVI, an irrepressible financial speculator as well as the central figure of several lawsuits and the victim of more than one lettre de cachet. When one of his many enterprises involved him in the famous Goezman suit he defended himself in a series of brilliant and widely read *Mémoires* attacking judicial injustice. His adventurous nature and taste for speculation were of great assistance to the cause of American independence. From 1776 on, under the name of Rodrigue Hortalez et Cie., and secretly aided by the French government, he sent the colonies regular supplies of arms and munitions. These shipments continued for several years, although hope of financial compensation was constantly deferred.

Beaumarchais' dramas, *Le barbier de Séville* (Paris 1775, ed. by L. Clarétie 1924) and the still more famous *Le mariage de Figaro ou la Folle journée* (Paris 1874, ed. by H. Babon 1927), have some importance in the history of political thought. It has been said that their presentation rang the tocsin of the *ancien régime*. Beaumarchais was far from being a conscious revolutionary or republican. But in the character of Figaro he embodied with such startling verve all his indignation against the hardships which his low birth had caused him to suffer that *Le mariage* burst upon that age of unrest as the most devastating of social satires and the most passionate of pleas for the rights of the talented and the oppressed. In the phrase of Danton, Beaumarchais "put an end to the aristocracy." Some of his epigrams have become formulae for the protest of the weak against the inequality of circumstances.

ANDRÉ LICHTENBERGER

Consult: Loménie, L. L. de, *Beaumarchais et son temps*, 2 vols. (4th ed. Paris 1880), tr. by H. S. Edwards, 4 vols. (London 1856); Hallays, André, *Beaumarchais* (Paris 1897); Hall, E. B. (S. G. Tallentyre), *The Friends of Voltaire* (London 1906) ch. ix; Marsan, Jules, *Beaumarchais et les affaires d'Amérique* (Paris 1919).

BEBEL, AUGUST (1840–1913), leader of the German Social Democratic party. He was the son of a Prussian petty officer and after the early death of his father he attended a school for poor boys in Wetzlar. He became a turner and after his journeyman's travels settled in 1860 in Leipsic, at that time one of the centers of German political activity. There he joined the newly founded Gewerblicher Bildungsverein (Industrial Educational Association) in which many radical and liberal scholars who had been disciplined by the government for their political beliefs were active. Bebel made use of this opportunity to read the literature of history and politics and to participate in discussions of current political problems. Here he became acquainted with the polemical writings of Lassalle and later, under the influence of Wilhelm Liebknecht who likewise had joined the Leipsic association, he studied the works of Marx and Engels and became a socialist of the Marxian persuasion.

Bebel was endowed with an unusual gift of oratory and soon won great prestige in labor circles. After the Austro-Prussian war of 1866 he and Liebknecht organized the Saxon People's party, which demanded among other things the complete unification of Germany as a democratic state, and in 1867 he was elected to the Constituent Reichstag of the North German Confederation. In 1869 Bebel helped form the Social Democratic party at Eisenach and was one of the leading spirits in effecting its union with the Lassallean group. In 1871 he was elected to the German Reichstag where, serving with only occasional interruptions until his death, he gradually attained the position of leader of the growing Social Democratic faction.

Bebel wielded an enormous influence over the German masses; although he eventually acquired an education far beyond the average level of the German worker he still remained essentially a simple working man who could speak to the workers as one of themselves. His dominance within the party is explained by his capacity to grasp quickly the problems of economic policy and his indefatigable cooperation in parliamentary committees. He opposed both the opportunism of Vollmar and the revisionists on the right, and the extreme revolutionary radicalism of the "younger" elements on the left. In contrast to the anti-parliamentarianism of Liebknecht he stood for positive collaboration of the Social Democrats in the Reichstag. Bebel was a steadfast opponent of imperialism and militarism. He opposed the Austro-Prussian War of 1866, refused to vote for the war credits during the Franco-Prussian War and continually denounced in the Reichstag the militarist tendencies of the government. He also advocated a basic army reform and the conversion of the army into a popular militia.

Bebel attained less distinction as a writer. His principal work, frequently cited, *Die Frau und der Sozialismus* (Zurich 1883; 50th Jubilee ed., Stuttgart 1910; tr. by M. L. Stern, New York 1910), is not a strictly scientific piece of writing. It is cleverly written socialistic propaganda that addresses itself primarily to women. Its description of the conditions among primitive peoples is based on Lewis H. Morgan's *Ancient Society*; in the part devoted to modern times it connects the inequality of the sexes with the shortcomings of the capitalist order. It attracted a large reading public in Germany and was translated into many languages. Bebel published also a number of other works dealing with current problems of party policy and with historical subjects. A collection of his speeches appeared posthumously (Berlin 1926, Eng. tr. New York 1928).

HEINRICH CUNOW

Consult: Bebel, August, *Aus meinem Leben*, 3 vols. (Stuttgart 1910–14), abr. Eng. tr. of the first two vols. (London 1912); Klühs, Franz, *August Bebel, der Mann und sein Werk* (Berlin 1923); Kampffmeyer, Paul, in *Biographisches Jahrbuch und deutscher Nekrolog*, vol. xviii (1913) 215–29; Michels, Robert, in *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. xxxvii (1913) 671–700; Mehring, Franz, *Geschichte der deutschen Sozialdemokratie*, 4 vols. (12th ed. Stuttgart 1922) vols. iii and iv.

BECCARIA, CESARE BONESANA, MARCHESE DI (*c.* 1738–94), Italian criminologist and economist. Beccaria was born of a noble Milanese family and lived in easy circumstances throughout life, a man of thoughtful, retiring disposition, somewhat timid and lethargic.

The essentials of Beccaria's thought were based on an intensive study of the contemporary French and English rationalists. Through his intimate friend Alessandro Verri, an official of the prison in Milan, Beccaria had frequent opportunities to visit that institution, and the revolting scenes which he invariably beheld during these visits furnished the clinical information and the moral stimulus for the execution of his famous work, *Dei delitti e delle pene* (Leghorn 1764; tr. into English as *Essay on Crimes and Punishments*, London 1767). Beccaria wrote this work at the insistence and with the collaboration of his friend Pietro Verri, Alessandro's brother.

In order to appreciate the timeliness and novelty of the book it is necessary to recall the penal law at the time, characterized as it was by secret accusations, by almost complete absence of provision for the defense of the accused, by extensive use of the most savage types of torture, indiscriminate resort to capital punishment for many minor crimes and by barbarous lesser punishments such as whipping, branding and mutilation. Beccaria's criticism of the system in vogue envisaged the major criminological advances of the next century and a half, excepting only the modern psychiatric analysis of the criminal with its substitution of the conception of treatment for that of punishment. Arguing from the premise of the greatest happiness for the greatest number, that crime must be regarded as an injury to society, he pointed to the extent of the injury as the only rational measure of crimes. Punishment he held to be in itself unimportant, and justifiable only as a preventive measure. To prevent crimes laws were to be improved and published, virtue rewarded and education developed. Secret criminal procedure was to be abolished, the accused was to have every chance to defend himself, and punishment was to be made sure, swift and in proportion to the social damage wrought by the criminal. Crimes against property were to be punished by fines or, when the fines could not be paid, by imprisonment, and political crimes by banishment. Capital punishment was to be abolished in favor of life imprisonment as a better deterrent. Imprisonment was to be extended but humanized, and the prisoners were to be classified and separated.

Beccaria's brochure had an enormous influence. The French rationalists welcomed it; Voltaire proclaimed that it would assure its author immortality and would work a revolution in the moral world. Eminent writers on law and criminal reform, such as Sonnenfels in Austria, Filangieri and Renazzi in Italy, and Blackstone, Howard, Bentham and Romilly in England, were profoundly influenced by Beccaria's doctrines and freely acknowledged their indebtedness to him. Many practical reforms of criminal jurisprudence in Europe and America have also grown out of his *Essay*.

From 1768 to 1770 Beccaria was a professor of cameralist science in the Palatine School in Milan, being the second to hold a chair of political economy in Italy. Already in 1765 he had in his famous *Tentativo analitico sui contrabbandi* (contributed to *Il caffe*, a periodical he and the Verris had started) made an ingenious application of mathematics to economics by seeking to estimate how much of a given quantity of a commodity a merchant must succeed in smug-

gling in order to break even, if the rest were confiscated. His economic doctrines were most systematically embodied in his *Elementi di economia pubblica*, professorial lectures written in 1769–70, but, except for the first lecture, not published until 1804. In his views on economic policy Beccaria started with a mild type of mercantilism and later espoused some of the doctrines of the physiocrats, with whom he had become acquainted on a trip to Paris. He believed agriculture to be the only true productive industry, favored the abolition of the guilds and advocated complete commercial freedom within the nation. He was, however, opposed to complete freedom for foreign trade. In his tenure of several public offices he aided Pietro Verri and G. R. Carli in securing economic reforms affecting the corn trade, currency and taxation. His most original work, besides his mathematical treatment of economic theory, was in the field of population, where he considered the problem of the relation of population growth to the means of subsistence, and in the elucidation of the theory of normal value. His theory of capital is somewhat similar to that of Turgot, and his views on the division of labor and the determination of wages are remarkable in their similarity to those of Adam Smith when it is considered that they were written seven years before the publication of the *Wealth of Nations*.

HARRY E. BARNES

Works: *Opere*, ed. by Pasquale Villari (Florence 1854).

Consult: Cantù, C. A., *Beccaria e il diritto penale* (Florence 1862, containing a text of the *Essay*; French translation Paris 1885); Amati, A., Buccellati, A., and Maneini, P. S., *Cesare Beccaria et l'abolizione della pena di morte* (Milan 1872), containing a bibliography; Phillipson, C., *Three Criminal Law Reformers: Beccaria, Bentham, Romilly* (London 1923); Graziani, A., *Storia critica della teoria del valore in Italia* (Milan 1889) p. 72–76 and 80; Macleod, H. D., *A Dictionary of Political Economy* (London 1863) p. 252–59.

BECHER, JOHANN JOACHIM (1625–85), the most distinguished of the early cameralists. He was at first court physician and professor of medicine at Mainz and made important contributions to natural science. Later, in the administrative service of various German princes and of Leopold I of Austria, he wrote extensively on economic and political subjects. It was upon his initiative that the Austrian Commerz-Collegium, which centralized the government's fiscal and economic activities, was organized. He managed the state owned factory at Vienna and attempted unsuccessfully to bring about Dutch-Austrian cooperation in developing American commerce. Both directly and through his writings he exerted a considerable influence on the current economic policy of the Austrian government.

Becher's political doctrines are grounded in a moral philosophy akin to deistic protestantism. An adherent of monarchic absolutism, he believed in governmental paternalism, particularly in economic affairs. He proposed a plan of administrative organization which called for five boards entrusted respectively with matters of religion, moral discipline, education, civil affairs and the protection of citizens. Because of the prime importance of education in a welfare state, the board of education was to be superior to the others.

Becher's interest in economic questions was based on a clear recognition of the relation between underlying economic conditions and increase in population, the determining factor in a country's strength. Production and consumption as well as the growth of population are disturbed by extreme price fluctuations, resulting from the operation of monopolies, "propolies" or corners in a market, and "polypolies" or unregulated production. The government should maintain readily available supplies of necessaries, charter trading companies and establish factories and banks controlled by a state board of commerce. To encourage production it should accord preferential treatment to domestic goods by a system of import duties. Taxes must not hinder economic development; they should be regular and certain, and fall on the rich rather than the poor.

LOUISE SOMMER

Important works: *Moral Discurs* (Frankfort 1669); *Närrische Weisheit und weise Narrheit* (Frankfort 1680); *Politischer Discurs von den eigentlichen Ursachen des Auf- und Abnehmens der Städte, Länder und Republicken, in specie wie ein Land volkreich und nahrhaft zu machen* (Frankfort 1688, 4th ed. 1754).

Consult: Roscher, W., *Geschichte der Nationalökonomik in Deutschland* (Munich 1874) p. 270–89; Small, A. W., *The Cameralists* (Chicago 1909) ch. v; Zielenziger, Kurt, *Die alten deutschen Kameralisten* (Jena 1914) pt. ii, ch. iv; Sommer, Louise, *Die österreichischen Kameralisten*, 2 vols. (Vienna 1920–25) vol. ii, ch. i; Kander, Emil, "Johann Joachim Becher als Wirtschafts- und Sozialpolitiker" in *Schmollers Jahrbuch*, vol. xlviii (1924) 811–41; Apfelstedt, Heinrich, *Staat und Gesellschaft in J. J. Bechers politischen Discursen* (Darmstadt 1927).

BECHTEREW, WLADIMIR. *See* BEKHTEREV, VLADIMIR.

BECK, ADAM (1857–1925), Canadian administrator. Beck was one of the first to recognize the importance of hydro-electric power in providing an adequate foundation for an effective industrial structure in coal-less Ontario. He served on the commission appointed in 1903 whose report, issued in 1906, gave an exhaustive survey of comparative costs of power production and indicated the advantages of harnessing the Niagara cataract. As a member of the Conservative Whitney ministry of Ontario, Beck prepared and introduced in 1906 legislation creating a provincial Hydro-Electric Power Commission, of which he became chairman. His purpose was the purchase and ultimately the development of power at a minimum price and its distribution at cost to consumers through a public agency rather than by private enterprise. Municipal corporations were authorized to purchase power from the provincial commission for resale within the municipality. With provincial funds the commission constructed the equipment required for the transformation and transmission of power bought during the earlier years from private generating companies at Niagara. Subsequently the commission acquired certain of these companies and finally constructed the Queenston-Chippewa generating plant, the greatest single hydro-electric development in the world. Other power companies were purchased throughout the province and other water powers were developed to serve special regions until the publicly owned system secured a virtual monopoly of the development and sale of power in the province.

Beck remained chairman of the commission until his death. Of dynamic energy, he was frequently accused of a ruthless disregard for the rights of those whose interests were prejudiced by the extension of the most significant example of public ownership in the electrical field. He replied to these attacks by pamphlet and otherwise, distinguishing between "government ownership" as generally understood and "cooperative municipal ownership." Controversy regarding the success of Beck's experiment has been more acute outside than within the province, where the public has been generally well satisfied with the service provided by the commission both in rural and urban districts, and where the cooperative municipal system has been applied also to electric railways.

DUNCAN MCARTHUR

Consult: Biggar, E. B., *Hydro-Electric Development in Ontario* (Toronto 1920); Mavor, J. *Niagara in Politics* (New York 1925); Thompson, C. D., *Public Ownership* (New York 1925) ch. xiii; Stevenson, J. A., "Electric Power in Canada" in *New Statesman*, vol. xxvi (1926) 638–40.

BECKET, THOMAS (1118–70), archbishop of Canterbury in the reign of Henry II. He first served the king after his ordination in the office of chancellor "in four realms." When the king insisted on making him archbishop of Canterbury he was ordained priest June 2, 1162, and consecrated the next day. Almost at once he fell into dispute with the king, who encroached upon the rights of the primate, and soon a most serious quarrel arose chiefly on the question of "criminous clerks." Definite issue was joined when the Constitutions of Clarendon were promulgated (1164), and the dispute reached a climax at the Council of Northampton (1164), after which Becket fled from England. The main question was whether clergy accused of crime should be tried in the church courts but punished in the lay courts. Becket, as the champion of ecclesiastical freedom, regarded this as an infringement of the church's privileges. His stand was supported by the view that such an arrangement would work an injustice, since it meant virtually a double punishment for a single offense. Most of the bishops and the churchmen, both ordained and lay, supported him, and the poor folk also were on his side. The minor punishments of the church courts, which could not touch life or limb, were in a sense a popular protest against the savage mutilations inflicted by the king's courts. Becket spent years in exile. The attention of all Europe was drawn to the struggle because it was regarded as a crucial one between the church and the temporal power of the state. After years of bitter wrangling peace was made in 1170, but no sooner had Becket returned in triumph to Canterbury than some rash words of the king caused some knights to murder the archbishop in his own cathedral. Becket was immediately regarded as a martyr. He was canonized in 1173 and became the most popular of the saints revered by Englishmen and the religious "patron" of the city of London. As a result of his death the church won on almost every point.

W. H. HUTTON

Consult: Hutton, W. H., *Thomas Becket* (new ed. Cambridge, Eng. 1926), for the most complete biography in English; Stubbs, W., *Constitutional History of England in its Origin and Development*, 3 vols.

(6th ed. Oxford 1896–97) vol. i; Maitland, F. W., *Roman Canon Law in the Church of England* (London 1898) p. 132–47.

BEDDOE, JOHN (1826–1911), British anthropologist. He was educated at the universities of Edinburgh and London and qualified for the medical profession. Beddoe's interest in anthropology was evinced as early as 1853, when he published *A Contribution to Scottish Ethnology* (Edinburgh). About 1854 he joined the Civil Hospital Staff for service in the Crimean War. In the course of his medical duties during the war and the special trips that he made he had an opportunity to study the characteristics of various races of eastern Europe and western Asia. He supplemented the knowledge thus obtained by making similar studies in 1856–57 over the greater part of Europe. Returning to England in 1857 Beddoe settled down to practise medicine in Bristol. In the intervals of his medical practise and after his retirement in 1891 he continued his ethnological studies, and in addition to his earlier field trips made several later visits to the continent and one to Australia

Beddoe's studies were made in the early years of the modern development of anthropology, when most anthropologists were measuring skulls and devising new chords, arcs and angles, treating living types in the same manner. Beddoe's clinical training caused him to lay less stress on measurement and more on the observation of the physical and psychical characteristics of the racial types that formed his data. Although he made craniological investigations on the old inhabitants of Britain his principal trend was in the direction of "observational anthropology," and it is in his work as the pioneer and chief exponent of this method that his importance lies. He was the first to make statistical investigations upon the color of the hair and eyes of the European peoples, devising for the purpose a simple method. He collected an immense number of data on somatology, and our present maps of the distribution of physical characters in the British Isles are based on his observations, as embodied in *The Races of Britain: a Contribution to the Anthropology of Western Europe* (Bristol 1885). His *Anthropological History of Europe* (Paisley 1893, rev. ed. 1912), an elaboration of the Rhind lectures delivered at Edinburgh in 1891, was a valuable sketch of the physical anthropology of Europe.

A. C. HADDON

Consult: Beddoe, John, *Memoirs of Eighty Years* (Bristol 1910), which throws many sidelights on the founders of anthropology with whom he was associated. See also Gray, John, in *Man*, vol. ii (1911) 151–53, containing a list of his publications; Royal Society, *Proceedings*, ser. B, vol. lxxxiv (1911–12) p. xxv–xxvii; Ripley, W. Z., *The Races of Europe* (New York 1899) ch. xii, and supplementary volume containing bibliography.

BEDE. *See* TAXATION.

BEDE (673–735), English historian and theologian. He received his early education from Benedict Biscop, founder of the sister abbeys of Wearmouth and Jarrow. Bede passed practically the whole of his life at Jarrow, where he devoted himself to studying, teaching and writing. The extent of his industry may be gauged from the list of his works, mainly Biblical commentaries, which he appended to the fifth book of his most famous work, *Historia ecclesiastica gentis Anglorum* (ed. by C. Plummer, 2 vols., Oxford 1896; tr. as *The Ecclesiastical History of the English Nation* in Everyman's Library, London 1927). This is a model of historical writing for its learning, breadth of outlook and chronological accuracy and constitutes the primary authority for a great part of early English history. Of greater European importance, however, is a small treatise on chronology, the *De temporum ratione* (ed. by T. Mommsen in *Monumenta Germaniae historica*, Auctorum Antiquissimorum, vol. xiii, Berlin 1898, p. 223–354), to which was added a chronicle on the six ages of the world from the creation to 729 A.D. In this work Bede adopted the mode of reckoning years from the Incarnation. The book was carried by English missionaries—St. Boniface and his companions —to the continent and was responsible for the introduction there of the system of dating from the year of grace.

Bede's work was of considerable influence in the development of the mediaeval chronicle which grew out of short notices or "annals" inserted in tables drawn up for the purpose of fixing the date of Easter. His own chronicle became the starting point of several series of annals both in England and on the continent. As a historian Bede is in advance of his time for his scholarly treatment of his subject, his lack of prejudice and his habit of mentioning the source of his information. Besides the works already referred to, Bede's account of the life of Cuthbert, of the lives of the abbots of Wearmouth and Jarrow and his epistle to Egbert

are especially noteworthy and throw much light on the conditions of monastic life at the time.

AUSTIN L. POOLE

Works: *The Complete Works of Venerable Bede*, ed. by J. A. Giles, 12 vols. (London 1843–44); *Opera historica*, ed. by C. Plummer, 2 vols. (Oxford 1896).

Consult: Werner, Karl, *Beda der Ehrwürdige und seine Zeit* (new ed. Vienna 1881); Plummer, C., Introduction to his edition of Bede's historical works (vol. i, p. ix–clxiv); Browne, G. F., *The Venerable Bede* (London 1919).

BEECHER, HENRY WARD (1813–87), American clergyman and publicist. Beecher's first pastorate after his ordination was in Indianapolis, where he addressed himself in his sermons to the problems of a newly created frontier community and sought in contributions to an agricultural journal to help the surrounding rural population. The eight years that he spent thus gave him an opportunity to develop a free and easy congeniality with people, perfect a preaching technique and consolidate in himself a religious fervor which were later to make him a conspicuous national figure. In 1847, after refusing several invitations which his growing reputation had prompted, he accepted a call to the Plymouth Church of Brooklyn, New York, and remained in this pastorate until his death. Here in a large auditorium especially constructed to accommodate the numbers who came to hear him he delivered weekly sermons which gained even wider currency by being distributed in pamphlet form; he further enlarged the sphere of his influence by his editorials in the *Independent* (1861–64) and in the *Christian Union* (1870–81) and by frequent lecture tours.

The dominant strain in Beecher's personality was an emotional directness which secured for him a wide influence in a community with a theology ridden past and created a vast audience for his utterances on public questions. Although he was not content with theology as an intellectual discipline or with religion as a set of ascetic rigors, his was no secular creed which reduced religion to everyday morality. His passionate directness invested with poetry his perception of a personal God, and his popularity was in no small measure due to the eloquence and lyricism with which he communicated this perception. He was formative also in contributing to the growing tradition current among prominent clergymen in a non-theocratic state of refusing to separate the religious life from the civic, of taking the nation as pulpit and the daily newspaper as text. Beecher's influence on American opinion was greatly enhanced by his talent for gaining publicity for his views. He was to find, however, that the very conspicuousness of his position gave his personal life, when "exposed" in the Beecher-Tilton adultery case in 1874, an unwelcome national attention.

Beecher showed forcefulness, skill and a considerable degree of courage in dealing with the issues raised by the troubled years leading up to the war and by the problems of reconstruction. While in the days of his Indianapolis pastorate he preferred to avoid the slavery question rather than antagonize those whose personal lives he sought to guide, his attitude toward this crucial issue of national policy became definite in his Brooklyn period when he felt more keenly his position of civic responsibility. He became an outspoken opponent of slavery, his opposition being tempered at first by a reluctance to endanger the Union and by the prevailing opinion that the constitution safeguarded slavery where it already existed. Later, however, his opposition to the Fugitive Slave Law went so far as to override even the latter qualification. Beecher supported Lincoln before the war, and in 1863 some of his best speeches were delivered to hostile audiences in England in defense of the Northern cause. After the war his position was a difficult one; he felt his way between the Republican "Radicals" and their demand for the rapid enfranchisement of the freedmen, and President Johnson's policy of reincorporating the seceded states into the Union. Practically all his views on public questions were in support of the currently mooted reforms of his age: against political corruption, for women's suffrage, for free trade, for civil service reform. His social thinking was deeply rooted in individualism; he had a strong emotional attachment to the charter of Anglo-Saxon liberties, a belief in the "natural" rights of man and a distaste for governmental regulation of individual life. Being not at all a social innovator he could only follow in the wake of contemporary political liberalism. He was not aware of the far reaching transformations that the industrial revolution of his day had wrought in the social structure, nor was he responsive to the plight of the underlying population.

MAX LERNER

Important works: *Freedom and War* (Boston 1863); *Lecture Room Talks* (New York 1870); *Lectures and Orations by Henry Ward Beecher*, ed. by N. D. Hillis (New York 1913).

Consult: Abbott, Lyman, *Henry Ward Beecher* (Boston

1903); Hibben, P., *Henry Ward Beecher, An American Portrait* (New York 1927); Brastow, L. O., *Representative Modern Preachers* (New York 1904) ch. iii.

BEER, GEORGE LOUIS (1872–1920), American historian and publicist. Beer's contributions lie in three fields. His historical work was done in the field of the old British colonial administration, to which he devoted three books: *British Colonial Policy, 1754–65* (New York 1907), *The Origins of the British Colonial Policy, 1578–1660* (New York 1908) and *The Old Colonial System, 1660–1754* (2 vols., New York 1912), which was never completed, the last volume published carrying the account to 1688. These volumes are based on prolonged and thorough investigation of the documents in the Public Record Office in London. In the field of modern Anglo-American relations he contributed articles to current journals and wrote one book, *The English-Speaking Peoples* (New York 1917), advocating Anglo-American cooperation as conducive to world peace and the advancement of the cause of civilization. Finally as chief of the colonial division of the American delegation at the Peace Conference in Paris he became a leading expert in the field of colonial administration and drew up reports, some of which were posthumously printed as *African Questions at the Paris Peace Conference* (ed. by L. H. Gray, New York 1923). He was largely the author of the mandate principle applied to the control of the forfeited German colonies and later was appointed the head of the Mandates Division of the Secretariat of the League of Nations. The labors of the conference, which undoubtedly hastened his death, prevented the completion of his historical work, and the refusal of the United States to enter the League brought to an end his connection with the mandate activities.

CHARLES M. ANDREWS

Consult: George Louis Beer: A Tribute to his Life and Work (New York 1924); Gray, L. H., introduction to Beer's *African Questions* (New York 1923).

BEGGING is a phenomenon closely associated with the emergence of private property. Primitive societies had no beggars. So long as men lived in small groups bound by blood ties the nearest analogue to begging was the hospitality asked for by travelers. With the disintegration of early forms of social organization the cases of begging multiply. In the oldest civilizations of which there is record begging was an honorable act and the giving of alms a meritorious one. The giving of alms was also a part of the ritual of many early religious feasts. In early societies the checks on begging were not in general deliberately imposed; its spread was limited rather by the discomforts of the life and the existence of other forms of support for those without adequate incomes. Polygyny provided for many who in later times would have been beggars. Prostitution, in early times as now, obviated much actual begging. Slavery, both voluntary and enforced, served as a means whereby dependents were cared for; while at a later date clientage and vassalage achieved a similar end.

Periods of social and economic disorganization and change have always been accompanied by increases in begging. There is no record of begging in Israel until after the growing commercial activity had disturbed the older pastoral and agricultural economy. In Rome there seem to have been few or no beggars until the foreign wars sent hordes of impoverished landed proprietors to the city. The political, economic and social changes during and after the Crusades did much to augment begging. In the fourteenth century the Black Death disturbed the whole economic and social structure of mediaeval Europe. The wars of the sixteenth and seventeenth centuries and the overseas expansion subsequent to the discovery of America upset the more or less stable relationships of feudal manors and mediaeval trading centers. Sheep enclosures drove thousands of workers from the land; while the industrial revolution sent hand spinners and weavers to the road, forcing them in many cases to beg their bread.

Throughout the Middle Ages, however, there was a further cause of begging in the Christian doctrine of the religious merit of almsgiving. The church always made efforts to care for its own poor and officially never ceased to discourage imposture and pauperization; but its machinery of prevention by no means equaled in efficiency the force of its religious theories in promoting beggary. With the rise of monasticism begging again became a holy occupation.

A similar religious value has been placed upon the beggar and his donor for many centuries in India, where holy beggars have infested every temple and shrine from time immemorial. Religion has given sanction to a profession made necessary by social disorganization.

In the western world the beggar became a problem for public attention only after the Black

Death. There were four or five distinct types of professional beggars wandering alone or in hordes over Europe in this era: the mendicant friars, or those posing as such; the gypsies, mentioned separately and dealt with sternly in the Elizabethan laws; the begging scholar, who became a familiar and tolerated figure after the rise of the universities; fakers of all kinds, who used palmistry, physiognomy, minstrelsy, fencing or some other craft or game as a cloak for their real vocation of roguery or begging; bands of rovers, discharged soldiers or servants, who started out as "sturdy beggars" perhaps seeking employment, but who often turned into bands of highwaymen and thieves.

In England begging was first regulated by the Statute of Labourers promulgated by Edward III and his Council in 1349 and enacted by Parliament under Richard II in 1378. The relevant sections of these statutes were directed specifically not at begging but at vagrancy. Legislation against vagrancy became increasingly severe, culminating in a Draconian law of Edward VI. Various punishments for vagrancy and begging such as whipping, detention in the stocks, burning the gristle of the ear and banishment were resorted to from time to time. Finally the great poor law of Elizabeth (1601) provided that able bodied vagrants should be sent to a workhouse, while those who would not work there were to be sent to the galleys, banished or executed as felons.

On the continent repressive measures alternated with the provision of charity as attempted solutions of the problem of begging. As early as 1531 Charles V, probably inspired by the Spaniard Vives, published in the Netherlands a long edict against vagrancy. It declared that the trade of begging created idleness and led to bad courses and that therefore none were to be permitted to beg under pain of imprisonment and whipping except mendicant friars and pilgrims and people who had suffered by war, fire and floods; balers and rogues were to be compelled to work.

In all this legislation a distinction was made or implied between able bodied beggars who were fit to work and the impotent poor. The latter were generally permitted to beg, often under a license which might provide that they operate outside the city limits. The legislation against the "sturdy beggar" was partially designed to clear the field for the aged, blind or other impotent poor whose right to their calling was recognized.

The distinction between the professional beggar and the unemployed laborer who begs until he can find work remains difficult to draw. Both groups are produced by unsettled social and economic conditions; the unemployed soon becomes a professional beggar. The sentimental appeal of weakness and deformity is always great, but most people will not refuse to give to any beggars unless they know of other adequate provisions for their maintenance.

In order to care for those who would otherwise become beggars an increasing number of methods have been tried by the state and by modern social agencies. In England the poor law of 1824 made begging a form of vagrancy and as such punishable by fine and imprisonment. No change in the status of the beggar was effected by the poor law of 1834; but the impossibility of keeping vagrants out of the workhouses led to the establishment there of the casual ward, admittedly caring for the professional beggar as well as for the honest seeker of work. Although students of the poor law continued to condemn it, the casual ward remained for many years an accepted feature of the English workhouse.

In the nineteenth century a number of countries founded labor colonies, usually compulsory, where vagrants and beggars are committed for stated periods and made to work under strict discipline. The most celebrated of such colonies are found in Belgium and Switzerland, but similar institutions have been established in Germany, Holland and England. Municipal lodging houses, developed in Germany, England and the United States, have offered some relief. Organized charitable and relief agencies prevent much begging; but all these institutions find it particularly difficult to deal with the professional beggar.

Begging has tended to become not only a profession, but an organized one. The beggars of the Middle Ages roved in bands and often belonged to fraternities with members in every country of Europe. Even today professional begging guilds or castes are to be found in some countries. In India there have long been professional begging castes, just as there are criminal castes. From time to time it is reported that professional beggars in some of our large cities are organized into guilds the better to enable them to pursue their daily tasks. Whether or not the beggars of any city are really organized in the modern sense, they certainly consort together and profit by division of territory. The

mendicancy police squads have done much to break up the more notorious of these ancient gangs. Nevertheless there are probably many professional beggars in every great city who make large sums by their begging, and according to current accounts some even reside in suburbs as respectable business men.

There is close connection now as always between professional begging and the ostensible peddling done by the crippled and the blind. Today in every country where the physically handicapped have not been adequately provided for they may be seen upon the streets making their appeals. However, in an increasing number of countries these classes are cared for by such means as pensions, reeducation and placement in workshops in which they can make an independent living. Moreover the state is striking at the source of such dependency in attempting to see that every blind and crippled child is rehabilitated physically at public expense and trained for a trade at which he can support himself.

Every relief agency is pestered by transient beggars, whether the tramp or the "fly-by-Ford" variety; in many cases they have been passed on from one city to another. If they refuse work which is found for them the agency can only let them go on. In the case of the professional beggar the agency usually fails to adjust the man to a steady life.

No adequate program for the prevention of begging has yet been found. The elements of such a program may be sought in a combination of repressive laws enforced by the police, the establishment of lodging houses manned by well trained case workers, an efficient system of employment offices, work colonies to which professionals can be sentenced, almshouses and hospitals for the old and sick, good case work by public and private relief agencies and the education of the public.

JOHN L. GILLIN

See: CHARITY; DEPENDENCY; VAGRANCY; MONASTICISM; RELIGIOUS ORDERS; UNEMPLOYMENT; MIGRATORY LABOR; CRIPPLES; BLIND; DEAF; POOR LAWS; ALMSHOUSE; LODGING HOUSES; SOCIAL CASE WORK; REHABILITATION.

Consult: Ashley, W. J., *Introduction to English Economic History and Theory*, 2 vols. (4th ed. London 1913–14) vol. i, pt. ii, ch. v; Lecky, W. E. H., *History of European Morals*, 2 vols. (3rd ed. New York 1890) vol. ii, p. 94–98; Aydelotte, Frank, *Elizabethan Rogues and Vagabonds* (Oxford 1913); Eden, F. M., *The State of the Poor, or an History of the Labouring Classes in England*, 3 vols. (London 1797) vol. i, p. 42–44, 81–86, 165–70; Webb, Sidney and Beatrice, *English Poor Law History in the Last Hundred Years*, vol. ix of their *English Local Government*, 9 vols. (London 1906–29) p. 771–78, 945–62; Ribton-Turner, C. J., *History of Vagrants and Vagrancy* (London 1887); Rivière, Louis, *Mendiants et vagabonds* (2nd ed. Paris 1902); Dawson, W. H., *The Vagrancy Problem* (London 1910); Kelly, Edmond, *The Elimination of the Tramp* (New York 1908); Solenberger, Alice W., *One Thousand Homeless Men* (New York 1911); Anderson, Nels, *The Hobo* (Chicago 1923); Bombay, General Department, *Report by Mr. O. H. B. Starte on Measures for the Prevention of Professional Beggary in the City of Bombay* (Bombay 1926).

BEHAVIOR CLINICS. *See* MENTAL HYGIENE.

BEHAVIORISM, in the words of the foremost exponent of this system of psychology, is "a natural science which takes the whole field of human adjustments as its own." Dr. Watson designs by means of this definition to assimilate psychology to physics, chemistry, biology and physiology, especially physiology; to discard everything in the older psychologies "which cannot be stated in the universal terms of science," in terms, that is, of matter, motion and number. Behaviorism rejects therefore the concepts of consciousness, sensation, perception, will, image and so on; such older terms as it does retain—e.g. attention, thinking and emotion—it redefines as forms of observable or inferred activities. It seeks consistently to state the conduct and the qualities of men in language taken from physiology. Save for the fact that it deals with the activities of the organism as a whole, while physiology is concerned with the functioning of the parts, behaviorism would be physiology. As it is, it presents itself as a sort of higher physiology, presupposing that discipline and supervening upon it. The data of behavioristic psychology, accordingly, are determinate and measurable; their relationships are invariant and quantitatively constant, expressible in laws as certain and definite as those of physics and chemistry. The aspiration of the behaviorist is to be able, like the physicist in his field, "to predict human activity with reasonable certainty" and to formulate "laws and principles whereby man's actions can be controlled by organized society."

According to Dr. Watson such a methodological premise and moral purpose appear for the first time in the history of psychology in behaviorism (preface to *Psychology, from the Standpoint of a Behaviorist*). The record, how-

ever, does not bear him out. The deterministic view of human nature, the notion of man as a machine whose parts and active principle can be discerned and used, has recurred in various forms from Spinoza's day on. Historically considered, behaviorism is only the current phase of a persistent aspiration to know the springs and motives of men in order to be able to predict and to control their behavior as the physicists know the physical world and can predict and control natural events. This aspiration took outstanding concrete form in that school of psychology known as associationism. It animated, with a Christian bias, David Hartley's *Observations on Man*; it was a postulate of David Hume's great *Inquiry* and it gave power and significance to the doctrines of Bentham and the whole utilitarian school which derives from him. Indeed Bentham's "felicific calculus" is a device for giving quantitative expression to human behavior in terms of the associationist psychology. Its tremendous influence came from the fact that it was the first powerful philosophy of human nature expressive of the growing importance of counting and accounting in the new economy of trade and manufacture which came with the industrial revolution. "Subjective" though its terms were, being engaged in setting up balance sheets of "pains" and "pleasures" (Watson eschews such terms), Benthamism was as preoccupied with human behavior and social control as Watsonism. To no small degree it achieved its social objectives. But as it failed to bring in a millennium and as economic laissez faire, political democracy and public education gave rise to new problems intrinsic to themselves, its associationist premises, which had underlain English thinking for more than a century, were first challenged, then rejected. Standards and principles deriving from German idealist philosophy were set up in their place in judgment upon them and were made the postulates of social theory and political practise. There ensued an interlude when the psychological view of human nature was without employment; when it was not being used either as underpinning for plans of social reform or as rationalization for acts of politicians manoeuvring for power. Psychology was free—and futile.

In this interlude arose the great war over the descent of man initiated by Darwin. Darwinism made psychology again a matter of practical moment. The exigencies of the controversy it aroused led to an assimilation of the qualities of mind to the structures of the body; the body was pushed more and more into the foreground of psychological speculation. The makers of the new human psychology—Wundt for example on the one side, James on the other—were anatomists and physiologists trained in the natural sciences and in medicine. On the other hand, in the study of animals, traditionally without souls, more and more was made of mental activities; Darwin in *The Expression of Emotion in Man and Animals* argued for an essential homogeneity of feeling throughout animal life; Lubbock and Romanes assimilated such life as lower animals have to the minds of men. Animal psychology became a scholarly pursuit, while human psychology more and more treated thinking, feeling and willing as instruments or organs of adjustment in the body's struggle for survival. Psychology became "functional" and thinkers as diverse as Herbert Spencer, John Dewey and William James worked out "functional" psychologies.

What such "functionalism" implied may be gathered from the fact that James, many years after he had dropped psychology, raised the question "Does Consciousness Exist?" (1904) and argued for the material identity of thoughts and things. For all that, functional psychology remained to an extraordinary degree on a speculative level. It might appeal to observation and common sense but it could set up no critical laboratory demonstrations. That could be done only where permanent structures, not changing activities, were premised and where precise, measured correlations could be obtained between the body's organs and the mind's states. Both these were easiest to reach in the psychophysics of the sense organs, and laboratory psychology actually and formally begins with the study of sensation. The step is from the physical problems of sound, sight and touch to the psychophysical problems of their anatomical ground and mental structure. It is a step variously taken by Müller, Weber, Hering, Helmholtz and Fechner. These savants deal with sensations as such without reference to their place in the mental life or their bearing on the psychological whole. Their technique and performance quickly develop into the "psychology without a soul," the psychophysical parallelism which established itself with Wundt and has prevailed in the academies until recent years. Wundt transferred to the psychological laboratory which he set up the technique of structural analysis he had learned in physiology and in physics. As by hypothesis no two observers

could share the same state of mind, the objective control of the body in an experiment had to be accompanied by reports of the parallel mental events observed introspectively. Devices like keimographs, electrical keys, pneumographs and so on, which could measure the time and space relations of bodily movements, were coordinated with introspection simultaneously carried on. The reports make a gigantic accumulation of printed matter which its critics declare adds nothing to the conceptions of the structure of the mind that Locke had not already set forth in his classic *Essay*. They offer nothing in the way of laws enabling scientific prediction and practical control.

At the end of the first decade of the current century functional psychology was still speculative and literary and animal psychology had only begun to turn from anecdote and anthropomorphism to scientifically controlled investigation. Mind or consciousness was recognized as a mode of adjustment to the environment but no way had been invented of subjecting it to scientific tests in that capacity. Advance in the knowledge of both human and animal life came from physiology, medicine and biology. Often these disciplines, when seeking to account for a structure or an activity, found themselves involved in the use of concepts that could as easily belong to psychology. However, animals are dumb. If they can and do introspect they cannot communicate their introspections. If there was to be an animal psychology at all, it would have to be one unvitiated by inferences from human mentality, yet satisfactorily accounting for animal behavior. Its data would have to be objective, specific, definite, measurable and subject to control in time and space, in a word, mechanisms amenable to measurements. In the United States, Thorndike, Watson and others worked out such mechanisms—the problem boxes, the discrimination and choice boxes, the mazes. They set up devices which would account for animal behavior in set situations without a word being said. In Russia, Pavlov and Bekhterev and their followers, starting with physiological premises and problems, projected their experiments, their technique and their terms far into the psychologist's domain.

This purely theoretic urge toward mechanistic precision and quantitative formulation deriving from physiology and biology was now reenforced by a practical one deriving from the industrialization of American economic life. A situation had developed which if by no means similar was in some sense analogous to that which had enlisted associationism a century before in England. Great and, from a human point of view, very costly and painful rearrangements of the national life were taking place. Men with the habits of one economy did not readily fit into the other. The process of learning the new ways was involved in maladjustments in the form of countless industrial accidents, labor troubles, financial disasters and the like. Political action and legal reforms of the type that were agitated by the associationists, although attempted, gave no relief and seemed irrelevant. What was called for was apparently something intrinsic to industry itself. What developed is the efficiency movement, the endeavor to adjust the man to the job and the job to the man. In this development psychology has played a major role.

The adjustments aimed at by Harrington and the other efficiency experts are necessarily objective and measurable. They call for premises and devices in principle precisely like those of the new animal psychology. They rule out introspection. They recognize only behavior and evaluate only performance. Beginning with the orthodox Münsterberg's pioneer devices to test the relevant sensibilities of the employees of a certain street railway, and with his grading scale based on performance records, the efficiency movement has spread with phenomenal rapidity into all fields of industrial, commercial and educational life. It captivated certain of the psychologists completely, and when the war came they exploited to the utmost the opportunity it gave them to make psychological tests of skills and "intelligence" without once in any way appealing to introspection or using the presumptions of the ruling academic psychology. Among the testers was John B. Watson, who had by that time already begun his studies in the development of reflexes and instincts in the human infant.

Thus the publication in 1919 of Watson's *Psychology, from the Standpoint of a Behaviorist* found a ready field. What had been since 1912 a sort of rebellious sideshow among the academic psychologists took on the dimensions of an intellectual revolution. Like psychoanalysis in another connection, it reoriented the mind with respect to the nature of man. It said authoritatively and clearly what important sections of the public had come mutely to feel; and it offset some of the more disagreeable implications of the Freudian doctrines. It made the world a simpler place to adjust to, and human nature a

more hopeful thing to deal with. Man, declared Watson, is "an assembled organic machine ready to run." At birth human infants, regardless of their heredity, are as equal as Fords. Each consists of an organization of units of unlearned behavior, each ready to respond to its appropriate stimulus. After birth the environment acts upon these units of unlearned behavior in an endless variety of ways. It "builds into" what is unlearned and unconditioned countless chains of conditioned and learned responses. It thus causes each "to develop into an ever-expanding system," a system of habits. One personality differs from another only as these habit systems differ: personality is the "end product of our habit-systems," our "conditioned" or "built in" ways of work and play, eating and drinking, sleeping and loving, being sad or merry, sound or sick. One of these habit systems has the vocal organs for its base; it is a way of talking. This when carried on subvocally is thinking, but not exclusively; thinking is also implicit manual or visceral behavior. The whole difference between thinking and doing may be said to be explication. Implicit behavior is thinking, explicit, doing. And as almost all behavior, whether implicit or explicit, consists in learned, conditioned, responses, it can be unlearned, unconditioned. Hence, social control has a sure ground. Let it only generate the desired conditioned responses.

From the standpoint of behaviorism, social psychology would arise wherever a study was made of such responses in the individual when the stimulus is one or more other individuals. Some of these responses are evoked by both human and non-human stimuli, others by human stimuli exclusively. Among the latter are language, gesture, every posture and movement of the human figure. As between individuals they operate constantly both as stimulus and as response. Solely activities of individuals, they cannot be referred to any other source. Hence there is no such thing as a collective mind: there are only numerous similar responses to the same stimulus by different men, as when a hundred soldiers step out at the word, "March!". The "behavior of crowds" is no more than the sum of the circling of stimulus and response from one individual to another and back again. In this circling consists whatever unity a crowd may have; it is different only in complication, not in principle, from the unity of a subway crowd during the rush hour, or a noonday crowd eating in Childs'. Its behavior and that of all groups must be considered a mechanically formulable resultant of the stimulus-response circle. All social sciences using quantitative methods, statistics and the like, may be said, whether explicitly or not, to rest on this premise. This would be particularly true of education and the economic disciplines. These have developed farthest because both appear more than any others to be instruments of social control. The study of other forms remains largely in the anecdotal-empirical stage. It cannot be said that anything approaching scientific knowledge in the behaviorist sense exists regarding fashions, fads, crazes, customs, conventions, rumors, public opinion or the institutions of church and state. In Soviet Russia, however, where the fundamental concepts of Pavlov are official doctrine and American behaviorism has a growing vogue, studies are being conducted in the dynamics of social behavior and social control as manifested in the group life of children from pre-school age up. These studies may be the beginnings of a behaviorist social psychology in terms of stimulus-response which may approximate the Watsonian ideal for behaviorism itself. At present the matter is in the air. A shift in dominant social interest or in ruling doctrine, whether in Russia or in the United States, may give behaviorism over to the same fate that befell associationism. For the life of a doctrine, like the life of a man, varies with its bearing on the ruling passions, the dominant drives of the community in which it appears. Generated by such needs, it lapses with their satisfaction.

HORACE M. KALLEN

See: PSYCHOLOGY; COMPARATIVE PSYCHOLOGY; CHILD PSYCHOLOGY; MENTAL TESTS; CONDUCT; PERSONALITY; SCIENCE.

Consult: Watson, J. B., *Psychology, from the Standpoint of a Behaviorist* (Philadelphia 1919, 3rd ed. 1929); Smith, Stevenson, and Guthrie, E. R., *General Psychology in Terms of Behavior* (New York 1921); Watson, J. B., *Behaviorism* (New York 1925), and *Psychological Care of Infant and Child* (New York 1928), and *The Ways of Behaviorism* (New York 1928); Weiss, A. P., *A Theoretical Basis of Human Behavior* (Columbus 1925); Murphy, Gardner, *An Historical Introduction to Modern Psychology* (New York 1929) ch. xvi; Pillsbury, W. B., *The History of Psychology* (New York 1929) ch. xvii; Boring, E. G., *A History of Experimental Psychology* (New York 1929) p. 580–89.

BEKHTEREV, VLADIMIR, (Bechterew, Wladimir) (1857–1927), Russian psychologist and neurologist. His chief work was the investigation of the objective neurological basis of personality in both its normal and its patho-

logical aspects. The psychological career of Bekhterev uniquely parallels the attempt of psychology to reach objectivity. After early studies with Charcot and certain German neurologists he worked as a student in Wundt's laboratory in Leipsic. Although the titles of some of his papers indicate that in common with most contemporary psychologists he still thought of psychological phenomena as psychic processes, during this period he was definitely participating in the new movement of experimental psychology.

Bekhterev soon became deeply impressed with the importance for psychology of neural structures and functions. This is a normal development from the attempted connection of psychic processes with physiological functions which animated experimental psychology. Bekhterev's studies on conditioned motor reflexes, or, as he called them, associated reflexes, contributed greatly to the subsequent shift of emphasis in psychology to the description of psychological phenomena in neural or general physiological terms. These early studies were stimulated by Pavlov's work on conditioned reflexes but Bekhterev went far beyond Pavlov in his emphasis on objectivity. He even eschewed the name psychology in favor of reflexology. His last work approached, in intention at least, the goal of physico-chemical description of biological or psychological phenomena.

Bekhterev applied his theories in studies of criminology, the organization of labor and similar subjects. He wrote voluminously on social as well as on psychological problems. Through a research institution which he founded in 1907 and which became the State Psychoneurological Academy of Leningrad (Gosudarstvenaya Psikhonevrologicheskaya Akademia), he continued until his death to direct a series of studies of child growth, mental hygiene, suicide, crime and other social problems of importance to Soviet Russia.

J. R. KANTOR

Works: The most complete available bibliography is to be found in *Obshchie osnovi refleksologii* (3rd ed. Leningrad 1926) p. 411–18. The more important works of Bekhterev are: *Osnovi ucheniya o funktsiyakh mozga* (Fundamentals of the science of brain functions), 7 vols. (St. Petersburg 1903–07), German tr. by R. Weinberg as *Die Functionen der Nervencentra*, 3 vols. (Jena 1908–11); *Vnushenie i yevo rol v obshchestvennoy zhizni* (St. Petersburg 1903), tr. into French by P. Kéraval as *La suggestion et son rôle dans la vie sociale* (Paris 1910), German translation (Wiesbaden 1905); *Obyektivnaya psikhologiya*, 3 vols. (St. Petersburg 1907–12), tr. into French by N. Kostyleff as *La psychologie objective* (Paris 1913), and into German (Leipsic 1913); "La psychologie objective appliquée à l'étude de la criminalité" translated from the Russian in *Archives d'anthropologie*, vol. xxv (1910) 161–88, German translation by T. Rosenthal as *Das Verbrechertum in Lichte der objektiven Psychologie*, Grenzfragen der Nerven und Seelen, no. 94 (Wiesbaden 1914); *Obshchie osnovi refleksologii* (Petrograd 1918, 3rd ed. 1926), tr. into German as *Grundzuge der Reflexologie des Menschen* (Vienna 1923); *Kollektivnaya refleksologiya* (Petrograd 1921), tr. into German as *Die kollektive Reflexologie* (Halle 1928); *Psikhologiya, refleksologiya i marksizm* (Psychology, reflexology and Marxism) (Leningrad 1925); *Refleksologiya truda* (Reflexology of labor) (Moscow 1926).

Consult: *Die Medizin der Gegenwart in Selbstdarstellungen*, vols. i–viii (Leipsic 1923–29) vol. vi, p. 1–52; Pines, L., in *Archiv fur Psychiatrie und Nervenkrankheiten*, vol. lxxxiii (1928) 677–86.

BEKKER, ERNEST IMMANUEL (1827–1916), German jurist. His father, August Immanuel Bekker the great philologist, strongly influenced his method. Bekker was a professor at Halle, Greifswald and Heidelberg. He was a brilliant but paradoxical figure. A convinced Romanist at a time when the school of Savigny was in the ascendant, he nevertheless urged the study of all legal systems. He was highly critical of the historical school although faithful to its fundamental tenets. Basically a philologist, he was led by his interest in the texts to occupy himself almost exclusively with the pure Roman law, as in his early *Die prozessualische Konsumption im klassischen römischen Recht* (Berlin 1853) or in his later *Die Aktionen des römischen Privatrechts* (2 vols., Berlin 1871–73). On the other hand, he could be fully alive to the demands of the present as is shown by his *System des heutigen Pandektenrechts* (2 vols., Weimar 1886–89), the very title of which was challenging. His *Das Recht des Besitzes bei den Römern* (Leipsic 1880) is the link between Savigny's and Bruns' work on the one side and Ihering's on the other. Above all Bekker wanted to be a legal philosopher; yet he was really a thoroughgoing skeptic, suspicious of theory. He detected in the historical school a leaning toward natural law. He distrusted work of legal systematization. In the *Jahrbücher des gemeinen deutschen Rechts*, published from 1857–63, he pleaded for the recognition of the so-called common law elements in the German civil law. In the controversies over the adoption of the German Civil Code he combated Savigny's doctrine of mistake in law as based too much upon an abstract theory of the will, and his views prevailed to some extent in the code. In the most considerable work in

which he ventured beyond the Romanist field, the *Theorie des heutigen deutschen Strafrechts* (Leipsic 1857–59), he accepted Hegel's absolute theory of punishment, but upon the premise of the historical school. He accepted it not as the only right one but as the one historically realized in the German criminal codes of his time—a position consistent with his championship of common law elements.

WILLIAM SEAGLE

Consult: Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–1910) vol. iii, pt. i, p. 692–93 and 847–52; Gradenwitz, Otto, in the *Zeitschrift der Savigny-Stiftung für Rechtswissenschaft*, vol. xxxvii (1916), Romanistische Abteilung, p. vii–xxxvii.

BELIAYEV, IVAN DMITRIEVICH (1810–73), Russian historian. For almost twenty years Beliayev occupied official positions in various Moscow archives and after 1852 was professor of Russian legislative history at the University of Moscow. In *Vremennik*, the publication of the Moscow Society of Russian History and Antiquities which Beliayev edited from 1848 to 1857, and in other publications he printed a great deal of hitherto unavailable archive material. As author or editor he published over one hundred works, some of which are considered standard monographs. They deal with a variety of subjects in the social and economic history of Russia from the ninth to the fifteenth century: the clergy, town government, peasantry and the agrarian order, state finances and the monetary system, military organization, law and the sources of legal history.

Beliayev was in general agreement with the Slavophile interpretation of Russian history; he contributed to various Slavophile publications and took a prominent part in the controversy between the Slavophiles and "Westernists" (*zapadniki*) regarding the peasant land commune (*obshchina*). He attempted to show that these communes were the dominant form of social organization in ancient Russia and the product of the Slavic *Volksgeist*. His Slavophilism was not a closely reasoned philosophic system but the result of his great sentimental attachment to ancient Moscow. The works to be mentioned in this connection are his book on peasants in Russia (Moscow 1860, 2nd ed. 1879), which is a classical treatise on land communes, and the four volumes of Russian history (Moscow 1861–72) forming a part of a projected twelve-volume work and covering the history of the northwestern territories of Novgorod, Pskov and Polotsk. Beliayev's was in many ways pioneer work in the social, economic and provincial history of Russia, but it suffered from a somewhat uncritical treatment of the sources and from the lack of a broad philosophical and sociological background.

BORIS EVREINOV

BELIEF. Because of its intimate relation to conduct, belief has been of continuing interest to social philosophers and its psychological nature a frequent subject of study. An important modern analysis of belief was that of Hume, who viewed it as a psychologic state differing from imagination only by its greater vividness and steadiness. It is at present generally recognized that to the extent that an idea fills the mind to the exclusion of possible alternatives we tend to hold it true. Thus fixed ideas and inflexible beliefs arise in a state of mental debility. Certain recent psychologists emphasize, as did the patristic and scholastic writers, the active element of assent in the judgment that something is true. Romantic philosophers have stressed the purely voluntary character of this assent; while others insist that when we truly believe, as when we truly love, we feel compelled to do so. The recognition that we have a choice means that another view is possible, and this is implicit doubt. One may, however, distinguish between the compulsion of the evidence of the subject matter and the inner compulsion of one's own nature to hold a proposition true despite the absence of objective evidence sufficient to silence the doubt of others. From this point of view beliefs differ in degree of intensity, indicated by such phrases as, "it is my opinion," "I am persuaded," "I am unalterably convinced."

Whatever the psychological characteristics of belief, it is clear that its specific forms are largely social in origin and are in many cases conditioned by our habitual emotional reactions with the result that through following a certain mode of life one generally ends by sharing the beliefs of others who follow that mode. Hypocrites are scarce because it is so easy to believe that which our conduct professes. Men generally believe that their professional groups, their nation, their city or section of the country, their college or fraternity, have certain inherent superiorities wholly invisible to outsiders. The social determination of belief is even more evident in such phenomena as booms, panics, crazes or fads. Le Bon has pointed out that in a crowd the beliefs or opinions of the wiser members are

generally depressed to the level of the majority. For the power of suggestion increases rapidly with an increase in numbers and it is always difficult to maintain opinions or practises different from those professed and approved by one's associates. Heretics who defy the opinions of the multitude depend all the more intensely on the devotion of their supporters.

Beliefs are transmitted not only unconsciously but also through the direct and intentional pressure of parents, teachers or other authoritative leaders. Both types of transmission are most effective in small homogeneous communities. It seldom occurs to a member of such a group even to doubt its prevailing views. The processes of intercommunication, commerce, travel or the mixing of diverse peoples in large cities break down such primitive certainty. "To have doubted one's own first principles is the sign of a civilized man," Mr. Justice Holmes has said. The state of doubt is, however, difficult and unpleasant. Doubt, "where all is double," requires much free intellectual energy. It complicates and renders more difficult our practical choices. To rid themselves of this burden most people rely on natural leaders and authorities or cling resolutely to certain plausibilities. Some attempt to follow the method of science, questioning everything until doubt is no longer possible; but since action must often precede the acquisition of adequate knowledge a large number of practical beliefs cannot be based on scientific evidence. Many firmly held beliefs are positively irrational and rest on excessive credulity or obstinate pride of opinion. Such beliefs are of the essence of superstition. The tendency to regard any chance coincidence of two events as a case of causal connection has not only led to various primitive, magical ideas, such as those attributing disease to the evil eye, but continues to add to the modern fund of superstitions. Persisting legends or myths, such as those glorifying certain statesmen as free from human imperfections, testify to man's perennial credulity, his will to believe that which is simple and pleasant.

Philosophers have long differed as to the way in which beliefs influence social evolution. Deterministic theories minimize their importance; beliefs are said to be only the ideologic reflections of the physical environment, of the racial inheritance, of the system of production, of the interests of the dominant class or of irrational emotions and feelings. On the other hand men have commonly believed in indoctrinating children and adults with the proper beliefs, whether by education, propaganda, preaching, advertising or various more indirect methods. In recent years, with the growth of psychologic interpretations of social development, the role of beliefs has been increasingly emphasized. The widespread recognition that the belief in science and the scientific method has revolutionized modern life is accompanied by the assertion that other types of belief have been equally or even more effective.

It is an ancient view, shared by such writers as Plutarch and Machiavelli, that religious and even superstitious beliefs are necessary for social life, "to manage and reform the vulgar." This idea appears in a modern sophisticated version in the theory of Sorel and Ross that myths or illusory beliefs are necessary to give *élan* and direction to social movements. These theorists have failed, however, to show by analysis what kinds of myths are effective, for obviously not all myths are influential. Again it has been held, notably by Kidd, that rational beliefs are always individualistic and that socially desirable conduct requires the subordination of the individual to the interests of the race, a process which can be sanctioned only by supernatural religion. This theory shows traces of the old view that religious peoples are the strongest. Doubts as to the complete social value of religious beliefs arise, however, from a survey of such facts as the religious sanctions of celibacy, slavery, the caste system or the sacrifice of children to Moloch; they arise even more strongly from a study of the extermination of such groups as the Albigenses and the Waldenses, because of the tenacity of their religious beliefs, and of the serious retardation of others by religious wars. The supposed facts about primitive life, assembled by Frazer to prove that superstitious and magical beliefs have strengthened respect for government, for life and property, for marriage and sexual morality, and have thus made for greater security, can be offset by an equally long list of the horrible effects on social life of various magical beliefs and superstitions.

More convincing is Max Weber's theory of the importance of religious ideas in molding economic development, and specifically his attempt to show that protestant asceticism led to the development of modern capitalism, although many of its underlying assertions have been successfully challenged, notably by L. Brentano, and although Weber has not made out a case for direct causal relation. The ambitious effort of Durkheim and his school to show that "the

fundamental categories of thought and consequently of science are of religious order" is based upon a view of religion which makes it synonymous with all the ritual of social life. But the fact that people take part in a common ritual or cult does not always mean that they have a common belief. Here too there is insufficient evidence of a definite causal relation between belief and the course of social evolution.

It is nevertheless true that most societies have felt the acceptance of certain beliefs essential to their survival, and have attempted by various means to suppress the practise and spread of other beliefs. In closely knit communities departures from group standards are so rare as to cause little concern. Few, if any, peoples previous to the Greeks thought it necessary to formulate the beliefs underlying their religion or their family, clan or industrial organization. While certain expressions were regarded as endangering the community because they might bring down the wrath of the gods or of evil spirits, speculation itself was considered too unimportant to require suppression. It is when religious organizations become voluntary and a definite formula of belief for admission to a group is necessary that dogma and creed appear. And it is when a society includes many different elements that the non-acceptance of certain beliefs first becomes a problem. Thus there is no creed or dogma in the Old Testament. The early development of the Christian church in the midst of hostile religions and its subsequent incorporation of so many diverse national groups and practises led to its insistence on the suppression of heresy. Unity of dogma was all the more urgent when the Roman Empire fell and the Catholic church tried to continue to rule different provinces subject to different temporal powers. Having assured the acceptance of its great central beliefs, the Catholic church has since allowed a great diversity of opinion and practise among its members; but the importance assigned to belief by the Christian tradition has continued to influence the history of the western world.

Political considerations have often led temporal rulers to support religious beliefs, while regard for public order and tranquillity have been the basis of many persecutions of heretics. The gradual secularization of thought and the more complete separation of church and state have led to a decreasing interest on the part of political rulers in religious beliefs and a consequent removal of religious disabilities. In England commercial expansion and the growth of dissent in the middle classes and in the cities led to the Toleration Act of 1689 and later to the emancipation of Catholics and Jews, the removal of religious tests for holding property or public office. One of the last steps in this direction occurred in 1877 when the English universities ceased to require adherence to the Thirty-Nine Articles as a prerequisite for fellowships and other privileges.

But with the growth of religious tolerance economic, political and social beliefs have assumed a greater importance and have become the subject of increasing attempts at control by governments or by voluntary associations. Modern governments, regarding socialism as a danger, have disqualified its adherents from certain honors, dignities or offices. It is often alleged that American universities adopt similar methods. Certainly belief in a heterodox code of marital or sexual relations might prevent a man from being elected to public office in some parts of the United States or in Great Britain. The United States excludes immigrants who believe in philosophic anarchy and it excludes from admission to citizenship those who believe that the law of God or conscience may take precedence over the call of the state to bear arms. After the World War an attempt was made in New York state to bar from teaching in the public schools those who did not believe in the existing form of national or state government. Similar attempts to prevent the dissemination of certain beliefs have been made in most modern states; while under dictatorships both the control of the expression of opinion and the development of methods of fostering beliefs approved by the ruling group have reached a high degree of perfection. In revolutionary movements as well, such as the socialist or communist parties, the need is strongly felt for formulated creeds to which adherents must subscribe so that heretics may be removed. Toleration of beliefs contrary to those one cherishes is possible only where there is a certain security and only for those who care more for scientific rectitude in the search for truth than for any of its results.

MORRIS R. COHEN

See: CONDUCT; CUSTOM; TRADITION; SUPERSTITION; RITUAL; RELIGION; PUBLIC OPINION; PROPAGANDA; CONTROL, SOCIAL; CIVIC EDUCATION; CHURCH; DOGMA; APOSTASY AND HERESY; BLASPHEMY; ATHEISM; CENSORSHIP; ANTIRADICALISM; INTOLERANCE; RELIGIOUS FREEDOM; ACADEMIC FREEDOM; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Hume, David, *Treatise on Human Nature*,

2 vols. (new ed. by T. H. Green and T. H. Grose, London 1874) pt. iii, §§ vii–x; Bain, A., *Emotions and Will* (3rd ed. London 1875) p. 505–38; Mill, James, *Analysis of the Phenomenon of the Human Mind*, 2 vols. (new ed. by J. S. Mill with notes, London 1869) vol. i, chs. xi–xii; James, William, *The Principles of Psychology*, 2 vols. (New York 1890) vol. ii, ch. xxi; Russell, Bertrand, *The Analysis of Mind* (London 1921) ch. xii; Lund, F. H., *The Psychology of Belief* (Boston 1925); Jastrow, J., *The Psychology of Conviction* (New York 1918); Guignebert, Charles, *L'évolution des dogmes* (Paris 1909); Le Bon, Gustave, *Les opinions et les croyances* (Paris 1911); Sorokin, P. A., *Contemporary Sociological Theories* (New York 1928) ch. xii. See also references cited in bibliographies of related articles.

BELINSKY, VISSARION GRIGORYEVICH (1811–48), Russian literary critic. Belinsky contributed numerous essays to Moscow and St. Petersburg reviews, in which he commented discursively on literature. He was at first a follower of German idealism and an advocate of pure art, but when he entered his thirties he discovered French socialism and opened a vehement if private campaign against the existing regime. Thenceforth he placed emphasis on art as an instrument of social betterment. A civic purpose, he argued, is not necessarily an adventitious element in a poem or story. The writer is the public conscience incarnate and his work, to be significant, must be sensitive to the needs and aspirations of the age, must stimulate the social consciousness of the masses. Since he attached value only to those literary works which were rooted in the common experience of life, he heralded the realistic method, championing Gogol and the younger writers. An intense, candid, irreverent soul, he was for years the autocrat of Young Russia. In the decades following his death his ideas gained a firm foothold among the educated classes and did much to popularize the notion of literature as subservient to social progress. At the turn of the century a reaction against this attitude considerably damaged his reputation, but in contemporary Russia Belinsky is held in high esteem as a forerunner of revolutionary ideology.

AVRAHM YARMOLINSKY

Works: Complete Russian edition containing so far vols. i–xii (St. Petersburg and Moscow 1900–26) still unfinished; *Pisma* (Correspondence), 3 vols. (St. Petersburg 1913–14).

Consult: Pypin, A. N., *Belinsky, evo zhizn i perepiska* (Belinsky, his life and correspondence) (2nd ed. St. Petersburg 1908); Miliukov, P., *Iz istorii russkoy intelligentsii* (2nd ed. St. Petersburg 1903), tr. into French by J. W. Bienstock as *Le mouvement intellectuel russe* (Paris 1918) p. 131–86 and 282–300; Mirsky, D. S., *A History of Russian Literature* (London 1927) p. 210–15; Poliansky, V., in *Literaturnaya entziklopediya*, vol. i (Moscow 1929) p. 394–405.

BELL, ANDREW (1753–1832), Scottish educator and Anglican clergyman. In 1787 he went to India and two years later became superintendent of the Military Male Orphan Asylum at Madras, where he put into practise the Madras system of mutual instruction, better known as the monitorial system. Upon his return to England he published *An Experiment in Education, made at the Male Asylum at Madras* (London 1797, 4th ed. 1808). Within a few years many monitorial schools were opened, but the credit for the movement was claimed equally by Joseph Lancaster, a Quaker, who had the following of the Nonconformist body for some time.

The monitorial system, which provided for pupil tutors under the direction of the master, was a phase in the philanthropic movement in education aroused by the social unrest accompanying the industrial revolution. It was designed to teach the lower classes the elements of letters, morality and religion in conjunction with vocational training and, it is said, to reconcile them to their social status. Fear of the non-Anglican influence of the Royal Lancasterian Institution (1808; known since 1814 as the British and Foreign School Society) led to the establishment of the National Society for Promoting the Education of the Poor in the Principles of the Established Church (1811), directed by Bell. The reduction of the cost of instruction which was made possible by the use of pupil teachers was a means to the popularization of schools and ultimately to their assistance by the state. The first government grant for elementary education in England was made (1833) through these two societies. Their religious basis, however, delayed for many years the advent of a genuine national system of state education in England.

MAX LEVIN

Works: *The Complete Works of the Reverend Andrew Bell* (Edinburgh 1832), while actually an abridged edition, contains his most important writings.

Consult: Southey, R. and C. C., *The Life of the Rev. Andrew Bell*, 3 vols. (London 1844); Meiklejohn, J., *An Old Educational Reformer, Dr. Andrew Bell* (Edinburgh 1881); Birchenough, C., *History of Elementary Education in England and Wales* (London 1914) chs. ii, vii; Adams, Francis, *History of the Elementary School Contest in England* (London 1882) p. 48–64. See also articles in *American Journal of Education*, vol. x (1861) 461–574.

BELLAMY, EDWARD (1850–98), American novelist and social theorist. Bellamy is significant chiefly as author of the utopian romance *Looking Backward 2000–1887* (Boston 1888) and as leader of the Nationalist movement of the late eighties and early nineties. *Looking Backward* portrayed a utopian society of 2000 A.D., devoid of the private monopolies, the wasteful, competitive and profit seeking production, the concentration of wealth and the accompanying social inequalities of the America of 1887. It was a state-socialistic organization in which the national ownership of all resources and all agencies of production and distribution was extended to include even such domestic utilities as food preparation and cleaning service. Such a portrayal with its premise of complete political, economic and social equality, while it expressed concretely the hopes and aspirations of many of that time, was in the main made palatable to an individualistic American audience through the medium of a romance tinged with sentiment and couched in a charming style. Its exposition of the benefits of science and invention and its acceptance of the new machine system made plausible the visualization of a utopia based on efficiency. The book was enormously successful, selling more than a half million copies in America within a few years, and was translated into many languages. *Equality* (New York 1897), another romance intended by Bellamy as a sequel, did not meet with equal success.

Out of the interest in *Looking Backward* grew the Nationalist movement to which Bellamy thereafter devoted himself as organizer and as editor of its publications, the *Nationalist* (1889–91) and the *New Nation* (1891–94). Despite the 162 clubs reported by its secretary as existing throughout the country and the even larger unorganized following, the movement could not maintain itself and passed over politically into the Peoples' party.

J. O. HERTZLER

Consult: Hertzler, J. O., *The History of Utopian Thought* (New York 1923) p. 227–36; Mumford, Lewis, *The Story of Utopias* (New York 1922) p. 159–69.

BELLARMINE, ROBERT FRANCIS ROMULUS (1542–1621), Italian Roman Catholic theologian. He became a Jesuit in 1560 and ten years later began to lecture on theology at the University of Louvain. In 1576 Gregory III appointed him to the chair of controversial theology at the newly founded Roman College, which he occupied for twelve years. On the basis of his lectures Bellarmine published *Disputationes . . . de controversiis christianae fidei adversus hujus temporis haereticos* (4 vols., Ingolstaat 1581–93; 3 vols., Rome 1832–38), a most exhaustive elucidation of Catholic tenets. In 1599 he was created cardinal and three years later archbishop of Capua. Bellarmine was called upon to defend the position of the church against the champion of Venice, Paolo Sarpi; against Pierre de Belloy, the apologist of Henry of Navarre; and against his personal friend Galileo. The most famous of all his controversies arose when he challenged the right of James I to exact an oath of allegiance from Catholics after the Gunpowder Plot. Bellarmine's most effective reply to James and to the regalist William Barclay was *De potestate summi pontificis in rebus temporalibus* (Rome 1610), in which with an attempt at moderation he developed his theory of the indirect power of the pope over princes.

According to Bellarmine the church was the most perfect of all political institutions. It governed through the pope, who received his authority directly from Christ and who, in order that he might not be hampered in carrying out his spiritual purpose over his wide domain, had been constituted an absolute monarch, independent of both church councils and civil powers. The authority of the prince was likewise sanctioned by God, but it was subject to certain conditions. If he became a heretic or attempted to interfere with the spiritual life of his subjects the pope could as a last resort depose him. Moreover, if the prince failed to govern with that enlightened regard for the people's interest described in Bellarmine's *De officio principis christiani* (Rome 1619), they themselves might have the sanction of the church to resist him. The papal right to interfere in temporal affairs, of which Bellarmine was perhaps the ablest defender, was condemned by Hobbes and others as the gravest error of the Roman church.

ROBERT H. MURRAY

Consult: Bellarmine, R. F. R., *Selbstbiographie . . . mit geschichtlichen Erläuterungen*, ed. by J. J. I. Döllinger and F. H. Reusch (Bonn 1887); Brodrick, J., *The Life and Work of Blessed Robert Francis Cardinal Bellarmine*, 2 vols. (London 1928); Raitz von Frentz, E., *Der ehrwürdige Kardinal Robert Bellarmin, S.J., ein Vorkämpfer für Kirche und Papsttum 1542–1621* (Freiburg 1921); De la Servière, Joseph, "Les idées politiques du Cardinal Bellarmin" in *Revue des questions historiques*, vol. lxxxii (1907)

378–412, and vol. lxxxiii (1908) 56–90; Schaff, D. S., *The Bellarmine-Jefferson Legend and the Declaration of Independence* (New York 1927).

BELLERS, JOHN (*c.*1654–1725), Quaker social reformer. His faith in the inner light led him to look upon the social conscience as the foundation of political authority. The social conscience expressed a common standard of right in social affairs, and Bellers' emphasis upon this was an alternative to the enforcement of church dogma, about which there was much disagreement among his contemporaries. His projects of social reform were all concerned with an organization of the social order which would enable the individual to develop his personality to the utmost. This is in striking contrast to the official church outlook, the Calvinist theory of the state and to such secular theories as those of Locke and Hobbes. His proposals include a plan for a college of industry which represents a special effort to improve the material and spiritual conditions of the workers. This plan did not involve the introduction of conscious socialism; the founders, like the modern shareholders of a company, were to have a controlling influence. Bellers emphasized the importance of educating the criminal and reforming criminal law. In common with William Penn he suggested a type of league of nations to do away with national rivalries; he advocated state hospitals as being more important to the country than expenditure on war.

PHILIP S. BELASCO

Important works: *Proposals for Raising a College of Industry* . . . (London 1695), reprinted by Robert Owen in his *New View of Society* (London 1818); *Essays about the Poor, Manufacturers, Trade, Money, Plantations and Immorality* (London 1699); *Some Reasons for an European State* (London 1710); *An Essay towards the Improvement of Physick* (London 1714).

Consult: Belasco, P. S., in *Economica*, vol. v (1925) 165–74, and *Authority in Church and State* (London 1928) p. 96–107.

BELLET, DANIEL (1864–1917), French economist and journalist. He abandoned his career as engineer with the central administration of public works to devote himself to economic studies and became eventually professor at the École Libre des Sciences Politiques and permanent secretary of the Société d'Économie Politique. He was the founder of the Ligue du Libre-Échange (1910). Bellet's talent as a journalist is evidenced by his numerous articles in such publications as *Journal des économistes* and *L'économiste français*. An adept at economic popularization, he wrote many books on a great variety of subjects. He was especially interested in the bearing of technology on economic problems, and his training in engineering enabled him to describe several important industries with great accuracy. Throughout his life Bellet remained the most faithful exponent of the liberal doctrine as formulated by Bastiat and Léon Say; he made no concessions to protectionism or to state interventionism.

ROGER PICARD

Important works: *Les grands ports maritimes de commerce* (Paris 1893); "Le mouvement libre-échangiste en France et dans les autre pays" in *Revue économique internationale*, vol. iii (1911) 306–17; *Illusions socialistes et réalités économiques* (Paris 1912); *La machine et la main d'oeuvre humaine* (Paris 1912); *Le chômage et son remède* (Paris 1912); *L'évolution de l'industrie* (Paris 1914).

Consult: *Journal des économistes*, 6th ser., vol. lvi (1917) 106–08 and 289–95.

BELLIGERENCY (from *belligerare*, to wage war) is the term used in international law to describe the legal condition or status of the parties to public war. The condition arises either from war between states, using the term state broadly to include all political entities having an internationally recognized status, or from civil war following insurrection within a state. Both in international and in civil war the modern practise of nations indicates that there are two requisites for belligerency: the first is the fact of a contest of arms; the second is some manifestation of intention or cognizance of the fact in the form of declaration or recognition. The latter requisite is not mere formalism. It serves to mark precisely, for the purposes of international law, the point at which belligerency begins. It is perhaps chiefly in respect to this requirement that the belligerency of international and of civil contestants differs.

In international contests belligerency usually begins with a formal declaration of war or is preceded by an ultimatum with conditional declaration. This is a modern revival of an ancient practise. In ancient times hostilities were usually preceded by declaration of war, but the custom was little observed after the seventeenth century and was not revived until late in the nineteenth century. The Franco-Prussian War of 1870 and the Russo-Turkish War of 1877 began with formal declarations, while the Spanish-American War of 1898 and

the Boer War of 1899 were preceded by ultimatums. Russia accused Japan of gross treachery in 1904 because Japanese torpedo boats attacked Russian men-of-war at Port Arthur before war had been declared. The question was considered at the Second Hague Peace Conference of 1907 and a convention was drafted as follows: "The contracting powers recognize that hostilities between them must not commence without a previous and unequivocal warning, which shall take the form either of a declaration of war, giving reasons, or of an ultimatum with a conditional declaration of war" (Convention III, Article 1). "The state of war must be notified to the neutral powers without delay, and shall not take effect in regard to them until after the receipt of a notification, which may even be made by telegraph. Nevertheless neutral powers cannot plead the absence of notification if it be established beyond doubt that they were in fact aware of the state of war" (Article 2). This convention was ratified by twenty-eight states, including most of the great powers, and was generally observed at the outbreak of the World War.

In civil contests within a state belligerency begins with recognition. There must be war in fact, of course, but it is not essential that the preexisting status of insurgency should have been recognized as such. Indeed the choice between recognition of insurgency and recognition of belligerency may often be quite arbitrary. The former hardly amounts to more than public cognizance of the insurrectionary contest. The state which thus takes cognizance of civil war in another state is not thereafter in a position, while the contest continues, to ignore or deny its existence. Beyond this it is not clear that recognition of insurgency has any very precise legal effect. Recognition of belligerency, on the other hand, concedes to the contest within the state most of the incidents and effects of a war between states.

The belligerency of insurgents may be recognized either by the state against which they are in revolt or by foreign states. The effect in the former case is to give the insurgents a war status in relation to all states. In the latter case the insurgents acquire by recognition a war status only in relation to the state against which they are in revolt and the recognizing state. Recognition by the state against which insurgents are in revolt is rarely express. If conceded it is usually by implication from acts affecting other states which are permissible only in time of war, such as blockade or the intercepting of cargoes of the nature of contraband. Recognition by foreign states, on the other hand, is usually express and generally takes the form of a proclamation of neutrality. Express recognition by foreign states may be expected to follow an implied recognition by the state against which insurgents are in revolt. Thus President Lincoln's proclamation of the blockade of southern ports, April 19, 1861, "in pursuance of the laws of the United States and of the law of nations," was soon followed by neutrality proclamations issued by the principal maritime powers. Recognition by foreign states, before the state against which insurgents are in revolt has at least impliedly conceded their belligerency, is always a delicate matter and the circumstances justifying it have been much discussed. Hall concludes, in a passage frequently quoted, that such recognition by a foreign state must be "based solely upon a possibility that its interests may be so affected by the existence of hostilities in which one party is not in the enjoyment of belligerent privileges as to make recognition a reasonable measure of self-protection" (8th ed., p. 39). Since recognition creates new legal relationships concerning others than the immediate parties it is said to be irrevocable.

The status of belligerency has its own standards, principles and rules applicable to both public and private relationships. Between belligerent states the normal avenues of communication are interrupted, intercourse becomes hostile and the laws of war are in force. Treaties may be abrogated, suspended or brought into effect depending upon their content. Private intercourse with the enemy is closely confined or prohibited. Enemy property on the sea becomes liable to capture and condemnation. Persisting non-hostile relations, such as the indirect diplomatic intercourse which continues through the legations of neutral powers, and special relationships resulting from the grant of safe conducts, the use of flags of truce, capitulations, armistices or peace negotiations, are justified by considerations of convenience, necessity or humanity. Between belligerent and neutral states the rules of neutrality limit the range of belligerent activities on the one hand and increase neutral responsibilities on the other. Between belligerent states and the individuals of neutral states contraband trade, breach of blockade and unneutral service incur the risk of visit, search, seizure and condemnation. So far as applicable and appropriate, like

consequences follow from the recognition of belligerency in civil war, both parties becoming entitled to a war status for the purposes of the contest in which they are engaged.

EDWIN D. DICKINSON

See: NEUTRALITY; BLOCKADE; CASUS BELLI; CIVIL WAR; REVOLUTION; WARFARE; RECOGNITION, INTERNATIONAL.

Consult: Hall, W. E., *A Treatise on International Law* (8th ed. by A. P. Higgins, Oxford 1924) p. 36–46, 444–68; Hyde, C. C., *International Law*, 2 vols. (Boston 1922) vol. i, p. 77–82, vol. ii, p. 195–201; Oppenheim, L. F. L., *International Law*, 2 vols. (4th ed. London 1926) vol. ii, p. 113–27, 134–42, 152–56, 192–229; Westlake, John, *International Law*, 2 vols. (2nd ed. Cambridge, Eng. 1910–13) vol. i, p. 50–57, vol. ii, p. 19–31; Wilson, C. G., *Handbook of International Law* (2nd ed. St. Paul 1927) p. 40–43, 235–46; Phillipson, Coleman, *The International Law and Custom of Ancient Greece and Rome*, 2 vols. (London 1911) vol. ii, p. 197–99; Maurice, J. F., *Hostilities without Declaration of War* (London 1883); Higgins, A. Pearce, *The Hague Peace Conferences* (Cambridge, Eng. 1909) p. 198–205; Wiesse, Carlos, *Le droit international appliqué aux guerres civiles* (Lausanne 1898); Rougier, A., *Les guerres civiles et le droit des gens* (Paris 1903).

BELLO, ANDRÉS (1781–1865), Latin American diplomat and publicist. He was born in Caracas, Venezuela, and there became a secretary to the Spanish governor in 1802. After the outbreak of the revolution in 1810 he was sent to England with Bolivar on a diplomatic mission and remained there until 1829, serving Venezuela, Chile and Colombia at various periods in diplomatic posts and at other times acting as editor, tutor and translator. While in England he studied the theories of Destutt de Tracy, Bentham and James Mill. When he returned to South America (1829) he became director of the College of Santiago, and from 1843 until his death was rector of the reorganized University of Chile. As rector he brought the university into line with the most advanced views in the physical and social sciences, and as teacher, editor and statesman he trained the first generation of social scientists and historians in Chile. Although not a partisan he was constantly drafted into public service because of his wide experience, honesty and knowledge of the social sciences at a time when Chile was little advanced. While he was senator he prepared the Civil Code of Chile (1885), which was copied by other South American states; he wrote treatises on law, philosophy, grammar and international law; he was for a considerable period adviser to the department of foreign relations; and he served as arbitrator between the United States and Ecuador (1864) and between Peru and Colombia (1865). Bello did more than any other man of his time to determine the character of Chilean civilization.

L. L. BERNARD

Works: *Obras completas*, published under the direction of the Chilean Government, 15 vols. (Santiago de Chile 1881–93).

Consult: Amunátegui, M. L., *Vida de Don Andrés Bello* (Santiago de Chile 1882); Balbín de Unquera, A., *Andrés Bello: su época y sus obras* (Madrid 1910); Blanco-Fombona, R., *Grandes escritores de América, siglo XIX* (Madrid 1917) p. 11–75.

BELOCH, KARL JULIUS (1854–1929), German historian of classical antiquity. With the exception of a single year at Leipsic, Beloch taught not in Germany but in Italy, where at the University of Rome he trained most of the men now outstanding in ancient history and archaeology in Italy. His first book *Campanien* (Berlin 1879) reflected his early interest in historic and economic geography. His next works, *Der italische Bund unter Roms Hegemonie* (Leipsic 1880), *Die attische Politik seit Perikles* (Leipsic 1884) and *Die Bevölkerung der griechisch-römischen Welt* (Leipsic 1886) showed rare sense for political and statistical realities. Since, however, they challenged conceptions sanctioned by great names—Mommsen, Grote, Böckh—they came into their due only gradually. Beloch's *magnum opus* was his *Griechische Geschichte* (3 vols., Strasbourg 1893–1904; 2nd ed. in 4 vols., completely revised, 1912–27). In this work is to be found the first sustained economic interpretation of Greek history. Beloch measured progress less by fluctuations in political systems and the development of formal excellence in art and letters than by the growth and spread of scientific ideas. Mass movements were emphasized. Beloch aimed to do for Greece what Mommsen in his *Römische Geschichte* did for Rome and in large measure, for better or worse, he succeeded. His *Römische Geschichte bis zum Beginn der punischen Kriege* (Berlin 1926) he himself characterized as "Geschichte ohne Darstellung," and his most distinguished pupil, De Sanctis, called it "Geschichte ohne Geschichte." In his many publications Beloch confined himself almost exclusively to the period before the establishment of Rome's hegemony, but his papers contain a vast body of statistics collected in archives during many years for a work on the population of the Mediterranean world in ancient, mediaeval and renaissance times.

Beloch was master of a German style French in its variety and clarity. In his critical procedure he combined deep distrust of ancient tradition with full confidence in his own intuitions. During all his life he was a rebel against authority, liberal in his political outlook and a hard fighter.

WILLIAM SCOTT FERGUSON

Consult: Beloch's autobiography in *Die Geschichtswissenschaft der Gegenwart in Selbstdarstellungen*, ed. by S. Steinberg, 2 vols. (Leipsic 1925–26) vol. ii, p. 1–27.

BELOW, GEORG ANTON HUGO VON (1858–1927), German economic and constitutional historian. Trained at Bonn under F. von Bezold and M. Ritter in history and under Th. von der Goltz and E. Nasse in economics, he initiated a new phase of research in German economic history. As Karl Lamprecht had done a short time before him, Below began with a study of the unedited sources of a Rhenish territory, the Duchy of Jülich and Berg; but in contrast to Lamprecht's leanings toward a new "cultural" and sociological historiography, Below's work, which establishes him as one of the founders of modern constitutional history in Germany, was from the outset characterized by a close connection with the older methods of political history and by an equally close contact with legal history, from which he borrowed its conceptual strictness. Since his favorite manner of writing was to use the critique of other theories as a starting point for developing his own, Below's chief contributions in these fields consist of articles or papers. Most of them were collected in the two classical books *Territorium und Stadt* (Munich 1900–02, enlarged ed. 1923) and *Probleme der Wirtschaftsgeschichte* (Tübingen 1920, 2nd ed. 1926). The comprehensive monograph on *Der deutsche Staat des Mittelalters* (Leipsic 1914, 2nd ed. 1925) did not get beyond the first general volume.

Perhaps the least controversial of Below's writings is the history of the *seigneurie* and manor (*Grundherrschaft* and *Gutsherrschaft*) in western and eastern Germany, in which he drew upon August Meitzen's fundamental treatise on German agrarian regimes and upon his personal background as a member of the native Prussian gentry. Another of Below's major interests was the growth of town economy and of mediaeval crafts and commerce. The characteristic feature and the lasting merit of his work in this field is the insistence on the role of free economic activity both in the agricultural communities and in the craft guilds. He was one of the first to recognize the influence of free agricultural communities on town government and, having challenged the hypothesis current since the days of Adam Smith as to the manorial origin of craft guilds, he pointed out the differences between early guild organization and *Hofrecht*. It cannot be denied, however, that he overlooked much that was valuable in the work of such opponents as Karl Bücher, Schmoller and Seeliger, who revived in a modified form Rodbertus' notion of manorial, municipal and territorial economies as self-sufficient areas and genetic stages, or Sombart, who emphasized the part played by the accumulation of land rent in the rise of towns, industry and capitalism.

Below's other works include a popular illustrated monograph, *Das ältere deutsche Stadtswesen und Bürgertum* (Leipsic 1898, 3rd ed. 1925); treatises on the "reception" of Roman Law in Germany, *Die Ursachen der Rezeption des römischen Rechts in Deutschland* (Munich 1905); the causes of the Reformation, *Die Ursachen der Reformation* (Freiburg i. B. 1916, 2nd ed. Munich 1917); the Italian policy of the mediaeval Emperors, *Die italienische Kaiserpolitik des deutschen Mittelalters* (Munich 1927); and *Die deutsche Geschichtsschreibung von den Befreiungskriegen bis zu unseren Tagen* (Munich 1924), which deserves notice for its shrewd, if often biased, elaboration of the differences between German and Western historiography and of the non-socialist fountainheads of economic history. The last work was published in the *Handbuch zur mittelalterlichen und neueren Geschichte* (Munich 1903–28), an important series, which Below edited in collaboration with Friedrich Meinecke.

Below was a conservative in politics and a nationalist in outlook. As he grew older he became increasingly hostile to democracy and to the republican regime in Germany. It is characteristic that in the last decade of his life he combated the teaching of sociology as a separate discipline. Although his influence was felt in all branches of social science, Below confined himself to teaching history, serving as professor successively at Münster, Marburg, Tübingen and after 1905 at Freiburg i. B.

CARL BRINKMANN

Consult: Autobiography in *Die Geschichtswissenschaft der Gegenwart in Selbstdarstellungen*, ed. by S. Steinberg (Leipsic 1925); Aubin, H., "Georg von Below als Sozial- und Wirtschaftshistoriker" in *Vierteljahr-*

schrift für Sozial- und Wirtschaftsgeschichte, vol. xxi (1928) 1–32; Klaiber, L., *Georg von Below, Verzeichnis seiner Schriften* (Stuttgart 1929).

BELUZE, JEAN PIERRE (1821–1908), French cooperator, a carpenter by trade. After Cabet departed for America to found an Icarian colony at Nauvoo, Beluze, who was his disciple, assumed the direction of the Icarian bureau of Paris and for twelve years managed the collection of subscriptions for the colony. Subsequently, however, he reached the conclusion that communism could not be realized, and advanced instead a program of cooperation for the workers. His *Les associations conséquences du progrès: crédit au travail* (Paris 1863) contains a theoretical section on the advantages of workingmen's associations and a practical section giving detailed provisions for a people's bank. The immediate success of the book made it possible for him to found the Société du Crédit au Travail of which he was appointed manager. Its supporters included conservative capitalists like Casimir-Périer and Augustin Cochin, young republicans like Clemenceau and revolutionists like Bakunin. With Elisée Reclus, Beluze at the same time founded a journal, *L'association*, to spread his ideas. The society prospered for three years and rendered valuable services to the producers' cooperatives which were being founded in various cities. Encouraged by its success the society wished to extend its activities to include the whole of France; it rapidly increased its loans without sufficiently investigating the solvency of the borrowing associations. The business of the society grew out of all proportion to its capital and it failed in 1868. Thereafter Beluze lived in retirement.

GEORGES WEILL

Consult: Gaumont, Jean, *Histoire générale de la coopération en France*, 2 vols. (Paris 1924) vol. i.

BENBOW, WILLIAM (born about 1784), English radical agitator. He was self-educated and a shoemaker by trade and appears to have preached intermittently from Nonconformist pulpits in his earlier years. Later he became a printer and bookseller. Both as a pamphleteer and as an orator he had a trenchant and often scurrilous style; he was sentenced in 1840 (not for the first time) to a term of imprisonment on a charge of seditious language. He was a member of various radical societies, including the National Union of the Working Classes, and was one of the lesser Chartist leaders.

Benbow's importance rests on his pamphlet, *Grand National Holiday or Congress of the Productive Classes*, probably written in 1832, and the first written expression of the theory of the general strike. Benbow himself did not use the term but he set forth the idea that the workers, "the productive classes," should emancipate themselves by the simple device of proclaiming a "national holiday" and stopping work for a month. Every family of workers was to lay in a stock of food for a week; the other three weeks it was assumed would present no difficulty. Local committees were to appoint delegates to a national congress and there proceed to reform society by a just distribution of wealth. Although the people were urged not to be squeamish, violence was not directly advocated. Indeed violence should be unnecessary, for the passive resistance of the workers would bring all economic and governmental activity to a standstill. For all its crudity this plan, insisting as it did on the need for class consciousness and unity among the workers, exercised a powerful influence during the stormy period of the thirties and forties. The Chartist Convention in 1839 decided on the proclamation of a "national holiday" but rescinded the resolution shortly before the holiday was to take place. When the curtain was finally rung down on the People's Charter, Benbow's plan disappeared. Obviously, however, it was a forerunner of French syndicalist schemes for the general strike.

C. M. LLOYD

Consult: Carpenter, Niles, "William Benbow and the Origin of the General Strike" in *Quarterly Journal of Economics*, vol. xxxv (1921) 491–99; Beer, M., *A History of British Socialism*, 2 vols. (London 1919–20) vol. i, p. 314–18; West, J., *A History of the Chartist Movement* (London 1920) p. 68–70.

BENDIXEN, FRIEDRICH (1864–1920), German writer on currency. Bendixen was manager of the Hypothekenbank in Hamburg from 1895 on, and the practical experience thus gained is reflected in his articles and longer works. In them he developed the theory of "classic" money and employed it in commenting upon current monetary and banking problems. He professed to be a follower of G. F. Knapp's monetary nominalism, and attempted to provide the economic counterpart to the latter's essentially legalistic theory. According to Bendixen the economic function of money is to serve as a medium of exchange. In the hands of its holder money is merely a draft on the stock of goods

available in the community; as money it need therefore have no inherent or independent value. Money based on bills and notes resulting from commercial transactions is "classic" or perfect money; it is a draft pure and simple; it is closely tied to a commodity basis; it is created when needed and disappears with the passing of the need. Theoretically such money may exist without a gold backing and its purchasing power will remain stable. Although he denied the existence of any problem of money value, Bendixen's practical conclusions concerning this question must fall in line with ordinary quantity theory. Again in his proposal of money issue he comes close to the theorists of the banking school and is subject to the same criticisms. One commodity value may give rise to a series of successive transactions and hence to a quantity of money representing a multiple of this value; moreover, money so created need not necessarily disappear with the destruction of the commodity. Any rise in prices is bound to result in an addition to the amount of money, and this in its turn will lead to a still further increase in prices; "classic" money is tainted therefore with dangerous possibilities of inflation.

ERWIN VON BECKERATH

Important works: *Das Wesen des Geldes* (Munich 1908; 4th ed. by Karl Elster, Munich 1926); *Geld und Kapital* (Leipsic 1912; 3rd ed. by Karl Elster, Jena 1922); *Währungspolitik und Geldtheorie im Lichte des Weltkrieges* (Munich 1916, 2nd ed. 1919); *Das Inflationsproblem*, Finanzwirtschaftliche Zeitfragen no. xxxi (Stuttgart 1917).

Consult: Budge, S., "Vom theoretischen Nominalismus" in *Jahrbücher für Nationalökonomie und Statistik*, 3rd ser., vol. lviii (1919) 471–509; Van Dorp, Elisabeth C., in *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. xlvii (1920–21) 889–94.

BENEDICT, SAINT (*c.* 480–*c.* 553), monastic reformer. He was sent from his native Umbria to Rome for his education, but before its completion he became disgusted with the moral tone there and retired to a cave near Subiaco where he lived as an anchorite. Later he founded twelve small monasteries near by. Soon after 520 he established a larger religious community at Monte Cassino in Campania, where he remained until his death.

Benedict's importance lies in the Rule which he framed for monastic life, of which some of the chapters are liturgical but most deal with monastic organization and discipline. In the monasteries of a communal character which existed at that time in western Europe there was more independence and less organization than a strictly coenobitic ideal allowed. Benedict's Rule required absolute obedience from the brethren, who collectively formed, as it were, a large family governed with paternal autocracy by the abbot. It was marked by an insistence on "stability" and "constant occupation." Performance of the canonical office, manual labor and devotional reading made up the daily life of the monks.

The purpose of the Rule and the circumstances under which it was composed have been variously explained. It has been held that it was framed by Benedict for Monte Cassino alone or for that house and any others which he may have intended to establish. Others have suggested that the Rule was written at the instance of some abbots in Italy who desired definite guidance for the proper direction of their communities at a time when there existed in all western monasteries much variety of usage and occasionally considerable laxity. Recently, however, Dom John Chapman has advanced a fresh interpretation to the effect that the Rule was intended for monasteries of various types in Italy and possibly beyond, and that Benedict in all likelihood drew it up at the request of someone in authority, perhaps Pope Hormisdas. Dom Chapman rightly emphasizes the markedly legal phraseology of the Rule as well as its frequent references to possible monastic abuses, which are intelligible only if its purpose was to assist in reforming existing houses. He also gives reasons for supposing that the Rule became known in northern Africa and southern Gaul within a few years after its publication and that some of Benedict's ordinances were used soon after by Justinian in certain of his *Novellae* dealing with monasteries.

The Rule fulfilled its purpose admirably in institutionalizing western monasticism. By the time of Charlemagne it had become all but universal in monasteries, and later when new orders were formed their constitutions were largely based on the Benedictine.

M. L. W. LAISTNER

Important works: Text of the Rule, *Regula monachorum*, with linguistic commentary, ed. by B. P. Linderbauer (Metten 1922; reissued as *Regula monasteriorum* with corrections as vol. xvii of the *Florilegium patristicum*, Bonn 1928); also edited with copious references to sources by C. Butler (2nd ed. Freiburg i.B. 1927); English translation, *The Rule of Saint Benedict*, by Cardinal Gasquet (London 1909).

Consult: Chapman, J., *St. Benedict and the Sixth*

Century (London 1929); Butler, C., *Benedictine Monachism* (2nd ed. London 1924); Delatte, P., *Commentaire sur la règle de Saint Benoît* (Paris 1912), tr. by J. McCann (London 1921).

BENEDIKT, MORITZ (1835–1920), Austrian criminologist and professor of neuropathology at Vienna. A chance reference of Virchow to brain anomalies in epileptics caused Benedikt in 1875 to begin a study of the brains and the skulls of criminals. The same year he made a preliminary report of his findings at a meeting of natural scientists (Gesellschaft deutscher Naturforscher und Ärzte, *Tageblatt der 48. Versammlung*, Graz 1875, p. 134–42), and published the final results in *Anatomische Studien an Verbrecher-Gehirnen* (Vienna 1879; tr. by E. P. Fowler as *Anatomical Studies upon the Brains of Criminals*, New York 1881). He concluded that criminals belonged to an anthropological variety of the human species. This theory, based on certain brain surface anomalies (confluent fissures), he later abandoned. The final formulation of his ideas is found in *Die Seelenkunde des Menschen als reine Erfahrungswissenschaft* (Leipsic 1895, p. 230–53) and well summarized in "Die Wiener Schule und die Criminal-Anthropologie" (in *Medicinische Blätter*, vol. xxv, 1902, p. 39–41).

Benedikt assumed that the influence of environmental factors made criminals of many biologically normal individuals. Many persons, however, were peculiarly disposed to antisocial behavior (*homo criminalis neurasthenicus*, the professional criminal, in particular; *h. c. e morbe aut ex intoxicatione*; and *h. c. degeneratus*, e.g. the congenital epileptic and the hereditary insane). Their skulls and brains presented anatomical anomalies, not peculiar to them alone but common to all subtypical individuals, including those suffering from mental disorders, epilepsy and brain diseases, either inherited or acquired in early childhood. These anomalies did not prove the existence of corresponding moral deterioration. Only a suspicion of such a connection would be justified until more were known about the structural and the functional properties of the brain.

His biological approach to crime causation brought Benedikt into substantial agreement with the Lombrosians, although he never accepted Lombroso's concept of atavism. Benedikt was apparently ignorant of Lombroso's earlier researches and regarded himself as the founder of the "new" criminal anthropology, a subject which after all formed but a relatively small part of his scientific work. He was favorably known for his contributions to mental therapy and wrote extensively on questions of natural philosophy. His researches were generally characterized by a critical attitude born of a strong realization of the nature and the dangers of scientific bias.

THORSTEN SELLIN

Consult: There is autobiographical material of value in Benedikt's *Hypnotismus und Suggestion: Eine klinisch-psychologische Studie* (Vienna 1894), and in his *Aus meinem Leben: Erinnerungen und Erörterungen* (Vienna 1906). See also Pagel, J., *Biographisches Lexikon hervorragender Ärtze des neunzehnten Jahrhunderts* (Berlin 1901) cols. 130–32; Wininger, S., *Grosse judische National-Biographie*, vols. i–iv (Czernowitz 1925–29) vol. i, p. 304; Chaym, Georg, in *Sozialistische Monatshefte*, vol. lv (1920) 1109.

BENEFICE. *See* CHURCH; FEUDALISM.

BENEFIT OF CLERGY. This term is applied to the immunity of clerics from the criminal jurisdiction of the secular courts. The growth of benefit of clergy coincided with the rise of the mediaeval church. At once a symptom and a partial cause of the elevation of the clergy into a class apart from and above the laity, its general acceptance in mediaeval Europe marked the vindication of the sacrosanct character of the priest and his ghostly office.

The claim of *privilegium clericale* originated in the Christian church under the Roman Empire, possibly as far back as the Council of Nicaea; but it took centuries of persistent effort to secure its practical effect and its universal recognition by the secular authorities. Early attempts to remove the clergy from the jurisdiction of the civil tribunals and to render them amenable only to the synod invariably broke down before the invincible strength and maturity of the Roman judicial system. Justinian recognized the privilege in part but took care to subject it to imperial prerogative. Under the Frankish and Carolingian kings, a period when the demands of the church were out of all proportion to its power to enforce them, benefit of clergy, although conceded in theory, continued to be ignored in practise. In the latter half of the ninth century, however, several factors promoted the growth of clerical immunity: the decay of the royal power permitted the church to encroach upon the province of lay justice; the rise of feudalism encouraged the indefinite multiplication of jurisdictions; while the Pseudo-Isidorian Decretals asserted the imprescriptible right of the clergy to exemption from the secular law. In the tenth

century the Cluniac revival and in the eleventh the Hildebrandine reform further exalted the sacerdotal body and proclaimed its superiority to all mundane powers. Benefit of clergy was only one of the claims that were now put forward in the name of "freedom of the church"; yet it was one of the few which secured in almost all the states of mediaeval Europe an unqualified victory. Upon this victory, in the twelfth century, the scientific study of the canon law set the seal of authority.

The category of clerks which *ratione personae* came under the jurisdiction of the church was extremely comprehensive; it included among others the learned professions, the minor officials and servants of religious institutions, university students and Crusaders. A system which placed so large a class outside the ordinary law of the land inevitably generated abuses. The privilege was exploited by many persons whose only apparent connection with the religious profession was the tonsure, which accordingly came to be greatly prized by criminals for the protection which it conferred. For the penalties imposed by the courts-Christian were considerably milder than those of the lay courts. They could not pronounce judgments of blood, and since the bishops were unwilling to support the expense of prisons a convicted clerk rarely suffered any punishment more serious than degradation. This virtual impunity had a very unfortunate effect upon the clergy themselves and was one of the strongest contributing factors in the corruption of the ecclesiastical body which provoked the censures of the reformers. The Reformation, however, did not destroy the privilege; even in the reformed countries it lingered on, a dangerous anachronism until the beginning of the nineteenth century. The claim is still maintained by the papacy.

Closely allied to the church's jurisdiction *ratione personae* was its jurisdiction *ratione materiae*, which had grown up alongside the other out of the primitive powers of discipline wielded by the church over its members. It was comparatively easy for the church to assert its right to cognizance of those offenses which, while possessing a definite spiritual significance, yet for the most part went unpunished by the lay courts. Crimes against faith—heresy, irreligion, sorcery, sacrilege—were obviously a primary concern of the spiritual authority, although the assistance of the secular arm might be needed for their suppression; but it was not difficult to discover a category of *delicta mixta* which included such offenses against Christian morality as adultery, fornication, perjury, blasphemy and, where practised by Christians, usury; nor did it require an undue exercise of sophistry to interpret certain of these offenses in such a way as to draw into its courts many cases more proper for the secular judge. Thus, for example, simple breach of contract was often construed as perjury. Moreover the extension of church jurisdiction was in some measure encouraged by the lay suitors themselves. In the earlier Middle Ages when the secular law was no more than a confused mass of barbarian custom, wholly inadequate in many departments, and at best ill applied, the law of the church seemed in comparison an admirable system. The judgments of its courts were frequently more equitable, merciful and unprejudiced than were those of the state.

In England benefit of clergy, in addition to the characteristics which were common to the institution throughout mediaeval Europe, developed some unique features. From the Conquest on, the stronger English kings sternly resisted the claim. William I, when he separated the jurisdictions, restricted the courts-Christian to cases touching the cure of souls; the weak Stephen was obliged in his charter of 1136 to recognize the privilege; but Henry II in the Constitutions of Clarendon offered to the church no more than the best civilians of the Middle Ages were willing to grant. After the murder of Becket, however, the concession of benefit of clergy was a part of the price which Henry had to pay for peace with the church. Thenceforward a clerk accused of a felony—the privilege did not apply to misdemeanors—could be tried only in the bishop's court. The normal procedure was that after a preliminary hearing in the lay court and a jury verdict, the clerk on claiming his privilege was delivered to the bishop or his officer and tried in the church court by the ancient process of compurgation. Until the fourteenth century some attempt had been made to limit benefit of clergy to clerks regularly ordained, although, as on the continent, persons were frequently found in holy orders who apart from the tonsure and clerical habit were indistinguishable from laymen; but the ordinance *pro clero* of 1350 extended the immunity to "all manner of clerks secular as well as religious." It became the custom to require the accused person to give proof of his ability to read; so that the first verse of Psalm 51, which was the usual test, became known as the "neck-verse." In the reign of

Henry VII an attempt was made to check such abuses by an enactment stipulating that benefit of clergy could be claimed by a layman only once—this to be ensured by branding him on the thumb; but the privilege was extended under Edward VI to peers of the realm who could not read and in the reign of William and Mary to women.

In 1576, as a result of the farcical character which the process of compurgation had come to assume, it was enacted that the offender pleading benefit of clergy should no longer be turned over to the bishop but should be either discharged or subjected to imprisonment for not longer than one year. Offenses came to be classified as either clergyable or non-clergyable and as the number of capital crimes increased the legal fiction of benefit of clergy came to fulfil an important function in tempering the severity of a barbarous criminal code. In the reign of Anne the reading test was abolished and thereafter any man or woman guilty of a felony could claim benefit of clergy for a first offense unless the crime committed was expressly excluded by statute. Thus, in the words of Blackstone, "was converted by gradual mutations, what was at first an unreasonable exemption of particular popish ecclesiastics into a merciful mitigation of the general law with respect to capital punishment." Maitland, on the other hand, says that this development made the law capricious without making it less cruel. Undoubtedly the English criminal law of the eighteenth century was capricious, but in its actual working it displayed a capricious mercy rather than a capricious cruelty; and this was due largely to benefit of clergy. As the list of non-clergyable offenses was augmented by statute it became the consistent practise of juries, instructed by the judges in cases where the punishment prescribed was obviously too severe, to return a verdict which made the crime a clergyable offense and thus liable to only a relatively mild punishment. Although in the majority of cases the juries did not, as is frequently asserted, acquit the criminal outright, they did all in their power to avoid imposing the extreme penalties of the law. There was a fair average of convictions; and to escape capital punishment by means of benefit of clergy did not as a rule mean to go scot free. But the reform of the criminal code deprived the ancient anomaly of the last reason for existence and it was abolished in 1827.

In America, both before and after the Revolution, the majority of recorded instances of benefit of clergy relate to the southern states. Massachusetts, however, offers the celebrated case of the trial of the British soldiers concerned in the Boston Massacre, two of whom claimed and were allowed benefit of clergy. In several of the slave states the privilege was abolished much earlier for free persons than for slaves; in Virginia, for example, the dates are respectively 1796 and 1848. It was apparently in the Carolinas that benefit of clergy most generally prevailed and here it continued longest, being abolished in North Carolina in 1854 and in South Carolina not until some ten years later. It was abolished by federal statute in 1789–90.

LEONARD MANYON

See: CANON LAW; CHURCH; MONASTICISM; ECCLESIASTICAL COURTS; CRIMINAL LAW.

Consult: Lea, H. C., *Studies in Church History* (Philadelphia 1883) p. 177–233; Fournier, P., *Les officialités au moyen âge* (Paris 1880); Génestal, R., *Le privilegium fori en France*, vols. i–ii (Paris 1921–24); Blackstone, William, *Commentaries on the Laws of England*, bk. iv, §§ 365–74; Stephen, J. F., *A History of the Criminal Law of England*, 3 vols. (London 1883) vol. i, p. 459–74; Pollock. F., and Maitland, F. W., *The History of English Law before the Time of Edward I*, 2 vols (2nd ed. Cambridge, Eng. 1911) vol. i, p. 439–57; Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. iii, p. 293–302; Gabel, L. C., *Benefit of Clergy in England in the Later Middle Ages*, Smith College Studies in History, vol. xiv (Northampton 1929); Cross, A. L., "English Criminal Law and Benefit of Clergy during the Eighteenth and Early Nineteenth Centuries" in *American Historical Review*, vol. xxii (1917) 544–65, and "Benefit of Clergy in the American Criminal Law" in Massachusetts Historical Society, *Proceedings*, vol. lxi (1927–28) 154–81.

BENEFIT SOCIETIES. *See* MUTUAL AID SOCIETIES; FRIENDLY SOCIETIES.

BENEFITS, TRADE UNION. Trade union benefits are financial aids provided through trade unions for members or the families of members whose wage incomes have been curtailed for reasons beyond their control or who face unusual expenditures. In the narrow and older sense union benefit schemes are to be distinguished from union insurance plans in that they apply to all members, make no provision for policies and accord individuals no legal claim to a definite amount of relief. In a broader sense the term "benefits" includes union insurance programs which permit members to subscribe voluntarily for policies of varying size. Union disbursements to strikers are frequently called benefits, but as a rule the term refers particu-

larly to welfare or friendly services, notably payments on account of unemployment, loss of tools, emigration, sickness, accident, disability, old age or death. Practically all unions both in the United States and abroad endeavor to provide strike relief, some according to prearranged rules and others making hasty provisions when emergencies arise, while practise with respect to welfare benefits differs widely.

British trade unions have performed benefit functions since their earliest days. In the eighteenth century societies of skilled tradesmen commonly assisted sick or unemployed members and arranged for their burial, thus carrying on the guild tradition of mutual aid. Stable and large scale benefit schemes first appeared with the advent about 1850 of "new model" unionism, which was based largely upon the financial policies of high dues, large funds and extensive benefits. Although the rise about 1890 of "new unionism" among the unskilled and hitherto unorganized workers represented a temporary reaction against insurance and other conservative policies, the majority of British unions had adopted benefit plans of some sort by 1900. These have been continued or extended ever since and mutual insurance is still firmly entrenched as an important instrument of union policy. Registered unions made benefit payments from their own funds (apart from Ministry of Labour grants for unemployed members which they also disbursed) of £3,893,000 in 1925, £9,719,000 (including strike relief of £5,617,000) in 1926, £3,470,000 in 1927 and £3,564,000 in 1928. Unemployment payments, which usually come first in importance, amounted in recent years to about a third of all benefits. Next in order, apart from the highly variable strike allowances, are expenditures on account of sickness and accident, death and old age. In general it is the unions of skilled and relatively well paid workers which maintain the most extensive programs, while a number of organizations of poorer paid workers offer little beyond strike relief and modest funeral grants.

In the United States benefit schemes developed later than in Great Britain and are even today less common. Although local unions had performed friendly society functions since the early decades of the nineteenth century, it was not until about 1880 that the national unions began to provide benefits. Successful experience with mutual insurance on the part of the Locomotive Engineers and the Railway Conductors, the Cigar Makers and the Iron Moulders, encouraged other unions to follow their lead, so that by 1900 many of the organizations affiliated with the American Federation of Labor were making death payments at least. Since then benefit programs have been gradually extended and the present tendency, according to the Bureau of Labor Statistics, is "towards the expansion and increase of benefits wherever the funds of the union will warrant." Nevertheless there are not more than 20 American national trade unions which can be said to have plans of real importance. The American Federation of Labor Executive Council reports that 86 out of 111 national and international unions for which data were available made benefit and insurance payments of £28,269,790 in 1927. The four railway brotherhoods of engineers, firemen, conductors and trainmen paid about half of this amount and the bulk of the remainder was paid by a dozen other organizations of skilled and relatively prosperous workers. Death benefit schemes, providing ordinarily for payments of from $50 to $300, are by far the most numerous; and there are a limited number of sickness, disability and superannuation plans involving a greater expense. Unemployment relief is granted by only three national unions. It is notable that the "new unions" of the clothing industry, which have grappled seriously with the problem of unemployment, have made no attempt to establish unemployment benefits but have endeavored to pass the burden of insurance over to their industry. Voluntary insurance plans, which have been well developed among the railroad brotherhoods for many years, appear to be growing in popularity, and a number of unions have recently purchased group insurance policies for their members. It should be noted also that many American unions have undertaken to provide for their members a variety of "welfare" or "beneficiary" services which are akin to benefits and are so entitled on occasion. Among these schemes are old age, tuberculosis and convalescent homes and hospitals, health centers, recreational and educational programs, credit unions, housing projects, cooperative purchasing plans and banking and investment undertakings.

In most other countries where trade unions have attained reasonable stability they have employed the method of mutual insurance on a considerable scale. Many of the German, Austrian, Swiss, Belgian and Danish unions had extensive programs of unemployment and other benefits before 1914 and in most cases these have

survived the chaos of war and reconstruction. The ebullient trade unions of France have never paid much attention to benefits and in general their leaders have denounced such schemes as detracting from the revolutionary purposes of labor organizations. Nor have benefit programs proved popular in Australia, where organized labor has stressed political action. In both these countries, as well as in the United States, friendly societies and fraternal orders have been more important than trade unions as agencies for voluntary insurance. It is of interest that in the recently created Jewish labor unions of Palestine a comprehensive scheme of benefits has been inaugurated.

Trade unions have adopted benefit policies for two major reasons—to provide relief for necessitous members and to increase organization strength and bargaining power. While the two cannot be completely dissociated it may be said that in the United States the former motive has been the more important and in Great Britain the latter. The brotherhood schemes, for example, have arisen primarily to meet the particular needs for protection of workers to whom ordinary commercial insurance is made difficult of access because of the unusual risks attached to hazardous occupations. In general the relative position of benefits in union policy in the two countries is indicated by the fact that the American unions are more concerned than the British with death benefits and voluntary insurance and less so with unemployment relief. Apart from strike payments, which are obviously indispensable to collective bargaining, unemployment benefits are far more useful than other types as means of forwarding the trade objectives of organized labor, for they lessen the danger that unemployed members will undermine standards of work and wages by accepting employment on whatever terms they can get. In both countries, however, it is accepted union doctrine that at least in well paid trades where workers can afford to pay high dues mutual insurance attracts recruits and, more important, gives members a financial interest in their union that discourages desertion. Another notable advantage of benefit schemes, from the standpoint of labor leaders, is that they provide large funds which in emergency can be used to finance strikes or to support the unemployed.

A common characteristic of strong beneficiary unions is that they are conservative in matters of trade policy. The administration of relief funds has proved useful training for officers, but it has tended to develop sober executives rather than crusading leaders. The unwillingness of labor organizations to give up their vested interests in well developed plans of mutual insurance has on occasion proved an obstacle to amalgamation. Moreover, many unions were at one time impelled to oppose state social insurance because they feared that their own schemes might be undermined. In Germany and Great Britain, however, the labor movement has long been converted to state insurance. When the British health and unemployment insurance programs were adopted in 1911 it was recognized that they should supplement rather than displace existing plans; and in both the British and German plans for social insurance it was provided that the unions should share in the administration. In the United States the attitude of conservative unionists toward compulsory social insurance has been equivocal, but apparently this has been induced not so much by fear for their benefit plans as by prejudice against governmental paternalism. The declaration of the 1929 Toronto convention of the American Federation of Labor in favor of state old age pensions is one of a number of recent indications that organized labor in America is becoming more kindly disposed toward certain forms of state social insurance.

The objection is frequently raised against trade union benefits that they are of dubious value as instruments of social insurance. Few benefit schemes are actuarially sound, it is pointed out, and their administration through union machinery is difficult. Administration is generally conceded to have been much more satisfactory in Great Britain than in the United States, but in both countries there are abundant instances of payment of fraudulent claims, denial of valid claims and mismanagement of funds. These difficulties and the high dues required discourage many unions from undertaking unemployment, disability and old age relief. Benefit funds may ordinarily be used for purposes other than those for which they were intended. As a rule such payments as are made are small. Thus the individual unionist, it is argued, has no guaranty that he will receive adequate assistance when he needs it. Furthermore, none but the most elementary schemes can be maintained by weak unions of poorly paid workers; and it is these who stand most in need of social insurance.

HARRY M. CASSIDY

See: TRADE UNIONS; FRATERNAL ORDERS; MUTUAL

AID SOCIETIES; MUTUAL INSURANCE; GROUP INSURANCE; SOCIAL INSURANCE.

Consult: Webb, S. and B., *Industrial Democracy* (new ed. London 1920) pt. ii, ch. i; Weyl, W. E., "Benefit Features of British Trade Unions" in U. S. Bureau of Labor, *Bulletin*, no. 64 (1906) 699–848; Kennedy, J. B., *Beneficiary Features of American Trade Unions* (Baltimore 1908); Smelser, D. P., *Unemployment and American Trade Unions* (Baltimore 1919) ch. vi; Parker, F. E., "Beneficial Activities of American Trade Unions," U. S. Bureau of Labor Statistics, *Bulletin*, no. 465 (Washington 1928); Seidel, R., *The Trade Union Movement of Germany* (Amsterdam 1928); Hansson, S., *The Trade Union Movement of Sweden* (Amsterdam 1927); Frankel, L. K., and Dawson, M. M., *Workingman's Insurance in Europe* (New York 1910); International Labour Office, "Voluntary Sickness Insurance" in *Studies and Reports*, ser. M (Social Insurance), no. vii (Geneva 1927).

BENEKE, FRIEDRICH EDUARD (1798–1854), German philosopher, psychologist and educationist. While docent at the University of Berlin he published *Grundlegung zur Physik der Sitten* (Berlin 1822) in opposition to Kant's *Grundlegung zur Metaphysik der Sitten*. Contending that morality demands behavior varying with the individual, Beneke found the basis for morality in the "moral sense" rather than in the categorical imperative. The "Epicureanism" of this work cost him his teaching position and he took refuge in Göttingen. In 1827 he was allowed to return to Berlin where he was made associate professor in 1832, a position which he held until his death. In 1833 he published *Lehrbuch der Psychologie als Naturwissenschaft* (4th ed. Berlin 1877). Psychology is for Beneke the sole foundation of all the philosophical sciences, such as logic, ethics and aesthetics. It is a natural science and must find its starting point in experience. The psychic life is a development from simpie elements which Beneke identifies with the innumerable primal faculties of the soul and the function of psychology is to determine these elements. In his *Erziehungs- und Unterrichtslehre* (2 vols., Berlin 1835–36; 4th ed. 1876) he applied his analysis of the processes of development to a theory of education. Although his basic assumptions brought him into conflict with Herbart, both agreed as to the close relation between psychology and pedagogy. Beneke's doctrine, popularized among German teachers of the liberal school by his greatest disciple, J. G. Dressler, and by Diesterweg, continued to be effective until the advent of physiological psychology.

HELMUT WIESE

Consult: Dressler, J. G., "Kurze Charakteristik der sämmtlichen Werke Benekes" in the fourth edition of Beneke's *Lehrbuch der Psychologie*, p. 285–312; Gramzow, O., *Friedrich Eduard Benekes Leben und Philosophie* (Bern 1899); Ueberweg, Friedrich, *Grundriss der Geschichte der Philosophie*, 5 vols. (12th ed. by K. Praechter, Berlin 1923–28) vol. iv. p. 186–97, containing bibliography; Brett, G. S., *A History of Psychology*, 3 vols. (London 1912–21) vol. iii, p. 63–76.

BENEVOLENCES. *See* FORCED LOANS; TAXATION.

BENEVOLENT ORDERS. *See* CHARITY; RELIGIOUS ORDERS.

BENJAMIN, JUDAH PHILIP (1811–84), American lawyer and statesman. Benjamin was born in the West Indies, of Jewish parents, and came with them to Charleston, South Carolina. He studied law in New Orleans and at the age of twenty-three was associated with Thomas Slidell in the publication of a *Digest* of the decisions of the superior courts of Louisiana. His rise in the legal profession was meteoric and he soon became the outstanding commercial lawyer of New Orleans and an authority on the Spanish system of law, similar to that of Louisiana. In 1853 he declined a seat on the United States Supreme Court. As a planter he introduced upon his broad acres at "Belle chasse" the most progressive methods of sugar culture and manufacture, being one of the first to test the discoveries of the French chemists, whose methods he commended to other sugar planters in a series of articles in *De Bow's Review*.

Benjamin's chief importance lies in his connection with the political history of the South. A conspicuously successful career in Louisiana politics as a Whig led to his election in 1852 to the United States Senate. The growing tension in the slavery controversy, however, and the break up of his old party induced him to join forces with the southern members of the Democratic party, under which banner he was reelected to the Senate in 1859. Throughout the fifties he had, along with other southerners, dreamed of building up the South economically by such means as the construction of an isthmian canal to tap the commerce of the Orient, but with the election of Lincoln he lost all hope of preventing secession. When the Confederacy was set up he was selected by President Davis to serve as attorney general and was soon transferred to the more important post of secretary of war. Under his supervision the department was thoroughly reorganized, but the previous failure

of the Confederacy to secure European munitions made his task a difficult one. A storm of criticism followed the loss of Fort Henry, Fort Donelson and Roanoke Island, and the responsibility for failing to provide the Confederate forces with sufficient ammunition was laid to the secretary of war. President Davis, however, with undiminished confidence in Benjamin, promoted him in March, 1862, to the office of secretary of state, an important and difficult assignment which, in spite of the popular hatred of him, he effectively administered until the end of the war. In this office he was responsible for the campaign of Confederate propaganda carried on to induce European intervention; and when toward the end of the war the Confederate man power began to be seriously depleted, Benjamin proposed to arm the Negroes and enrol them as soldiers, with the promise of eventual emancipation.

After the collapse of the Confederacy Benjamin fled from the Union forces, escaping to England by way of the West Indies. In the land of his father's nativity the southern *émigré* resumed the practise of law, won a new fame and repaired his wrecked fortune. His *Treatise on the Law of Sale of Personal Property* (London 1868, 6th ed. 1920) proved an instantaneous success and became standard. His arguments before the Privy Council and the House of Lords were influential in shaping legal development and displayed his remarkable versatility in handling the codes of native law and custom of the regions comprising the British Empire.

ARTHUR C. COLE

Consult: Butler, Pierce, *Judah P. Benjamin* (Philadelphia 1907).

BENNETT, JAMES GORDON (1795–1872) and his son of the same name (1841–1918), American journalists. In 1835 the father founded the New York *Herald*, which sold for a penny a copy at a time when six-cent newspapers were edited for the well-to-do and when news was printed principally for its political effect. The period was one of rapid industrial development: immigration was increasing at an accelerating rate; railroads were building and new groups of business men were rising to power. The presence of Andrew Jackson in the White House put a new emphasis on popular rights, the extension of the franchise and the demand for education at the public expense. Automatically there was created a market for newspapers cheaper than those in existence, but the first of these, founded in 1832, was short lived. In 1833 Benjamin Day established the *Sun*, in New York City, which sold at a penny a copy and soon became a flourishing property.

The elder Bennett's leadership of the *Herald* lay in the energetic gathering of news and in its exploitation as a commodity. His paper specialized in accounts of violent crime, illicit love, Wall Street speculation, the hazards of the race track and the prize ring. The climax of his news making came when, in collaboration with his son and the London *Telegraph*, he sent Henry M. Stanley to find David Livingstone in Africa, the search ending successfully in the latter part of 1871. The exploit proved profitable in the fame and added circulation it brought to the paper. Editorially the *Herald* was flippant, cynical and highly prejudiced. The elder Bennett sided with the slave owning South until Lincoln sent an emissary who persuaded him to change front; subsequently he declined the ambassadorship to France.

The son after his father's death did much to encourage exploration and the development of aviation through the use of his journal's columns and through prizes. He regarded the paper, however, not only as a source of revenue but as an agency for his own aggrandizement. He was a social toady and made his property serve his ambitions. Through personal spite he forbade his editors to mention the name of President Theodore Roosevelt. He printed the advertisements of prostitutes and was fined heavily in a federal court for doing so. Finally he fled the country and edited his paper after a fashion from a yacht abroad. It declined rapidly in prestige and influence.

The patterns which now dominate metropolitan news selection and presentation were cut by the elder Bennett and elaborated by his son. They thought a daily journal should be sensational, but should also be "light and amusing." Their influence is still perceptible in the invasion of privacy by the press, the treatment of public affairs from the vantage point of the crowd's passions rather than in the light of reasoned judgments, and the competition for mass circulation at the expense of high standards. The son increased his contribution to these defects by founding the New York *Telegram*, an afternoon daily given over mostly to flashy material. This paper attained a larger circulation than the *Herald*, especially among working people, and did much to establish false notions

of living and meretricious standards of success. It set the pace for the present tabloid picture papers.

SILAS BENT

Consult: Seitz, Don C., *The James Gordon Bennetts* (Indianapolis 1928); Bleyer, Willard G., *Main Currents in the History of American Journalism* (Boston 1927) ch. vii; Villard, Oswald G., *Some Newspapers and Newspaper-Men* (rev. ed. New York 1926) ch. xvi.

BENNIGSEN, RUDOLF VON (1824–1902), German political leader. The revolutionary events of 1848–49 were decisive in determining his political ideas. A descendant of the old Hanoverian nobility, Bennigsen became one of the leaders of the National Liberal movement that strove to transform the loose German Confederation into a closed national state organized in accordance with the constitutional ideals which dominated the continent after 1830. Together with men like Unruh and Schulze-Delitzsch he founded in 1859 the *Deutscher Nationalverein*, a political society modeled on the Italian plan. Its program called for the creation of a "little Germany," united under Prussian leadership and freed from the old particularism of the separate states; in the creation of this national state it proposed to draw upon liberal ideas and untrammeled public opinion. After 1862 this policy met with the opposition of the Prussian prime minister, Bismarck. The founding of the empire under Bismarck's auspices thwarted the national and liberal movement but also realized many of its aspirations. Thenceforward the preponderance of power lay with Bismarck, who could claim the credit for final achievement.

From 1867 until the end of his life Bennigsen was leader of the National Liberal party. During the period of his collaboration with Bismarck (1871–77) he had a decisive influence in the Reichstag. Bismarck's attempt toward the end of 1877 to induce Bennigsen to enter the ministry failed because of the opposition of the old emperor and the demands of the Liberals for two additional cabinet posts. In 1879 the split between the free traders and the protectionists was the beginning of the decline of Bennigsen's party. His appointment as head of the Prussian administration of the province of Hanover (1888) marked the beginning of his gradual withdrawal from the center of the political arena.

HERMANN ONCKEN

Consult Oncken, Hermann, *Rudolf von Bennigsen*, 2 vols. (Stuttgart 1910).

BENOISTON DE CHATEAUNEUF, LOUIS FRANÇOIS (1776–1856), French statistician. After serving as a military surgeon in several campaigns, in 1810 he took office in the ministry of finance, where he remained until 1833. During this period he became interested in statistics, which he applied to the study of various social problems. His chief work, *Recherches sur les consommations de tout genre de la ville de Paris en 1817 comparées à ce qu'elles étaient en 1789* (read before the Académie des Sciences in 1819; published in Paris in 1821), was based both on official records and on much laborious research in private establishments. It estimated not merely the prices of raw materials, to which Lavoisier in his investigation of consumption in 1789 had confined himself, but of manufactured articles as well. It also presented a classification of the expenditures of the population of Paris for such large groups as food and fuel. Benoiston was the author of several important studies in vital statistics, treating such subjects as the changes in mortality between 1775 and 1825, fertility in Europe at the beginning of the nineteenth century and longevity among the rich and the poor, among scholars and among aristocrats. He also wrote on penal institutions and the care of foundlings. Many of his studies were published in the *Annales d'hygiène publique et de médecine légale*, a paper founded and edited by Villermé, with whom after 1833 Benoiston undertook a series of scientific investigations in the provinces.

LOUIS VIGOUROUX

BENTHAM, JEREMY (1748–1832), British social philosopher. Bentham's position in the history of the social sciences is that of a very great inventor of social expedients. He was not the first utilitarian, i.e. he was not the first to conceive of happiness as the end of human existence or of the associationist psychology as the main determining condition in attaining that end. But throughout his long life he set himself, with amazing industry and fertility, to invent practical methods of organization by which human happiness might in a modern community be "maximised." He compared his own work with that of the chemists and physicians who during his lifetime were arranging material phenomena under laws and inventing expedients for increasing human control over the material world. In a draft preface among the Bentham manuscripts he describes his writings as "an attempt to extend the experimental

method of reasoning from the physical branch to the moral" (quoted in Halévy, vol. i, p. 290).

Bentham was a lawyer, and his most conspicuous success as an inventor was in the reform of English law and judicial procedure. Sir James Stephen said that Bentham's legal writings "have had a degree of practical influence upon the legislation of his own and various other countries comparable only to that of Adam Smith and his successors upon commerce" (*History of the Criminal Law of England*, vol. i, London 1883, p. 216). Less known is the direct and indirect effect of Bentham's work on political and administrative institutions. The fact that the fall from power of the British aristocracy in 1832 led neither to social revolution or administrative chaos at home nor to the break up of the new British Empire abroad was largely due to the political expedients—local government reform, open competition in the civil service, scientific health and police administration, colonial self-government, Indian administrative reform—which Bentham's disciples either found in his writings or developed, after his death, by his methods.

Bentham himself was never in Parliament, never an official or a member of a royal commission and never in "society." A small income during his father's lifetime and a legacy after his death enabled him to live without either the necessity or the discipline of professional earning. But his inventive genius never again, after the failure of his Panopticon scheme of poor relief, lost touch with reality. To this end he kept up in his own house and at his own table personal intercourse with anyone who had the power and the will to promote human happiness, whether a visitor from South or North America, a radical printer just out of prison, a reforming schoolmaster (like Rowland Hill) or a cabinet minister.

The practical influence of Bentham's work on social organization was largely due to the fact that his charm of character and absolute disinterestedness enabled him to win the devotion of two generations of disciples and assistants —Lind, Dumont, James and John Mill, Place, Grote, Southwood Smith, Parkes, Bowring, Austin and others—who preached his doctrines, prepared for the press most of his books and in Parliament and the government offices drafted bills, distributed pamphlets and managed committees. J. S. Mill described in his *Autobiography* how Bentham's work gave for him, as for other philosophical radicals, "unity to my conception of things . . . a creed, a doctrine, a philosophy, . . . the inculcation and diffusion of which could be made the principal outward purpose of a life. And I had a grand conception laid before me of changes to be effected in the condition of mankind through that doctrine" (New York 1924, p. 47).

In Bentham's writings those who desire to reform judicial procedure or the relation between ministers and officials and central and local authorities may still in the twentieth century find new and practical suggestions. But perhaps the best help that the social reformer can acquire from him is guidance in the difficult art of being a reformer.

GRAHAM WALLAS

Works: Most of the writings published by Bentham himself appear in John Bowring's unequally edited collection (11 vols., Edinburgh 1838–43). Much valuable unpublished material is contained in the very large collection of Bentham's MSS. bequeathed by him to University College, London. A complete bibliography of Bentham's published works was compiled by C. W. Everett and printed as an appendix to the English translation of Halévy's study of philosophic radicalism.

Consult: For the life of Bentham the rather unsatisfactory biographies by John Bowring (vols. x and xi in his edition of Bentham's *Works*) and by C. M. Atkinson (London 1905), and the brief sketch by Graham Wallas in *Political Science Quarterly*, vol. xxxviii (1923) 45–56. For a critical evaluation of Bentham's works and influence: Halévy, Élie, *La formation du radicalisme philosophique*, 3 vols. (Paris 1901–04), tr. by Mary Morris (London 1928); Stephen, Leslie, *The English Utilitarians*, 3 vols. (London 1900) vol. i; Wallas, Graham, "Bentham as Political Inventor" in *Contemporary Review*, vol. cxxix (1926) 308–19; Dicey, A. V., *Lectures on the Relation between Law and Public Opinion in England* (2nd ed. London 1914) lecture vi.

BENTINCK, LORD, WILLIAM CAVENDISH (1774–1839), British colonial administrator. He was appointed by the East India Company in 1803 to the governorship of Madras, and there he began the reforms with which his name is identified. In concert with the experienced Indian administrator, Sir Thomas Munro, he settled the land tenure of the province on the basis of peasant proprietorship to the benefit of both the revenue and the people at large. His strong measures for the suppression of the mutiny of native regiments at Vellore in 1806 were disapproved by the Court of Directors and he was recalled. On his return he resumed the military and diplomatic service interrupted by his appointment. He was one of the first English statesmen to work for the revival of

Italian unity and he caused the British government some difficulty by his proclamations in support of this ideal while commanding at Genoa in 1814. In 1827 he was appointed governor general of Bengal. His administration is memorable as a period of peace in which the principle of government with scrupulous regard for the sentiments and interests of the governed was more firmly established in the British administration of India. In 1833, when the East India Company's Charter Act was passed, Bentinck became the first governor general of India. He greatly increased the employment of Indians in place of Europeans in the public service, reformed and reduced military expenditure and settled the land tenure of the northwest provinces on a basis which recognized the rights of the cultivators. In conjunction with Macaulay, Bentinck laid the foundation for the modern Indian educational system, making English the medium of instruction. He was careful in his impartial regard for Indian customs and beliefs, but attacked with unsparing severity antisocial practises which covered their corruption with a religious sanction. The bands of Thugs who lived by the ritual murder and robbery of travelers were suppressed and the practise of suttee or the burning of widows was put down with the approval of the best Indian opinion.

ARTHUR PERCIVAL NEWTON

Consult: Boulger, Demetrius C., *Lord William Bentinck* (Oxford 1892); *Cambridge History of the British Empire*, vol. iv, *British India 1497–1858*, ed. by H. H. Dodwell (Cambridge, Eng. 1929) p. 577–79.

BENTON, THOMAS HART (1782–1858), American statesman. Benton was born in North Carolina of old colonial stock, spent his young manhood in Tennessee and after 1815 helped to build the territory of Missouri into a state, becoming its most distinguished citizen. He represented Missouri as senator during its first thirty years of statehood and when Jackson was elected to the presidency Benton became the leader of the administration forces in the Senate. He was a copious and pompous speaker and displayed a classical erudition upon his western themes. As an anti-Bank, hard-money Democrat he fought Jackson's battles in season and out. He regarded himself as a special protector of the interests of the West, concerning himself with the Oregon territory and the Texas question, advocating the annexation of California and seeking to aid the fur trade, the caravans to Santa Fe and the Continental railway scheme. He was very influential in the formation of the government's homestead policy. For a generation he was a leading exponent of Jacksonian democracy and the most authentic spokesman of the new West.

Benton was so staunch a Unionist and so lukewarm a defender of slavery that he lost control of Missouri politics in 1850 and was defeated for reelection to the Senate. Despite a term in the House of Representatives his political career was over. He devoted most of his remaining years to literary labors, among them the composition of his memoirs, *Thirty Years View* (New York 1854–56), which was a political history of the period as well as an autobiography, his *Historical and Legal Examination . . . of the Dred Scott Case . . .* (New York 1857) and an *Abridgement of the Debates of Congress, 1789–1856* (16 vols., New York 1856–61).

FREDERIC L. PAXSON

Consult: The materials needed for a sound biography of Benton were destroyed by the burning of his home. A brief sketch by Benton's daughter, Jessie, in Frémont, John C., *Memoirs of my Life* (Chicago 1886) p. 1–17; Meigs, William Montgomery, *The Life of Thomas Hart Benton* (Philadelphia 1904); Rogers, Joseph M., *Thomas Hart Benton* (Philadelphia 1905); Roosevelt, Theodore, *Life of Thomas Hart Benton* (Boston 1887): are all imperfect.

BEÖTHY DE BESSENYO, LEO (1839–86), Hungarian statistician, economist and sociologist. Although he was the son of a wealthy nobleman Beöthy chose a career of public service. He obtained employment with the state in 1867 and advanced to the position of assistant director of the Central Statistical Office in 1883. He organized the collection of data on foreign trade, railway traffic and mining and thus laid the foundation of these branches of statistics in Hungary. For twelve years he edited the yearbooks and other publications of the Central Statistical Office. In his economic work *Nemzetlét* (National existence, Budapest 1876) Beöthy championed protection as a necessary defensive weapon in the struggle of nations for existence. He was very critical of the classical school and emphasized the importance of nationality and national feeling. As a sociologist Beöthy is best known for his work on the origins of human society (*A társadalmi fejlödés kezdetei*, 2 vols., Budapest 1882), a rich source of descriptive-sociological and prehistoric materials. In attempting to solve inductively the problem of social origins he studied the development of the

chieftaincy, which he considered the oldest social institution, more ancient than the patriarchal family. He found that the development of various social formations was conditioned by degree of political organization. Where the latter became incompatible with the stage which society reached in its evolution, dissolution inevitably set in and new social forms took the place of old.

ALEXANDER L. KRISZTICS

BERCH, ANDERS (1711–74), Swedish economist, the founder of the academic study of economics in Sweden. In 1738–39 the parliament established a professorship in economics at Uppsala University, probably the fourth in Europe, and made Berch its first holder. While at Uppsala, Berch published an essay on political arithmetic (1746) in which he attempted unsuccessfully to apply the methods of Graunt and Petty to Swedish conditions. More remarkable, however, was his bulky volume on general economics, published in 1747, which constituted something of a new departure; it was translated into German (*Einleitung zur allgemeinen Haushaltung . . .* , Halle 1766) for use as a textbook. This treatise represents more than a discussion of detailed questions of practical economic policy, like the contemporary pamphlet literature in England, Holland and Sweden; it is also far more systematic and readable than most of the books of German cameralists. Its viewpoint is that of moderate Swedish mercantilism, but its conclusions are more general in character and of wider applicability than those of such representative German and French mercantilists as Dithmar, Lau and de la Mare. In a modest way he consequently belongs among the pathfinders of an independent economic science.

ELI F. HECKSCHER

BÉRENGER, ALPHONSE MARIE MARCELLIN THOMAS (1785–1866), French criminologist. He joined the "constitutional opposition" to the throne in 1828, in 1830 headed the parliamentary commission which tried the ministers of Charles X and in 1831 was appointed a member of the Court of Cassation. His supreme efforts throughout his life were directed toward reforming the methods of dealing with criminals. His *De la justice criminelle en France, d'après les lois permanentes, les lois d'exception et les doctrines des tribunaux* (Paris 1818) was a bold attack upon the abuses in the administration of justice under the Restoration. Citing with admiration the example of America and England, he demanded the cessation of administrative arbitrariness, the abolition of secret police, the dissolution of special tribunals, provost courts and military commissions and the restoration of the jury trial in their place. Under the July Monarchy Bérenger was largely responsible for the Penal Code of 1835, which reduced the number of crimes punishable by death and recognized the possibility of "extenuating circumstances" for the condemned. His *De la répression pénale, comparaison du système pénitentiaire en France et en Angleterre* (Paris 1855) was a comparative study undertaken at the instance of the Académie des Sciences Morales et Politiques and buttressed by statistics and psychological knowledge. Emphasizing the fact that punishment should be not only a deterrent but a means of reform, Bérenger advocated three phases of punishment: imprisonment, communal life, parole. Together with Charles Lucas he had founded in 1833 a society for the protection of young ex-convicts in the department of the Seine. His son, René Bérenger (1830–1915), who continued his work, was particularly interested in the regeneration of the criminal as well as in general prison reform, and important legislative enactments in this field are to be traced to his influence.

WILLIAM OUALID

Consult: Giraud, C., "Notice historique sur la vie et les travaux de M. Bérenger" in Institut de France, Académie des Sciences Morales et Politiques, *Mémoires*, vol. xiv (1883–84) 179–216. For the younger Bérenger: Joly, H., "René Bérenger" in *Revue des deux mondes*, 6th ser., vol. xxx (1915) 43–74.

BERGBOHM, KARL MAGNUS (1849–1927), German legal philosopher and international lawyer. He was professor successively at the universities of Dorpat, Marburg and Bonn. Influenced by his teacher, von Bulmerincq, who had begun the liberation of the law of nations in Germany from the political, moral and philosophical sentiments and abstractions which vitiated it, Bergbohm became the arch champion of positivism in international law. Treaties and the law of states he considered the only valid sources of international law and the only instrumentalities for its development. He drew a fruitful distinction between true "normative" treaties and those merely "negotiative." The codification of international law he regarded as hopelessly utopian. These ideas led naturally to his work on the treaties which established

the doctrine of armed neutrality, *Die bewaffnete Neutralität, 1780–83* (Berlin 1884).

Although he opposed the doctrine of natural law he recognized that jurisprudence had need of a philosophical basis. The philosopher of law, however, was to aim at the solution of those intellectual and theoretical problems without which positive law could achieve no unity. This is the object of the chief work to which he owes his fame, *Jurisprudenz und Rechtsphilosophie*, of which, however, only the first volume, *Das Naturrecht der Gegenwart*, was published (Leipsic 1892). Bergbohm may be regarded as the forerunner of the neo-Kantians.

ELEMÉR BALOGH

Consult: Hrabar, V. E., in *Zeitschrift fur Völkerrecht*, vol. xiv (1928) 559–63.

BERGER, VICTOR LOUIS (1860–1929), American socialist leader. He was born in Austria-Hungary and studied at the universities of Budapest and Vienna. He came to the United States in 1878, worked at various trades, taught in the public schools of Milwaukee and from 1892 on devoted himself entirely to socialist politics and journalism, representing consistently the moderate wing of the movement. At the conventions of the American Federation of Labor which he attended as representative of the Milwaukee local of the International Typographical Union he was conspicuous among the "borers from within" in the Socialist opposition to Gompers. Together with Eugene V. Debs, whom he is said to have converted to socialism, Berger organized the Social Democratic party which in 1901, jointly with an insurgent wing of the Socialist Labor party, formed the Socialist party. As a leading member of the national executive committee of the latter party he steadily opposed the radical faction which was first led by William D. Haywood and which in recent years served as the basis for the Workers' party. He was the master mind and tactician of the party in Wisconsin; under his leadership it became a vital factor in state politics and has dominated the city administration of Milwaukee since 1910. In the same year Berger was elected to the House of Representatives, being the first Socialist to win election to Congress. He was again elected in 1918, but was denied his seat because of his outspoken stand against American participation in the World War. He was twice reelected by increased votes and on both occasions denied his seat by a war minded Congress. In 1918–19 he was tried before Judge Landis in Chicago on a number of indictments for anti-war speeches, found guilty and sentenced to twenty years in Leavenworth; the decision, however, was reversed by the United States Supreme Court in 1921. He was reelected to Congress in 1922 and served there for three successive terms, prominent as a strong advocate of remedial social legislation. Berger founded and edited the German daily *Vorwärts* (1892–98), the English weekly *Social Democratic Herald* (1901–11) and the daily *Milwaukee Leader*, of which he remained editor until his death.

J. B. S. HARDMAN

BERGH, HENRY (1811–88), American humanitarian and pioneer in animal protection. During a short diplomatic career in Europe he became acquainted with the work of the Royal Society for the Prevention of Cruelty to Animals. After his return to America in the face of much scoffing he organized in 1866 the American Society for the Prevention of Cruelty to Animals, of which he served as president until his death. Although the society was intended to engage in the work of protecting animals throughout the entire country, in practise it limited its efforts largely to New York City. In 1867 he sponsored, and persuaded the New York legislature to pass, an animal protective law. The New York Society for the Prevention of Cruelty to Animals attacked the cruel treatment of omnibus horses and of animals transported to abattoirs, and campaigned against cock and dog fights, against tail docking and other fashionable abuses of horses and against animal vivisection. It also established drinking troughs for horses in New York City.

Bergh was actively interested in preventing medical experiments on animals. He had endeavored in vain to have such experimentation prohibited in the animal protective law of 1867. After a long campaign he placed an antivivisection bill before the New York legislature, but failed to obtain its passage.

Shocked by a particularly flagrant case of adult brutality toward a child—the Mary Ellen case—in 1875 Bergh and his humanitarian associates launched the New York Society for the Prevention of Cruelty to Children, thus inaugurating the organized movement for child protection in the United States.

WILLIAM J. SHULTZ

Consult: Coleman, Sydney H., *Humane Society Leaders in America* (Albany 1924) ch. ii; McCrea, Roswell C., *The Humane Movement* (New York 1910) p. 147–56.

BERING SEA CONTROVERSY. *See* FISHERIES.

BERKELEY, GEORGE (1685–1753), Bishop of Cloyne, British philosopher, economist and political theorist. Berkeley was educated at Trinity College, Dublin, where he received the impetus of the new philosophy of Newton and Locke. His *Essay towards a New Theory of Vision* (1709) showed that vision was not the reception of external objects but the mind's interpretation of visual signs. This theory was developed in his *Treatise concerning the Principles of Human Knowledge* (1710), the conclusion of which was that the world is real only in so far as it is the experience of some percipient mind, which mind was held to be God. Berkeley enlarged continually upon the theme until in the *Siris* (1744) it became full fledged neo-Platonism of the English type.

Since the core of this philosophy is the ubiquity of the Deity, Berkeley's writings on political and ethical problems are based upon man's relations to God. Thus in *Passive Obedience* (1712) he attempts to prove that resistance to government is wicked on the ground that it is resistance to the moral law as personified in God. Berkeley directed this treatise mainly against Locke's theory that rebellion is justified when government ceases to protect and realize the public weal. He argued that only the will of God could declare what was beneficial to the public weal, that His will was found in the "laws of nature," to be sure, but that these laws were not to be discovered outside religion. Berkeley's ethics was very similar. In *Alciphron* (1732) he attacks the "minute philosophers," Shaftesbury, Mandeville and Collins, whom he likens to the French libertines, founding morality on "public benefit" or "taste." In reality, he says, they are apologists for vice and the true morality must be founded upon a belief in God, whose existence is the guaranty not only of the reality of the perceptible world but also of the moral.

As an economist Berkeley, although he produced no systematic treatise, threw out a number of original and significant suggestions in the *Querist* (1735–37) which give him a place as a forerunner of Adam Smith in the transition from mercantilism to a more rational economic creed. This work, written soon after Berkeley arrived in Ireland and while he was freshly impressed with its economic conditions, is concerned primarily with the possibility of improving them through the encouragement of industry and the promotion of a national bank whose chief function was to be the circulation of funds to supply tools and materials for work. The theme of the *Querist*—the encouragement of industrial production and population growth and the discouragement of unproductive consumption, speculation and idleness—found expression also in his *Essay toward Preventing the Ruin of Great Britain* (1721), written soon after the failure of the South Sea scheme.

GEORGE BOAS

Works: *The Works of George Berkeley*, ed. by A. C. Fraser, 4 vols. (Oxford 1901), containing prefaces, annotations, appendices and biography.

BERLIN-BAGDAD RAILROAD. *See* TRANSPORTATION; WORLD WAR.

BERLIN, CONGRESS OF. *See* NEAR EASTERN PROBLEM.

BERLINER, ABRAHAM (1833–1915), Jewish historian. He was born in Prussian Posen and received a thorough rabbinic training but no secular schooling. In 1865 he moved to Berlin where in 1873 he was appointed docent and later professor of Jewish history and literature and librarian at the newly founded Rabbinical Seminary. He founded in 1874 the *Magazin für jüdische Geschichte und Literatur* (continued from 1876–93 as the *Magazin für die Wissenschaft des Judentums*) and in 1885 together with David Kaufmann revived the society Mekize Nirdamim for the publication of mediaeval literary and historical manuscripts.

Berliner's scholarly activities ranged over a vast field of Jewish history and literature. Of particular importance were his pioneering investigations into the social history of the Jews in the Middle Ages. He regarded the mediaeval life of the Jews as extending well into the eighteenth century and drew his information chiefly from rabbinical sources of the fifteenth, sixteenth and seventeenth centuries, particularly from the different collections of *minhagim* (local customs) and *responsa*. His work lacks a genuinely historical appreciation of social and economic phenomena and of the relation between Jewish and general European history.

SALO BARON

Important works: *Aus dem inneren Leben der deutschen Juden im Mittelalter* (Berlin 1871, 2nd ed. 1900); *Persönliche Beziehungen zwischen Christen und Juden im Mittelalter* (Halberstadt 1881); *Aus den letzten*

Tagen des römischen Ghetto (Berlin 1886); *Über den Einfluss des ersten hebräischen Buchdrucks auf den Cultus und die Cultur der Juden* (Berlin 1896); *Geschichte der Juden in Rom*, 2 vols. (Frankfort 1893).

Consult: Grünberg, S., *A. Berliner* (in Hebrew)(Berlin 1912); Eppenstein, S., "Abraham Berliners wissenschaftliche Wirksamkeit" in *Jeschurun*, vol. ii (1915) 457–80; Nobel, N. A., Freimann, A., and Marx, A., in *Jüdische Presse*, vol. xxxiv (1903) 219–22.

BERNARD OF CLAIRVAUX (1090–1153), monastic reformer, church statesman and theologian. Bernard was the chief propagator, although not the founder, of the Cistercian order, a strictly reformed branch or type of Benedictine monasticism, and the greatness and work of the order are indirectly his. The insistence of the Cistercians on manual labor and solitude made them colonizers of uncultivated districts like northeast Germany and like northern England where they practised sheep farming. They received uneducated men as *conversi* or lay brothers, and the federation of their monasteries under a general chapter became a general model of future monastic organization. Like Gregory the Great, Bernard was a contemplative forced into action. Without official position, through sheer greatness of character, he came to be the controlling religious force in Europe, traveling, preaching irresistibly, healing a papal schism, urging a crusade (*cf.* his *Epistolae*). His *De consideratione*, addressed to the Cistercian, Pope Eugenius III, is an "examination of conscience of the Papacy," a loyal yet candid statement of the responsibilities and dangers of centralization. For the guidance of a bishop he wrote *De moribus et officio episcoporum*, for monks *De praecepto et dispensatione*. In *De laudibus novae militiae*, while praising the Templars' defense against the infidel, he vigorously condemned the prevalent warfare between Christians. The last of the patristic, positive theologians, he opposed the nascent scholasticism of Abélard. His own doctrine, mainly embodied in his *Sermones*, has had an enormous influence, particularly in developing affective piety and mystical theology.

W. A. PANTIN

Works: *Opera omnia*, ed. by J. Mabillon in J. P. Migne, *Patrologia latina*, 221 vols. (Paris 1844–65) vols. clxxxii–clxxxv, tr. by S. J. Eales as *Life and Works of Saint Bernard*, 4 vols. (London 1889–96).

Consult: Vacandard, E., *Vie de Saint Bernard, Abbé de Clairvaux*, 2 vols. (4th ed. Paris 1920); Coulton, G. G., *Five Centuries of Religion*, 2 vols. (Cambridge, Eng. 1923–27) vol. i; Berlière, U., *L'ordre monastique* (3rd ed. Lille 1924) ch. vi, containing a good bibliography; Pourrat, P., *La spiritualité chrétienne*, 3 vols. (4th ed. Paris 1921–27), tr. by W. H. Mitchell and S. P. Jacques, 2 vols. (London 1922–24) vol. ii, ch. i and ii; Butler, C., *Western Mysticism* (2nd ed. London 1927).

BERNER, ALBERT FRIEDRICH (1818–1907), German jurist and criminologist. Berner was professor of criminal law at the University of Berlin (1848–99) and took an active and important part in the codification of the criminal law of the German Empire. He began as a strict Hegelian and his first work *Grundlinien der kriminalistischen Imputationslehre* (Berlin 1843) and its sequel *Die Lehre von der Teilnahme am Verbrechen* (Berlin 1847) still show the influence of Hegel's dialectics. As early as 1845, however, he had begun to break away from Hegel's absolute view of the criminal law and thereafter, although still under his influence, he always sought to reconcile the relative and absolute theories of punishment. He substituted for Hegel's doctrine of punishment as the ideal cancellation of wrong the doctrine of punishment as retribution. This was the result of the compromising influence of French law upon him, which may especially be traced in his *Wirkungskreis des Strafgesetzes nach Zeit, Raum und Personen* (Berlin 1853), a comparative study of extradition. These tendencies are fully manifested in his chief work, the *Lehrbuch des deutschen Strafrechts* (Leipsic 1857), which by 1898 had gone through eighteen editions exhibiting a progression in Berner's thought toward practical use rather than philosophical content. Eventually Berner even came to hold that acquaintance with actual penal institutions is of more value to the criminalist than the study of philosophical abstractions. Nevertheless, although Berner was one of the first in Germany to oppose capital punishment and to favor special treatment for young offenders, his Hegelianism prevented him from entertaining any thoroughgoing views of limited criminal responsibility.

ELEMÉR BALOGH

Consult: Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 680–87.

BERNHARDI, THEODOR VON (1802–87), German economist and historian. He was active in the Prussian diplomatic service and published a number of historical works. He is best known, however, for his *Versuch einer Kritik der Gründe, die für grosses und kleines Grundeigenthum angeführt werden* (St. Petersburg 1849; 2nd ed. with

a preface by Karl Diehl, Leipsic 1925). Beginning with the problem of large versus small scale production in agriculture, Bernhardi analyzes the contention advanced by many English classical economists that superior productivity results from large agricultural units. He holds that what is most important as a criterion of policy in this connection is not the net economic return nor even the gross return, but the bearing of the organization of agricultural production on the ultimate interests of society as a whole. He takes this opportunity for a keen and detailed criticism of the classical stand on such fundamental questions of economic theory as value, price, capital, income, rent. As he reaches the special subject of his work, the expediency of unrestricted alienation of landed property, Bernhardi takes the comparative historical viewpoint. He describes historical and contemporary conditions in Italy, England, Ireland and parts of Germany, utilizing the best sources available during his time. On the basis of these studies of actual experiences with a variety of land systems, Bernhardi concludes that unrestricted division of land often leads to the formation of a rural proletariat and the growth of equally unsound latifundia. The goal of agrarian policy, he maintains, should be a well balanced system of small, medium sized and large land holdings, flourishing beside one another.

KARL DIEHL

Consult: Demuth, Fritz, *F. Th. von Bernhardi. Ein Beitrag zur Geschichte der Nationalökonomie des 19. Jahrhunderts* (Jena 1900); Skalweit, August, *Agrarpolitik* (2nd ed. Berlin 1924) p. 224–28.

BERNOULLI, a family of Swiss mathematicians who made important contributions to the theory of probability. Jacques Bernoulli (1654–1705) was the first to establish the theory of probability on a scientific basis and to recognize the possibility of its application to social phenomena. In the fourth, unfinished, part of *Ars conjectandi* (Basel 1713; the only complete translation is in German by R. Haussner, 2 vols., Leipsic 1899), the great work on which he labored for twenty years, he formulated and completely proved the famous Bernoulli theorem: "If in each of a given series of experiments there are r contingencies favourable to a given event out of a total number of contingencies t, so that $r \div t$ is the probability of the event at each experiment, then, given any degree of probability c, it is possible to make such a number of experiments that the probability, that the proportionate number of the event's occurrences will lie between $(r + 1) \div t$ and $(r - 1) \div t$, is greater than c" (as translated in J. M. Keynes, *A Treatise on Probability*, London 1921, p. 340). The importance of this theorem can scarcely be overstated. It was developed and more precisely defined by de Moivre, Montmort, Stirling, Bayes and Laplace and formed the basis of Poisson's law of large numbers. It was the first expression of the basic idea of modern statistics, namely, that in dealing with a large number of events it is possible to reduce their occurrence to general laws even though each event if taken separately may be unpredictable. While earlier tentative formulations of the probability calculus by Pascal, Fermat and Huyghens were applied merely to games of chance, Bernoulli stated that in *Ars conjectandi* he would demonstrate the employment of probabilities in dealing with social, moral and economic phenomena.

Nicholas Bernoulli (1687–1759) was the nephew of Jacques and of another distinguished mathematician, Jean Bernoulli (1667–1748), who solved several interesting questions of probability theory. Beginning in 1709 Nicholas attempted by using Huyghens' methods to establish mathematically certain probabilities in the field of vital and criminal statistics. For example he estimated the time interval sufficient to consider an absent person legally deceased, the premium for insuring to a girl a dowry or an annuity from the day of her marriage, the probability of the truth of different types of testimony and of the guilt of an accused person. This type of research was later developed by Poisson and Cournot as a study of the probability of judgment.

Daniel Bernoulli (1700–82), the son of Jean, applied the probability calculus to astronomical problems. He treated errors of observation as a branch of the science of probabilities. In the field of social statistics he attempted to give a precise numerical evaluation of the influence of inoculation on longevity. The value at which he arrived, the prolongation of life by three years, was, despite the insufficiency of data and resort to hypotheses, identical with the calculations made forty years later by Duvillard, who relied on a comparison of mortality tables before and after the discovery of the vaccine. He also established the average duration of marriage in relation to the ages of the husband and wife, and studied sex ratios at birth.

MAURICE HALBWACHS

Consult: Merian, Peter, *Die Mathematiker Bernoulli*

(Basel 1860); Gouraud, Charles, *Histoire du calcul des probabilités* (Paris 1848); Todhunter, Isaac, *A History of the Mathematical Theory of Probability* (London 1865).

BERNSTEIN, ARON (1812–84), German journalist. Bernstein, a native of Danzig, studied to be a rabbi but soon came to Berlin to take up journalism. He was a leading representative of that influential group of German Jews who combined political with religious radicalism. Bernstein signed the famous *Aufruf* of 1845 and otherwise participated in establishing the Berlin Jewish reform congregation. He was a "forty-eighter" and, when reaction threatened in 1849, he founded the *Urwählerzeitung*, Berlin's first democratic paper, in order to arouse and direct popular sentiment in defense of the revolution. The paper was suppressed in 1853 after Bernstein had served a prison sentence, whereupon he established with Franz Duncker the *Berliner Volkszeitung*, "Organ für Jedermann aus dem Volke," which numbered among its contributors many important radicals. Bernstein was gifted with an unusual power of clear exposition of difficult political, economic and social problems, and his presentation of them in a simple, lively manner was extremely popular and influential among the lower classes. His journalistic writings, which dealt with natural science and general culture as well as politics and economics, introduced his readers to the main stream of current ideas and affairs and set a model of broad intellectual interest which subsequent radical journals on the continent have continued to follow. Many of his editorials were collected under the title *Revolutions- und Reaktionsgeschichte Preussens und Deutschlands von den Märztagen bis zur neuesten Zeit* (3 vols., Berlin 1882). He also published several books of Biblical criticism, a number of ghetto stories and a popular manual of natural science which was frequently reprinted.

KURT ZIELENZIGER

Important works: *Aus dem Jahr 1848* (Stuttgart 1873); *1849: Verfassungskämpfe und Kabinets-Intriguen* (Stuttgart 1874); *Bis nach Olmütz* (Stuttgart 1874); *Die Jahre des Volkes* (Stuttgart 1873, 2nd ed. 1875); *Die Jahre der Reaktion* (Berlin 1881); *Schulze-Delitzsch: Leben und Wirken* (Berlin 1879).

Consult: Bernstein, Eduard, *Von 1850 bis 1872* (Berlin 1926) p. 4–6, 212–13; Salomon, L., *Geschichte des deutschen Zeitungswesen*, 3 vols. (Oldenburg 1900–06) vol. iii, p. 559–61; Lazarus, I., "Die Berliner Presse" in Verein für die Geschichte Berlins, *Mitteilungen*, vol. xxv (1908) 254–55.

BERNSTORFF, ANDREAS PETER (1735–97), Danish statesman. He was brought into the Danish service in 1758 by his uncle, J. H. E. Bernstorff, and was rapidly promoted. Oracular and self-sufficient, and surpassing his uncle in strength of character and capacity for business, he served the state as devotedly as the elder statesman had served the king. He was dismissed with the fall of his uncle in 1770, but the overthrow of Struensee, whose doctrinaire reforms had subverted almost every institution, led to the recall of the younger Bernstorff in November, 1772. He held nine important offices, involving business in the treasury, board of trade and foreign office. Under Guldberg he remained prominent until 1780, when he was sacrificed to the demands of Danish nationalists and of Russia. Recalled by the crown prince when the latter triumphed over the reactionaries in 1784, he ruled as premier until his death in 1797. Although he was a great German landed proprietor and the husband of a Stolberg, he served Denmark most loyally and in his later years won the hearts of the merchants of Copenhagen. Thus while continuing his uncle's success in avoiding war he could go beyond him in diffusing liberal ideas. He championed neutral rights with lasting effect. A friend of freedom, he did much to create the atmosphere in which after 1784 it blossomed in Denmark. Peasant emancipation, the creation of individual holdings, the abandonment of cruel punishments, the abolition of the slave trade (1792), the furtherance of education and of the freedom of the press—all these may be credited to his administration. Under a lunatic king he raised the prestige of the crown and promoted the social unity which Denmark sorely needed.

W. F. REDDAWAY

Consult: Friis, Aage, *Bernstorfferne og Danmark*, 2 vols. (Copenhagen 1903–19), vol. i tr. into German by F. F. W. Buhl (Leipsic 1905); *Bernstorffske Papirer*, ed. by A. Friis, 3 vols. (Copenhagen 1904–13) published in both Danish and German; Linvald, A., "Oplysningens Tidsalder" (Age of Enlightenment) in *Det danske Folks Historie*, ed. by A. Friis, A. Linvald and M. Mackeprang, 8 vols. (Copenhagen 1926–29) vol. vi, p. 1–193.

BERNSTORFF, JOHAN HARTVIG ERNST (1712–72), Danish statesman. A Hanoverian nobleman by birth, he served Denmark from 1732 until 1770. After 1751 he had almost entire control of foreign affairs; at the same time he exercised considerable influence over the internal administration. From 1752 to 1767 he

played a great part in the centralized direction of trade and industry, while at least until the change of king in 1766 he represented the small group of councilors who really ruled the nominally autocratic state. Thus for nearly twenty years his personality and ideas were to a great degree predominant in Denmark.

A courtly, dapper little man, well educated by tutors, books and travel, eminently virtuous, kindly and Christian, he nevertheless sometimes failed, both as a man and as a statesman, to appreciate sordid facts. However, he brought a breath of European culture and an example of energy, incorruptibility and goodness into a narrow and sluggish society. Regarding war, if avoidable, as the worst of evils, he kept Denmark from intervention even in the Seven Years' War. He actively endeavored to increase Danish commerce, manufactures and shipping, and showed sympathy with the hard lot of the serfs. On the other hand, regarding himself as the servant of God's anointed, he did little to check the flagrant vices and profuse expenditures of the kings. Accepting the existing divisions of society, Bernstorff increased still further the burden of oppressive taxation. He failed to realize his own incompetence in economic matters and apparently wasted state treasure. A foreigner himself, he was blind to the latent strength of Danish patriotism. Thus he fell almost unlamented.

W. F. REDDAWAY

Consult: Friis, Aage, *Bernstorfferne og Danmark*, 2 vols. (Copenhagen 1903–19), vol. i tr. into German by F. F. W. Buhl (Leipsic 1905); *Bernstorffske Papirer*, ed. by A. Friis, 3 vols. (Copenhagen 1904–13) published in both Danish and German; Linvald, A., "Oplysningens Tidsalder" (Age of Enlightenment) in *Det danske Folks Historie*, ed. by A. Friis, A. Linvald and M. Mackeprang, 8 vols. (Copenhagen 1926–29) vol. vi, p. 1–193.

BERT, PAUL (1833–86), French colonial administrator and educational reformer. He was a professor of physiology but the Revolution of 1870 led him into politics. Here he became famous as an advocate of compulsory, free and lay instruction—a triad of educational principles soon adopted by the Third Republic. In January, 1886, he was appointed *résident-général* of Annam and Tonkin in order to test the colonial theory of Jules Ferry. By the time of his death in the following November he had demonstrated the efficacy of the protectorate scheme as opposed to the usual French method of assimilation, and had made his policy a tradition in colonial annals. His influence was out of all proportion to the changes he introduced or to the actual events of his administration. When he set out to substitute for the reigning empiricism a scientific organization of the colonies, he found Annam in revolt and control of Tonkin confined to the Red River delta. He won over the royal figurehead and the governing *literati* in Annam, and expelled the hated foreign mandarins from Tonkin. In a position which seemed to call for Gatling guns rather than elections, Bert with the audacity of genius summoned representatives of the provinces of Tonkin (a Council of Notables) to discuss national problems. He set up a Tonkin Academy to train native administrators who would be friendly to the French and who would possess the *imprimatur* of culture so essential in a Chinese country. He made of his *résidents* merely protectors and supervisors, and all laws had to reconcile the interests of the natives with the needs of moderate progress. These reforms were all accomplished within six months. After his death there was a reaction against his policies and even his own followers in Indo-China deserted his principles. But his theory remained and was transferred through Gallieni to Lyautey and the present school of colonial administrators.

STEPHEN H. ROBERTS

Consult: Ducloz, J., "L'enfance et la jeunesse de Paul Bert" in Société des Sciences Historiques et Naturelles de L'Yonne, *Bulletin*, vol. lxxviii (1924) 5–105; Chailley-Bert, J., *Paul Bert au Tonkin* (Paris 1887); Roberts, S. H., *History of French Colonial Policy (1870–1925)*, 2 vols. (London 1929) vol. ii, p. 439–45; Basch, V., "Paul Bert et l'oeuvre scolaire de la République" in *Grande Revue*, vol. xiii (1900) 593–632.

BERTILLON, ALPHONSE (1853–1914), founder of the science of criminal identification. He began his career in the Paris police department as clerk in 1878 and later became the organizer and chief of its Service d'Identité Judiciaire. Before his time positive identification of recidivists was frequently impossible. Branding had been abolished; the "rogues' gallery" had failed. Inspired by Quételet, Bertillon devised a system of identification based on the facts that in mature men the skeletal structure remains unchanged, its dimensions can be accurately measured externally and so many such measurements can be taken that errors in identification are avoided. Finally, these measurements can be easily classified. His system was officially adopted in France in 1888 and rapidly spread to other countries. He later improved it

by adding to its eleven body measurements chromatic notations on eyes, hair and beard, and descriptions of scars, marks and deformities (*Identifications anthropométriques: instructions signalétiques*, Melun 1885, 2nd ed. 1893; English translation Chicago 1896). Certain defects in the system, especially the difficulty of applying it to women and physically immature persons, forced him to make use of fingerprints, but the dactyloscopic method, which was later to displace his own, was to him only a supplementary device.

Bertillon's contributions to the technique of criminal investigation were also significant. Mention should be made of the "descriptive portrait" (*le portrait parlé*), the standardized photograph and the metric photograph (*La photographie judiciaire*, Paris 1890; English translation New York 1897).

THORSTEN SELLIN

Consult: Lacassagne, A., in *Archives de l'anthropologie criminelle*, vol. xxix (1914) 161–66, containing a fairly complete bibliography of Bertillon's writings; Locard, E., "L'oeuvre d'Alphonse Bertillon" in *Archives de l'anthropologie criminelle*, vol. xxix (1914) 167–86; Borgerhoff, T., in *Bulletin et mémoires de la Société d'Anthropologie de Bruxelles*, vol. xxxiii (1914) 79–93; Stockis, E., in *Archives internationales de médecine légale*, vol. v (1914) 186–91; Heindl, Robert, *System und Praxis der Daktyloskopie und der sonstigen technischen Methoden der Kriminalpolizei* (3rd ed. Berlin 1927).

BERTILLON, JACQUES (1851–1922), French statistician and sociologist. He was trained for the profession of medicine but early devoted himself to work in the field of vital statistics. He succeeded his father, Louis-Adolphe Bertillon, as director of the municipal statistical bureau of Paris (1883–1913) and as professor of demography at the École d'Anthropologie. Later he taught demography at the Collège Libre des Sciences Sociales, which he helped to found in 1895. During the World War he superintended the work of collecting and arranging the statistics of French war losses.

Bertillon is notable chiefly for his efforts, through the International Institute of Statistics, to induce different nations to adopt similar classifications and methods of treating statistical material. In 1893 he recommended an international classification of the causes of death; this classification, of which there were to be three forms—an abridged, an intermediate and a detailed—combined the features of the most generally used national systems. The "Bertillon classification" was revised in 1900 and 1909 under his direction; a further revision was made in 1920.

Bertillon was equally interested in the problem of French depopulation. In 1896 he helped to found the Alliance Nationale pour l'Accroissement de la Population Française. He published a number of works on the subject and in 1910 prepared a report for the first French commission on depopulation, in which he furnished an analytic description of the causes, consequences and remedies for the decline of the French birth rate. He considered as chief causes exaggerated thrift, the burdensomeness of large families, the peculiarity of French inheritance law and custom, and "social capillarity." In 1918, together with Paul Coquemard, he founded *La femme et l'enfant*, a magazine of propaganda for an increase in the birth rate and for special protection to be afforded for large families. He was made a member of the Conseil Supérieur de la Natalité immediately following its establishment in 1920.

Bertillon was a prolific author. His works include a number of books concerned with population statistics, a general course of statistics and over three hundred articles in *L'annuaire statistique de la ville de Paris*, of which he was editor, in the *Journal* of the Société de Statistique de Paris and in other periodicals.

JOSEPH J. SPENGLER

Important works: *Statistique humaine de la France* (Paris 1880); *Étude démographique du divorce* (Paris 1883); *Atlas de statistique graphique de la ville de Paris en 1888* (Paris 1890); *Cours élémentaire de statistique administrative* (Paris 1895); *L'alcoholisme et les moyens de le combattre* (Paris 1904, 3rd ed. 1911); *Le problème de la dépopulation* (Paris 1897); *La dépopulation de la France* (Paris 1911).

Consult: Barriol, A., in Société de Statistique de Paris, *Journal*, vol. lxiii (1922) 267–69; Bourdon, Jean, in *Revue d'économie politique*, vol. xxxvi (1922) 638–42.

BERTILLON SYSTEM. *See* CRIME; IDENTIFICATION.

BERTIN, LOUIS FRANÇOIS (1766–1841), French journalist. With his brother, Bertin de Vaux (1771–1842), he bought in 1800 the *Journal des débats*, then an undistinguished newspaper which had been founded in 1789. Napoleon I subjected the paper to rigorous censorship, changed its name to *Journal de l'empire* and finally in 1811 confiscated it. After Waterloo Bertin returned to his "petit royaume" and gave powerful support to the Bourbon monarchy until he found its policy inconsistent with his ideal of constitutional government. The breach which began under the ministry of Villèle be-

came complete after the appointment of Polignac. After the July Revolution the *Journal des débats* once more supported the government. Bertin exerted a powerful influence not on the masses but on the intellectual élite; "we write," he said, "only for five hundred persons in Europe." He was the guide of that vital fraction of the French bourgeoisie which from 1815 to 1848 sought to perpetuate the best achievements of the French Revolution. Like that bourgeoisie he was friendly to progress but at the same time deeply attached to social order. In order to meet the growing interests of his public Bertin gave much space to the great economic changes of the time and made other innovations in the French press. He was one of the first to perceive the importance of the editorial and of advertising; he did much to further the development of the *roman feuilleton*; and through literary and dramatic criticism he exercised a considerable intellectual influence. When Bertin died the *Journal des débats* was, in the phrase of J. J. Weiss, a European institution.

ANDRÉ MORIZE

Consult: *Le livre du centenaire du journal des débats: 1789–1889* (Paris 1889) p. 14–47, 69–96, 158–91; Pereire, A., *Le journal des débats politiques et littéraires, 1814–1914* (Paris 1914) p. 1–102, containing a bibliography.

BESELER, KARL GEORG CHRISTOPH (1809–88), German jurist and political leader. He was born in Schleswig-Holstein, graduated from the University of Kiel in 1833 and taught at Basel, Rostock, Greifswald (1842–59) and Berlin (after 1859). In Greifswald he completed his three-volume work, *Die Lehre von den Erbverträgen* (Göttingen 1835–40), which established his reputation as one of the leading "Germanists." In his *Volksrecht und Juristenrecht* (Leipsic 1843) he made a plea for the study of the indigenous element in German law and legal practise, which involved him in a violent feud with Puchta. The completion of his principal work, *System des gemeinen deutschen Privatrechts* (3 vols., Leipsic and Berlin 1847–55; 4th ed., 2 vols., Berlin 1885), was interrupted for some time because of his participation in the reform movement of 1848. He played a prominent part in the Frankfort national assembly and was a member of the deputation that offered the imperial crown to the king of Prussia. In the Prussian lower chamber (1849–52) he did particularly commendable work in connection with the Prussian penal code of 1851. Later on he represented the University of Berlin in the Prussian upper chamber. His importance as a jurist lies partly in the fact that he succeeded in incorporating in the national legal system the ideas he derived from his researches in the history of German law. It is even more significant, however, that he introduced into legal thinking the idea of the corporate association derived from old German law and thereby became the "father of the association theory," which was subsequently elaborated and completed by his great disciple, Otto von Gierke.

RUDOLF HÜBNER

Consult: Beseler's own memoirs, *Erlebtes und Erstrebtes, 1809–1859* (Berlin 1884); Hübner, R., in *Allgemeine deutsche Biographie*, vol. xlvi, p. 445–72; Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880–1910) vol. iii, pt. ii, p. 507–19.

BESOLD, CHRISTOPH (1577–1638), German political scientist. Besold became professor of jurisprudence at Tübingen in 1610 and at Ingolstadt in 1637. He was a typical polyhistorian, combining an erudition in history, philosophy and law with the knowledge of many languages. As a great teacher he counted among his pupils many German statesmen and jurists, and his ninety-two works prove that he was a prolific writer as well.

In his political writings he was a protagonist of absolute monarchy and of Bodin's theory of sovereignty. He opposed Machiavellism, however, and warned rulers against being too tyrannical. After his conversion to Catholicism he championed vigorously the doctrines of his new faith. Besold's few works on economic questions associate him with such writers as Bornitz, Klock and Faust, the legal school of seventeenth century fiscal writers. Since he was a jurist rather than an economist he cannot be regarded as a mercantilist or cameralist. He denied the sterility of money capital and approved of interest charges, contending that legal limitation of the rate of interest and the operation of a public pawnbroking establishment would eliminate usurious practises. He insisted on the importance of accumulating a public treasure, for the increase of which he advised the use of fines, regalia and bequests and also contributions from prosperous citizens. He looked with favor on customs duties and advocated the continuance of the guilds, which should be prevented, however, from any agreement tending toward monopoly. Although in-

significant as an economist, Besold is of considerable importance in the history of fiscal science.

KURT ZIELENZIGER

Important works: *Collegium politicum* (Tübingen 1614); *De aerario publico discursus* (Tübingen 1615); *Politicorum libri duo* (Frankfort 1620); *Discursus politici* (Strasbourg 1623).

Consult: Roscher, Wilhelm, *Geschichte der Nationalökonomik im Deutschland* (Munich 1874) p. 195–205; Zielenziger, Kurt, *Die alten deutschen Kameralisten* (Jena 1914) p. 123–25.

BESTUZHEV-RIUMIN, KONSTANTIN NIKOLAYEVICH (1829–97), Russian historian. He studied at the University of Moscow (1847–51) under a number of gifted young historians and jurists who strengthened his interest in Russian history. After graduation he became a private tutor and later taught for some time in secondary schools. During the period of journalistic activity which followed he gained such prominence as a writer of critical historical reviews and as a translator of foreign historical works that he was selected to succeed Kostomarov as professor at the University of St. Petersburg. He lectured there for seventeen years, until severe illness forced him to retire. From 1878 to 1881 he was director of the Higher School for Women, and in 1890 he was elected member of the Russian Academy of Sciences.

Bestuzhev-Riumin was one of the most outstanding representatives of the reaction against the trends then dominating Russian historiography which derived the course of history from a single determining principle. He recognized the motley character of Russian historical development and explained it by the multiplicity of interacting factors. Following the tradition of Schlözer and Pogodin, he concentrated his attention on the critical examination of the sources and of the controversial historical hypotheses. It is significant that he was granted an honorary degree for his monograph on Russian chronicles to the end of the fourteenth century (St. Petersburg 1868). His work on the history of Russia (vol. i, St. Petersburg 1872; first part of vol. ii, 1885) begins with a lengthy introduction devoted to a critical survey of sources and historiography. He brings the story down to the end of the sixteenth century and, in contrast to the historians of the "state" school, devotes considerable space to cultural history.

V. MIAKOTIN

Consult: Shmurlo, E., in *Severny Vestnik*, vol. xii (1897) nos. 4, 5, 6 and 8.

BETHMANN HOLLWEG, THEOBALD VON (1856–1921), German statesman. Bethmann was greatly influenced by the commercial and agrarian activities of his family, and by the bureaucratic condition in which he grew up. He began his career in the Prussian civil service, became minister of the interior (1905), imperial secretary of state for the interior (1907) and finally in 1909 was called by Wilhelm II to succeed Bülow as imperial chancellor. As chancellor Bethmann Hollweg was most successful in his moderating influence on the Kaiser. The specific features of his internal administration included the continuation of policies he had already planned, such as the comprehensive insurance law (1911) and the unsuccessful attempt to democratize the Prussian franchise (1910), the granting of greater autonomy to Alsace-Lorraine (1911) and the financing of necessary armament increases (1911–13). In foreign affairs he found a hostile group of powers encircling Germany, but was opposed to a militaristic program and desired peace in Europe. He reversed Bülow's policy of unlimited support of Austrian schemes in the Balkans and retarded the building of warships. He broke through economic "encirclement" by the agreement with Russia (1910–11) and with England (1912–14) but failed to obtain non-aggression pacts from them because of the opposition of France within the Entente. The Morocco crisis of 1911, engineered by Kiderlen-Wächter and brought to a peaceful issue by Bethmann and the Kaiser, poisoned Franco-German relations. Toward Austria Bethmann's position was that Germany was not bound to support her in Balkan adventures, no "vital interests" being at stake; but in 1914 he agreed with Wilhelm II that the existence of the Austro-Hungarian monarchy was imperiled and that Germany must support her in punitive action against Serbia even if Russia intervened. He and Jagow tried to limit Austria's action to punishment rather than aggression, and insisted finally that Austria stop at Belgrade and accept the English plan of mediation. Russian mobilization, however, made war inevitable. During the war Bethmann's program included electoral reform in Prussia, restricted submarine warfare and a conciliatory peace. Unsuccessful in these he remained in office only to moderate policies he considered unsound, but was forced out in July, 1917, by Ludendorff and Hindenburg.

Bethmann Hollweg's chancellorship was a failure not because his policies were superficial

but because events moved too rapidly for his long-run methods. Humble, serious and factual, he scorned the arts of the demagogue. His lack of humor prompted solemn answers to his critics at home and abroad. He had a Kantian sense of responsibility and belief in the power of the intellect that survived the disillusioning experience of public life.

M. H. COCHRAN

Consult: Bethmann-Hollweg, T., *Betrachtungen zum Weltkrieg*, 2 vols. (Berlin 1919–21), vol. i tr. by George Young (London 1920), and *Kriegsreden* (Stuttgart 1919), with historical introduction by F. Thimme; Hammann, Otto, *Bilder aus der letzten Kaiserzeit* (Berlin 1922); Hartung, Fritz, in *Deutsches Biographisches Jahrbuch*, vol. iii (Stuttgart 1927) p. 21–41; Fay, S. B., *The Origins of the World War*, 2 vols. (New York 1928).

BÉTHUNE, MAXIMILIEN DE. *See* SULLY, DUC DE.

BETSKY, IVAN IVANOVICH (1704–95), Russian educator. Betsky, who was the illegitimate son of a Russian noble, Prince Trubetskoy, spent his youth in Copenhagen and Paris and later resided for a long time in various European capitals. At the age of sixty he was called by Empress Catherine II to take charge of educational affairs in Russia. An ardent admirer of the pedagogic theories of Montaigne, Locke and Rousseau, he attempted to put them into practise in the two St. Petersburg confined-residence schools for boys and girls of the nobility, modeled by him after St. Cyr. He hoped that by separating the pupils from their coarse family environment for the entire period of their education and by bringing them up according to the principles of advanced pedagogy, he would raise a new breed of people and eventually effect a moral regeneration of society. Sound emotional and moral training was to be emphasized in preference to merely intellectual instruction; teaching, adapted to the peculiarities of the individual student, was to be conducted in an atmosphere of gayety and joy without resort to compulsion. Along the same lines Betsky also organized and directed the House of Education in Moscow for orphaned, illegitimate and abandoned children; it served later as a model for similar establishments in the provinces. The pupils of this house and of the schools founded by Betsky for the children of handicraftsmen and merchants were after graduation protected by special privileges from some of the worst evils of the Russian political and social system. Although actual practise fell far short of Betsky's aspirations he is important for the bold advocacy of such ideas as the greater individualization of instruction, equalization of curricula for boys and girls, the value of a liberal education in preparation for even a technical vocation and the abolition of corporal punishment.

A. A. KIESEWETTER

Important works: *Les plans et les statuts des différents établissements . . . pour l'éducation de la jeunesse . . .* 2 vols. (Amsterdam 1775), a translation from the Russian.

Consult: Maykov, P. M., *I. I. Betskoy* (St. Petersburg 1904); Lappo-Danilevsky, A. S., *I. I. Betskoy i evo sistema vospitaniya* (I. I. Betsky and his educational system) (St. Petersburg 1904).

BETTERMENT TAXES. *See* SPECIAL ASSESSMENTS.

BETTING TAX. *See* GAMBLING.

BEUST, FRIEDRICH FERDINAND VON (1809–86), Saxon and Austrian diplomat and statesman. After filling various diplomatic posts Beust became foreign minister of Saxony (1849) and the leading spirit of the cabinet. He was highly regarded in Vienna and in the smaller German states but was looked upon with great suspicion by Bismarck. An exponent of the "triad" idea, Beust urged the formation of the secondary states of Germany into an independent state beside the two great powers, Prussia and Austria. The plan, however, incurred the growing opposition of Prussia. Under Beust's leadership Saxony with other German states joined Austria against Prussia in the war of 1866. After the Prussian victory Bismarck forced his resignation. He was then called into service by the Austrian emperor, Francis Joseph, appointed foreign minister and a year later imperial chancellor. He brought to a successful conclusion the Compromise (*Ausgleich*) of 1867 with Hungary, restored constitutional government and abrogated the concordat with Rome. Inspired by a spirit of *revanche* against Prussia he secretly attempted to bring about an alliance of Austria-Hungary with France and Italy, but the Prussian victory at Sedan (1870) nullified all his plans and he was compelled to resign (1871). He became ambassador at London in 1872, where he incurred the unqualified distrust of Disraeli. When his position at London became untenable he was in 1878 appointed ambassador at Paris. Dismissed in 1882 for

plotting against Bismarck, Beust retired from public life to write his memoirs.

EDUARD VON WERTHEIMER

Consult: Beust, Friedrich Ferdinand, *Aus drei Viertel-Jahrhunderten*, 2 vols. (Stuttgart 1887), tr. into Eng. as *Memoirs of Friedrich Ferdinand Count von Beust*, ed. by Henry de Worms, 2 vols. (London 1887); Ebeling, F. W., *Friedrich Ferdinand Graf von Beust*, 2 vols. (Leipsic 1870–71); Wertheimer, Eduard von, *Graf Julius Andrássy*, 3 vols. (Stuttgart 1910–13).

BEVERAGE INDUSTRY. *See* LIQUOR INDUSTRIES; FOOD INDUSTRIES.

BEVERIDGE, ALBERT J. (1862–1927), American statesman and historian. Beveridge was born in Ohio and passed his boyhood in poverty in Illinois. In 1885 he was graduated from DePauw University and, until his thirty-sixth year, practised law. His rare powers of oratory soon gave him a national reputation. He declared for the permanent retention of the Philippines before a shot had been fired in the war with Spain and, on being elected to the United States Senate in 1899, immediately went to the islands to prepare himself for the role he had assumed as the foremost imperialist in the country. When Theodore Roosevelt became president, Beveridge supported his ameliorative legislation. The Meat Inspection Law was his alone and he proposed to limit child labor by means of the Interstate Commerce Act. A defender of trusts, he insisted upon rigid supervision; a proponent of protection, he opposed prohibitory rates and began a long and futile fight to force the Republican party to the adoption of scientific revisions on findings of a tariff commission. In 1909 he was one of the Republican insurgents who bitterly fought the Payne-Aldrich tariff. This attempt to liberalize his party aroused powerful enemies and he was defeated for reelection in 1910. Having abandoned hope of making his party progressive he joined the new Progressive party, delivered the keynote speech at the convention that nominated Roosevelt, accepted the gubernatorial nomination in Indiana and, after Roosevelt, became the most significant of the party's leaders. He accepted the Progressive senatorial nomination in 1914, hoping to prevent reconciliation with the Republican party, but was defeated. On the disintegration of the Progressive party he rejoined the Republicans in 1916 and supported Charles E. Hughes for president. Six years later he was the Republican senatorial nominee but the old factional enmities were again fatal. In his early life Beveridge was dominated by Hamiltonian concepts and his later philosophy was that of a liberalized federalism. His intense nationalism colored his entire career and arrayed him belligerently against the League of Nations.

On his retirement from the Senate in 1911 he began his *Life of John Marshall* (4 vols., Boston 1916–19), a book which was an interpretation of constitutional history as well as a monumental biography. After his defeat for the Senate in 1922 he turned to the preparation of a *Life of Abraham Lincoln* planned upon the same scale and intended to carry on his interpretation of constitutional history. He died with half the biography uncompleted, but the two published volumes (Boston 1928) are concededly the most thorough and authentic dealing with the period before Lincoln's presidency. Among his other books are *The Russian Advance* (New York 1903), the product of a trip to Russia made to observe the economic and political trend, and *What Is Back of the War* (Indianapolis 1915), written as the result of a trip to Germany, France and England, and regarded as somewhat pro-German.

CLAUDE G. BOWERS

BEYER, GEORG (1665–1714), German jurist. He was a pupil of Christian Thomasius, who furnished the inspiration for the course of lectures, the first which were concerned with the native Germanic law, given by Beyer in Wittenberg beginning in 1707 (edited by Michael Heinrich Griebner as *Delineatio iuris Germanici*, Halle 1718, 4th ed. 1740) and constituting his significance in the history of law. Thirty-nine of Beyer's works are known. He distinguished himself by assiduously collecting the scattered material of the Germanic law and making it part of the system of the Institutes. He was especially interested in native Saxon law as embodied in the Saxon Mirror, but followed the prevailing tendency in forcing both the older and the more recent German law into the mold of Roman law, an error which continued to be characteristic of German legal science for more than a century. Beyer, however, deserves great credit for denying the validity of Roman penal law in Germany and for energetically stressing instead the *Carolina*, the penal code of the time of Charles V.

HANS FEHR

Consult: Jugler, J. F., *Beyträge zur juristischen Biographie*, 6 vols. (Leipsic 1773–80) vol. i, p. 184–208, which is particularly valuable for a complex and accurate bibliography of Beyer's works; Stobbe, Otto,

Geschichte der deutschen Rechtsquellen, 2 vols. (Brunswick 1860–64) vol. ii, p. 423–24; Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschafts*, 3 vols. (Munich 1880–1910) vol. iii, pt. i, p. 137–38.

BEZOLD, FRIEDRICH VON (1848–1928), German historian. Bezold studied history in Munich, Göttingen and Berlin and came especially under the influence of Waitz. He held professorial positions in Munich, Erlangen and Bonn and in 1883 was appointed member of the historical commission of the Bavarian Academy of Sciences. He devoted himself at first to the study of classical antiquity but soon shifted his interest to the Renaissance and the Reformation. His collection, *Aus Mittelalter und Renaissance* (Munich 1918), contains some penetrating studies on the struggle between science and faith (astrology, occultism, natural philosophy, Kabbala) as well as fragments of a larger work on Bodin which Bezold contemplated. His last book, *Das Fortleben der antiken Götter im mittelalterlichen Humanismus* (Bonn 1922), reveals a deep understanding of the significance of superstition in the spiritual life of a people. Bezold's most significant works are, however, his *Geschichte der deutschen Reformation* (2 vols., Berlin 1886–90) and his "Staat und Gesellschaft des Reformationszeitalters" in *Die Kultur der Gegenwart* (pt. ii, vol. v, Berlin 1908, sect. i). Raised in the liberal atmosphere of Munich and inspired by the ideals of 1848, which later made him the most bitter critic of the era of Wilhelm II, he liberated the historical writing on the Reformation from its narrow theological limits. He gave more emphasis than had hitherto been given to the social and economic currents in the sixteenth century and ranked the Reformation in its true importance as an epoch making period of great national significance. While Bezold attempted to envisage western civilization as a whole, the individuality of historical development was of greater significance to him than its metaphysical explanation.

FEDOR SCHNEIDER

Consult: Beyerhaus, Gisbert, in *Historische Zeitschrift*, vol. cxli (1929) 315–26.

BIANCHINI, LUDOVICO (1803–71), Italian economist and public figure. Bianchini, a professor at the University of Naples and a prolific author, revealed a breadth of vision and considerable familiarity with French and English economic literature. His early work, *Principii del credito pubblico* (Naples 1827, 2nd ed. 1831), although inferior to Nebenius, is still a noteworthy study of the types of public loans, including paper money. In order to take advantage of lower interest rates he recommended the use of callable loans, a suggestion further elaborated in a later monograph (1836), in which he discussed the problems of conversion. Financial questions are treated historically in his principal work, *La storia delle finanze del regno di Napoli* (3 vols., Naples 1834–35; 3rd ed., 1 vol., 1859), which is in fact almost as much a treatise on social and economic history as the later *Storia economico-civile di Sicilia* (2 vols., Naples 1841). The theory of public finance and the history of financial doctrines are discussed also in the second volume of his *Scienza del ben vivere sociale e della economia degli stati* (2 vols., Palermo and Naples 1845–55); the first volume is given to a critical, but not always illuminating, history of economic theory. Bianchini dealt with questions of economic policy in his interesting monographs on the German customs union and on the anti-corn law agitation in England in the years 1842–46. In the latter, *Sulle riforme doganali della Gran Bretagna del 1842 al 1846* (Palermo 1846), Bianchini described the doctrinal and historical background of the agitation, analyzed the economic effects of a free trade policy and suggested that in order to offer effective relief to the working classes the abolition of corn laws must be accompanied by an extension of factory and child labor legislation.

AUGUSTO GRAZIANI

BIBLE. *See* SACRED BOOKS.

BICAMERAL SYSTEM. The bicameral legislature, so prevalent a characteristic of modern constitutional government, is historically rooted in the stratified social order of the later Middle Ages, in a regime in which the various social classes—higher nobility, lower nobility, clergy and townsmen—constituted politically independent "estates." In times of emergency each of these social classes met as an independent "estate" in a "states general" to make its contribution to the revenues of the king. They were not bodies representative of the nation. Only in the king was the ideal of national unity vaguely expressed in political form. Although they constitute the historical antecedents of modern parliaments and legislatures, it is obvious that these mediaeval "states general" have no institutional similarity or logical connection with

them. It was largely by accident that in England these several social orders came to sit in two houses. This circumstance did not change the character of the English Parliament. It remained essentially a "states general." Under the Tudors it became a subservient instrument of the monarchy. Only through the political struggles of the seventeenth century were the foundations of modern constitutional government laid in England. The question of the organization of Parliament on a bicameral or unicameral basis could not arise until this stage of political evolution had been reached. In France three estates met separately at irregular intervals until 1614 and did not meet again until 1789 on the eve of the French Revolution. In Sweden four separate estates continued to meet until 1866. The modern bicameral system on the continent of Europe really dates from the later eighteenth century when French revolutionary ideas, reenforced by English example, ushered in the new epoch of constitutionalism.

Two eighteenth century doctrines have been employed in the defense of modern constitutional government. The one supports the bicameral principle, the other the unicameral. The first is the doctrine of checks and balances with which Montesquieu's name is indissolubly connected. The second is that of popular sovereignty and the "general will" which received its classic statement from Rousseau. Reflecting the scientific point of view of the eighteenth century, best revealed in Newtonian physics, Montesquieu's theory of the state embodied the conception of an equilibrium of forces. The bicameral system is merely one application of this doctrine of checks and balances. Montesquieu himself argued for two chambers on the ground that where an aristocracy exists a separate representation of it is required in order that the common liberty may not result in its enslavement. A legislature of two chambers is desirable, it is urged, to secure the necessary deliberation, to avoid haste, to balance the judgment of the representatives of the masses by that of the representatives of the wealthy and aristocratic elements in society. This consideration was certainly present in the minds of the statesmen who framed the American federal and state constitutions. The apocryphal story of Washington pouring the hot tea from his cup into the saucer to cool, thus illustrating the value of the Senate as a body moderating the impulsive tendencies inherent in the House of Representatives, indicates the character of the argument.

The doctrine has been expanded in later theoretical discussions. A government, it is alleged, in which a strong executive, elected by popular vote and thus in a position to claim to be the mandatary of the nation, is set over against a single legislative chamber elected on the same principle embodies in itself the elements of inevitable conflict. The experience of the second republic in France is supposed to afford practical evidence of this danger. A bicameral legislature, when the two houses are in agreement, can be trusted to express the will of the people, and the justice and wisdom of their decisions can scarcely be challenged; while in case of disagreement between the two houses the executive will occupy the position of arbiter. Thus government, resting upon a tripod instead of upon only two legs, will enjoy stability. Three is the least number out of which a majority may be formed. In a bicameral system a majority, consisting of both houses or of one house and the executive, is always possible, and the presumption is that the opposing single element must give way in any crisis.

In this general form the argument has been urged for any and all constitutional governments. Additional reasons have been presented and have carried great weight with respect to certain special forms of government. The theoretical defense of the bicameral system has been especially cogent in the case of federal governments, where it has been felt necessary to provide representation for the member states as well as for the masses of the people. Thus the United States Senate, in which the states are equally represented, embodies the principle of state autonomy, state equality and state rights, as against the national House of Representatives, in which the principles of popular sovereignty and numerical majority find expression. In the German, Austrian and Swiss federal systems, in the Canadian and Australian federations and in several of the Latin American governments this dualism exists and is justified on similar theoretical grounds of checks and balances. In very democratic countries like Australia and New Zealand where economic and social problems are dominant the two-chamber system is defended as affording representation to both capital and labor. This argument is likewise not unfamiliar in the United States. The larger extent of the electoral districts on the basis of which the upper chamber is elected, in some instances the more restricted suffrage by which it is chosen or the employment of a system of

indirect election, special property qualifications which are required for eligibility, the consequent greater expense that is involved in securing election, and often the fact that members of the upper chamber are not paid, insure that this body will include more rich men than the lower house—men who will naturally approach every problem from the capitalistic point of view. Thus, it is asserted, the two great economic factors of modern society receive due representation.

The eighteenth century theory of democracy, embodying the doctrines of popular sovereignty and the general will, was used effectively in opposition to the bicameral system. Rousseau himself denounced all forms of representative government. His was a system of direct democracy. But his disciples grafted the principle of representation upon his doctrine and clothed the representative assembly with the supreme legislative attributes which Rousseau had reserved for the people themselves. Their conclusion was simple and logical. If the people are sovereign, if there is a single national will, this can be expressed only through a single organ elected by majority vote, not through several organs. The general will at any moment, and with regard to any particular question, must be definite and certain. There ought not to be two contradictory voices. This would be to organize an absurdity. The entire theory is implicit in the dilemma which the Abbé Sieyès propounded: "If the upper house agrees with the lower it is superfluous; if it disagrees, it ought to be abolished." Tugot and Condorcet in France and Samuel Adams and Paine in America supported this view. Benjamin Franklin, who was undoubtedly more influenced by a comparison of the experience of the colony of Pennsylvania, where the legislature was unicameral, with that of most of the other American colonies, which had the bicameral system, than by the fine spun theories of the French doctrinaires, gave a practical turn to the argument. He declared that "a legislative body divided into two branches is like a carriage drawn by one horse in front and one behind pulling in opposite directions." Certainly the frequent deadlocks between the two houses in the American Congress and state legislatures, resulting in failure to enact much needed legislation, weigh heavily against the bicameral system.

The argument in favor of a single chamber has acquired additional support with the clearer perception of the nature of parliamentary government in England and in other governments of the cabinet type. In this form of government it has come to be clearly seen that the primary function of parliament is not law making but control of the executive. There has thus developed a conception of centralized authority under strict responsibility and control as against the notion of checks and balances. One cannot serve two masters, and any attempt to subject the executive to the control of two independent and often antagonistic chambers involves the frustration of national policy, if not the breakdown of government itself. The bicameral system is logically inconsistent with the principle of ministerial responsibility which constitutes the cornerstone of governments of the parliamentary type. In England the question of the House of Lords dominated English politics for nearly a century and received only a partial solution in the Parliament Act of 1911, by which the upper chamber was practically reduced to the status of a mere consultative and advisory body. In effect the English government operates on the unicameral principle. In France the existence of two chambers of approximately coordinate power has resulted in kaleidoscopic changes of ministry. Ministerial instability has been the outstanding characteristic of French politics during the Third Republic.

American federal and state governments are still based upon the principle of checks and balances and the bicameral system continues to be a cardinal feature. In American municipalities, however, the pendulum has swung definitely in the opposite direction. When Lord Bryce wrote his *American Commonwealth*, in the middle eighties of the last century, the prevailing type of city government in the United States included a bicameral council; and his statement that "the government of cities is the one conspicuous failure of the United States" was only too well deserved. The marked improvement in the character and quality of municipal government may be traced directly to the establishment of unicameral councils or commissions. This reform was doubtless due to the application of methods employed by business corporations, where boards of directors are always organized in single bodies, rather than the result of any theoretical considerations. The successful experience of these reorganized city governments, together with the increasingly unsatisfactory character of American state government, has led to a considerable movement for single-chamber state legislatures. In California in 1913

the legislature voted in favor of a constitutional amendment providing for a unicameral legislature, but the necessary two thirds was not obtained. A similar proposal was submitted to popular referenda in Oregon in 1912 and 1914. In the latter year a majority of those voting on the proposition favored the amendment but the necessary majority of all those voting at the election was not forthcoming. In 1913 and 1915 the governors of Kansas and Arizona respectively urged the advisability of reform in this direction. The subject has been agitated in other states and has been frequently considered by organized bodies of political scientists and lawyers.

That there has been a definite reaction against the bicameral system is evident. While the national governments of all the larger constitutional states retain two chambers, unicameral legislative bodies are found in Bulgaria, Turkey, Finland, Esthonia, Jugoslavia, Latvia, Lithuania, Honduras, Costa Rica, Salvador, Panama, the Canadian provinces (except Quebec and Nova Scotia), in Queensland, in the cantons of Switzerland, in many of the states of the German and Austrain federal republics and in most of those of the Latin American federations. Although there is as yet no basis for predicting a general substitution of one chamber for two in national governments, the question continues to be actively and widely discussed. The basis of discussion is assuming a far more pragmatic and less theoretical character.

A bicameral system based upon a principle entirely different from that which has prevailed since the establishment of constitutional government is being currently advocated by certain political and social theorists and has obtained initial institutional form in recent constitutional changes in Europe. A system in which one chamber elected by equal and universal suffrage on the basis of geographical areas is balanced by a second chamber representing functional economic groups is forecast by such writers as Léon Duguit in France and Sidney and Beatrice Webb in England. The establishment of a functional Economic Council by the German constitution and the creation in France of a body similarly constituted from economic groups, although both bodies are merely advisory and consultative in character, reflect the new orientation. In Italy perhaps even more significant constitutional changes in the direction of functional representation have recently been put into effect. It is, however, as yet impossible to prognosticate what may be the future development of these ideas and institutions.

W. J. SHEPARD

See: LEGISLATIVE ASSEMBLIES; STATE GOVERNMENT, UNITED STATES; MUNICIPAL GOVERNMENT; REPRESENTATIVE GOVERNMENT; FEDERALISM; CABINET GOVERNMENT; CONGRESSIONAL GOVERNMENT; CHECKS AND BALANCES; POPULAR SOVEREIGNTY; STATES' RIGHTS; FUNCTIONAL REPRESENTATION.

Consult: Mill, J. S., *Considerations on Representative Government* (London 1905) ch. xiii; Temperley, H. W. V., *Senates and Upper Chambers* (London 1910); Marriot, J. A. R., *Second Chambers* (new ed. Oxford 1927); Lees-Smith, H. B., *Second Chambers in Theory and Practice* (London 1923); Rockow, L., "Bentham on the Theory of Second Chambers" in *American Political Science Review*, vol. xxii (1928) 576–90; McBain, H. L., and Rogers, L., *The New Constitutions of Europe* (New York 1923) ch. iii; Bryce, James, *Modern Democracies*, 2 vols. (London 1921) vol. ii, ch. lxiv; Great Britain, House of Commons, Conference on the Reform of the Second Chamber, *Letter from Viscount Bryce to the Prime Minister*, Parliamentary Papers, vol. x, Cd. 9038 (London 1918); Laski, H. J., *The Problem of a Second Chamber*, Fabian Tract no. 213 (London 1925); Roberts, G. B., *The Functions of an English Second Chamber* (London 1926); Esmein, A., *Éléments de droit constitutionnel français et comparé*, 2 vols. (8th ed. Paris 1927–28) vol. i, p. 115–56; Duguit, L., *Traité de droit constitutionnel*, 5 vols. (2nd ed. Paris 1921–25) vol. ii, p. 542–71; Luce, R., *Legislative Assemblies* (Boston 1924) ch. ii; Garner, J. W., *Political Science and Government* (New York 1928) ch. xx; Barnett, J. D., "The Bicameral System in State Legislation" in *American Political Science Review*, vol. ix (1915) 449–66; Rogers, L., *The American Senate* (New York 1926).

BIDDLE, NICHOLAS (1786–1844), American financier and politician. After some years passed in diplomatic service at Paris and London and in literary activities which ranged from aesthetics to political pamphleteering, Biddle was in 1819 appointed by his friend, President Monroe, as one of the government directors of the Second Bank of the United States. In 1823 he succeeded Langdon Cheves as president of the Bank. Biddle modified to some extent the conservative policy of his predecessor; under his regime credit expansion by the western branches was made possible through the branch issue of drafts on the parent bank, which circulated as currency. Together with the freer use of inland bills of exchange, the circulation of branch drafts weakened the dependence of business upon the notes of the state banks and the services of the private dealers in exchange. This policy aroused the vigorous resentment of frontier communities eager for easy credit, so that with the advent of the Jackson administration the Bank became the

subject of political attacks. At first inclined to conciliate President Jackson, Biddle, with his "aristocratic" Philadelphia background, came increasingly under the influence of Clay and other anti-Jacksonites. He was induced by them to apply in 1832 for an extension of the Bank's federal charter, not due to expire until 1836. Jackson took up the issue gladly and vetoed the rechartering bill, with the result that the Bank question became a major issue in the ensuing presidential campaign. Jackson won and in 1833 ordered a gradual withdrawal of government deposits from the Bank, thus materially hampering its operations. A state charter enabling the Bank to continue was secured in Pennsylvania, but the speculations upon which it embarked thenceforth resulted in repeated suspensions of payments until it finally failed in 1841, two years after Biddle's resignation as president.

PAUL WEBBINK

Consult: Catterall, Ralph, *Second Bank of the United States* (Chicago 1903); Bowers, Claude, *Party Battles of the Jacksonian Period* (Boston 1922) chs. viii and xi.

BIEDERMANN, FRIEDRICH KARL (1812–1901), German publicist, parliamentarian and historian. In 1835 he became *Privatdocent* in philosophy at the university of his native Leipsic and three years later was promoted to an "extraordinary" professorship. In 1842 he published his first major work, *Die deutsche Philosophie von Kant bis auf unsere Zeit* (2 vols., Leipsic 1842), in which he advocated, in opposition to the idea of the absolute propounded by Fichte, Schelling and Hegel, a more empirical attitude toward the vital questions of political and social organization. Throughout the early forties he took a leading part, both as editor of the *Deutsche Monatsschrift* and as member of the Leipsic municipal council, in the practical reform movements of the day: the establishment of constitutional government in the various German states, liberty of the press and national unification. Elected to the Frankfort parliament of 1848 he joined the moderate Liberals. In the debates on "fundamental rights" he stood preeminently for the separation of church and state and became a founder of the "Hereditary Empire" party and a leader of the delegation sent to Berlin to offer the imperial crown to Friedrich Wilhelm IV. Because of his opposition to the reactionary persecution after the dissolution of parliament he was sentenced by a Saxon court to a month's imprisonment and dismissed from the university. He took refuge in Weimar, where after 1855 he edited a government owned Liberal newspaper. In 1865 his Leipsic professorship was restored to him and later Biedermann became a member of the National-Liberal party in the first German Reichstag, 1871–73. For years he had been at work on his monumental *Deutschland im achtzehnten Jahrhundert* (2 vols., Leipsic 1854–80; vols. i and ii, pt. i, 2nd ed. 1880). This truly remarkable attempt at a comprehensive picture of the many different phases of German national culture in the eighteenth century—political, social, intellectual, educational, religious and literary—distinguishes Biedermann as one of the earliest and most outstanding representatives of the German *kulturgeschichtliche* method.

KUNO FRANCKE

Consult: Buchholz, G., in *Biographisches Jahrbuch und deutscher Nekrolog*, vol. vi (1904) 413–17; also Biedermann's autobiographical works, *Mein Leben und ein Stück Zeitgeschichte*, 2 vols. (Breslau 1886–88), and *Erinnerungen aus der Paulskirche* (Leipsic 1849).

BIEL, GABRIEL (*c.* 1425–95), German theologian and philosopher. He was professor of theology at the University of Tübingen, which he had helped to found, and in his later life joined the Brethren of the Common Life. In his philosophy Biel was a nominalist and follower of William of Occam. His most important work, *Epithoma pariter et collectorium circa quattuor sententiarum libros*, edited and completed by his pupil Wendelin Steinbach (Tübingen 1501), is a methodic exposition of Occam's thought. Biel, however, has little in common with the deteriorated scholasticism of the fifteenth century. Avoiding intellectual juggling and empty speculation, he gave much attention to questions of practical life, maintained friendly relations with the humanists and took considerable interest in the social movements of his time.

Biel's progressive economic views were first pointed out by Roscher, who introduced Biel to modern students of economics. His advance beyond his predecessors is illustrated particularly in his views on just price and on the morality of merchandising. The equality which justice demands in exchanges is not determined by anything intrinsic to the contract but by the utility of the goods for human life. A price fixing law should take into account human needs, the scarcity of the goods and the labor and difficulty of obtaining them. This is similar to the rule of market price, except that Biel seems to have held to the traditional doctrine which measured the cost of production by the customary cost of

living. Trading, according to Biel, is not in general evil but good and necessary, and the trader is worthy of the remuneration called gain, provided that he carries on his work for worthy ends. There are only two such ends: personal and family sustenance in accordance with the trader's station in life, and charitable distribution. It is not lawful to seek an accumulation of wealth in order to live in idleness, indulge in pleasures or enjoy pomp and splendor.

The sections of Biel's work dealing with currency were later published separately as *Tractatus de potestate et utilitate monetarum* (Mainz 1541). Here he severely denounces princes who debase the currency or impose arbitrary burdens of taxation, those who curtail the rights of the people to forests, meadows and water, and likewise the rich sportsmen who encroach upon the lands of the peasantry.

JOHN A. RYAN

Consult: Linsemann, F. X., "Gabriel Biel und die Anfänge der Universität zu Tübingen" and "Gabriel Biel der letzte Scholastiker, und der Nominalismus" in *Theologische Quartalschrift*, vol. xlvii (1865) 195–226, 449–81 and 610–76; Roscher, W., *Geschichte der Nationalökonomik in Deutschland* (Munich 1874) p. 21–28; Garnier, H., *De l'idée du juste prix* (Paris 1900) p. 74–83.

BIERLING, ERNST RUDOLPH (1841–1919), German jurist. Bierling, who was professor at Greifswald, was at first concerned with canon law but, confronted with the problem of the juristic character of the law of ecclesiastical associations, he turned to a general examination of juridical principles and to studies in the philosophy of law. In 1877 he published the first volume of *Zur Kritik der juristischen Grundbegriffe* (2 vols., Gotha 1877–83), which he later expanded and systematized in his chief work, *Juristische Prinzipienlehre* (5 vols., Freiburg and Tübingen 1894–1917).

With Adolf Merkel, Bierling represented the school of the "Allgemeine Rechtslehre" in Germany, which may best be described as a type of analytical jurisprudence. Without disdaining the positive law, the exponents of the school sought to subject it to analysis upon general philosophical principles. Bierling thus sought those juristic categories a priori applicable to all legal situations but in themselves without positivistic content. These he recognized as the concepts of legal subject and legal object, legality and illegality; above all he dealt with the concept of law itself, which, however, he held was not to be derived by abstraction from the positivistic rules in which it simply happened to be manifested. He thus had much in common with the neo-Kantians; indeed Stammler similarly developed the a priori basis of juristic knowledge in his *Theorie der Rechtswissenschaft* (2nd ed. Halle 1923.)

ELEMÉR BALOGH

Works: Bierling's canonical works are listed in Schulte's *Geschichte der Quellen und Literatur des canonischen Rechts*, 3 vols. (Stuttgart 1875–80) vol. iii, pt. ii, p. 236.

Consult: Radbruch, Gustav, *Grundzüge der Rechtsphilosophie* (Leipsic 1914) p. 14–18; Hölder, E., in *Kritische Vierteljahrsschrift für Gesetzgebung und Rechtswissenschaft*, vol. xxxvii (1895) 1–52; Schuppe, W., "Die Methoden der Rechtsphilosophie" in *Zeitschrift für vergleichende Rechtswissenschaft*, vol. v (1884) 269–74.

BIGGS, HERMANN MICHAEL (1859–1923), American public health administrator. After studying medicine in the United States and Germany, Biggs returned to New York in 1885 and became instructor in the newly established Carnegie Laboratory of the Bellevue Hospital Medical College, where he taught pathology, therapeutics and the practise of medicine. When New York was threatened by cholera in 1892 Biggs persuaded the Board of Health to establish a department of pathology and bacteriology. He became director of the laboratory, which made important studies in the etiology of diphtheria and which as a pioneer exerted a powerful influence in bringing about the establishment of public health laboratories throughout the world. In 1894 Biggs introduced antitoxin treatment of diphtheria on a comprehensive scale in New York. At the same time he launched the first organized administrative campaign against tuberculosis and after a bitter struggle against the conservatism of the medical profession established the fundamental principles of laboratory diagnosis of tuberculosis and of the reporting, isolation and sanatorial and clinical treatment of cases under public auspices. From 1902 to 1913, under Biggs' leadership as "general medical officer," the health department of New York City developed programs for infant welfare, school hygiene, venereal disease control and public health nursing which made it a model for other city health departments.

In 1913 Biggs served as chairman of a commission which prepared a thorough reorganization of the New York State Department of Health; in 1914 he became state commissioner,

developing at Albany an organization and program widely influential among state departments of health. In 1917 he made a survey of the tuberculosis problem in France and laid down the basic principles upon which the Rockefeller Foundation conducted its fruitful work in that country; and in 1920 he reorganized the League of Red Cross Societies at Geneva and outlined the sound policies on which it has since been conducted. Biggs' last major service was a study of the problem of medical care in the rural districts which led to the passage in 1923, a few months before his death, of a bill for state aid in the development of rural hospitals, clinics and health services, involving social principles of profound significance. Biggs was the most effective administrative leader in the field of public health which the United States has yet produced.

C.-E. A. WINSLOW

Consult: Winslow, C.-E. A., *The Life of Hermann M. Biggs* (Philadelphia 1929).

BILIŃSKI, LEON (1846–1923), Austrian-Polish economist and statesman. A professor at the University of Lemberg after 1874 he also filled many administrative and political offices. He was governor of the Austro-Hungarian bank (1900–09), minister of finance of Austria (1895–97 and 1909–11), of Austria-Hungary (1912–15) and of the new Polish state (1919). His literary activity was no less varied. He wrote in both Polish and German, but many of his works, particularly those dealing with current problems, did not survive the test of time. The more noteworthy of his productions are two manuals of social economics (in Polish, 1873 and 1880), a manual of finance (in Polish, 1876) and smaller works on railway tariffs (in German, 1875) and on the tax burden of Austrian agriculture (in German, 1880).

Biliński is best remembered, however, for his contribution to the controversy about luxury versus income taxation, a subject which at the time agitated the German speaking world. In his *Die Luxussteuer als Correctiv der Einkommensteuer* (Leipsic 1875) with its characteristic subtitle, *finanzwissenschaftlicher Beitrag zur Lösung der sozialen Frage*, Biliński took a stand for luxury taxes and against income taxes, investigated the place of luxury taxation in current theory and practise and recommended practical means for carrying out his proposal. A year later in "Die Stellung der Vermögens- und Verkehrssteuern im Steuersysteme" (in *Annalen des deutschen Reichs für Gesetzgebung, Verwaltung und Statistik*, vol. ix, 1876, p. 719–28) he attempted to show that the principle of the luxury tax can be applied to both indirect and direct taxation; in the latter application the luxury tax becomes virtually a general property tax, bearing particularly heavily on unearned increment, inheritance, gifts, and lottery and speculative gains. Georg Schanz, then a young man, characterized this idea as new, but as correct and practicable only in part. *Die Gemeindebesteuerung und deren Reform* (Leipsic 1878) showed that Biliński still believed in the validity of the principle and attempted to incorporate it in a system of local taxation.

FRANZ MEISEL

BILL OF EXCHANGE.

HISTORICAL. The bill of exchange is a credit instrument of long standing and of great importance in the wholesale trade. Originally devised as a promissory note, it soon took on the form of a draft. Such extensive changes have occurred in the bill of exchange that it is impossible to give a useful definition that will apply to the forms and practises of all ages. Generally speaking we may say that it has been a document or bill (*bulla*) indicating an indebtedness incurred in one kind of money to be settled in another kind. The word "exchange" (*cambium*) did not originally refer to the sale of the goods giving occasion to the bill, but to the change from one system of coins to another. While the bill of exchange was probably devised in order to give credit to a customer, who was to make payment when the goods had been sold at a distant point, it possessed other advantages. For instance it made possible compliance with local laws against the export of gold and silver and it removed the risk of transporting coins, since it could be sold to someone who needed to make a payment at a distant point but who feared the risk of carrying the money.

It is not possible to state definitely when and where the bill of exchange first appeared. It may be discovered among the clay tablets of later Babylonian history or in the papyri of later Egyptian history. It is thought by some scholars that when Cicero in his letters to Atticus and others spoke of the transfer of money he was referring to the bill of exchange. But the *permutatio*, *permutare Athenas* and similar expressions may have reference to the drafts of private bankers. The bill of exchange may also, conceivably, be dealt with implicitly in the

Roman legal codes. It is a matter of speculation whether the mediaeval bill of exchange was handed down from antiquity through Byzantium.

Various early writers have assigned the origin of the bill of exchange to the Jews and to the Lombards. Some have placed it in Amalfi, others in Florence; but the most likely *locus* where it first appeared and whence it spread rapidly to other Italian towns and Marseille is Genoa. Certainly the earliest clear cases of bills of exchange come from Genoa. The one described by Goldschmidt (p. 420) is dated 1156, while that put first by Endemann (p. 81) bears the date 1157. A common form for these early bills is as follows: "I, A. B., have accepted from you, C. D., goods of the value of so many pounds of Genoese money, and I promise to pay to you in Alexandria in bezants of Alexandria, so many bezants to the pound, before the arrival of a certain date."

The promissory note which was the original form of the bill of exchange developed alongside of the sea loan and there is not always a sharp distinction between the two. In fact the slow process by which the original confession of indebtedness and promise to pay was gradually improved points to the slow emergence of a new form of credit instrument. In the latter part of the thirteenth century something similar to the draft was used in addition to the promissory note. It was not until the 1330's, however, that the draft appeared in its modern form. In the next century the draft form triumphed and shortly afterward the acceptance of the draft by the drawee became an established practise. In the fourteenth century the bill of exchange spread to England and Flanders and from Flanders to northern Germany. By this time the private money changers (*campsores*) and lenders, or private bankers as we may call them, had come to occupy a commanding position in handling bills of exchange.

In both France and England the bill of exchange fell under the suspicion and regulation of secular authorities during the fourteenth century. Theologians and jurists had also begun to take cognizance of it. Distinction was then made between actual exchange of coins (*cambium reale*); genuine exchange by bills (*cambium per literas*), which was divided into two classes, bills payable at fairs and those payable in towns; and dry exchange (*cambium siccum*), in which both the debt and its repayment involved only one kind of money. Dry exchange was often a disguise for a straight loan; and since it savored of usury was opposed by the church. Although the ordinary bill of exchange was accepted by ecclesiastical authorities, there might have been embedded even within its innocent wording a considerable interest charge.

From 1550 to 1650 the practise of endorsing bills of exchange made rapid headway in Italy and particularly in France. For several centuries the bill of exchange had characteristically been payable at some fair. But endorsement, which added to the security of the bill, gave it great currency; indeed it came to circulate almost everywhere as money. In the seventeenth century the fairs were largely supplanted, as far as bills of exchange were concerned, by the central towns, particularly Amsterdam and London. It became common in early colonial trade, as well as in trade in the Orient, to pay for goods secured from Europe by bills of exchange on one of these two cities.

In London in the seventeenth century bills of exchange were discounted by goldsmiths and other private bankers and later by the Bank of England. Bill brokers arose to discount the domestic bills and foreign brokers to discount the foreign bills. The forms and commercial usages of England, which spread to the American colonies both as a part of common law and as enacted by provincial legislatures, persisted in the United States. The discounting of bills of exchange has since 1781 constituted a prominent part of the business of state banks, at least in the commercial centers.

Originally the bill of exchange had developed as part of the Law Merchant of Europe with a persistent tendency to uniformity. In the modern period, however, there arose a diversity of forms and rules. This was due to the acceptance of Roman law on the continent and its rejection in England, which held to the common law and developed no separate commercial code. Indeed we may say that the Law Merchant became part of the common law of England, while on the continent rules and regulations were made to cover the situations regarded in England as mere practises. There have thus developed differences in the wording of the bill, endorsement, days of grace, interest and other features. In the efforts that have been made at various international conferences since 1885 it has been easier to harmonize French and German practises than to effect an agreement between the continental and Anglo-American.

N. S. B. Gras

MODERN. The American Uniform Negotiable Instruments Law defines a bill of exchange as "an unconditional order in writing . . . signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer." This definition is almost identical with the one in the English statute, after which it was modeled. A bill is more commonly called a "draft," but the latter word has no definite legal meaning. The companion instrument to the bill is the unconditional written promise to pay money, known as the note. Bills and notes (orders and promises) together make up the main body of what are called negotiable instruments, a group of money contracts distinguished in a legal way not merely by the exceptional freedom and ease of their transfer but also by unusual rules (derived from the historical Law Merchant) that are applied to protect the so-called holder in due course from a certain class of defenses against payment that might be available to the obligor against a previous holder, such as the defenses of counterclaim, lack of consideration or fraud.

The one who writes the order constituting a bill is known as the "drawer," and the one directed to make payment is known as the "drawee," while the person named to receive payment (in regular course the first holder of the bill) is called the "payee." The transfer or "negotiation" of the instrument substitutes a new payee for the old. Ordinarily negotiation requires endorsement by the transferor, which (in the case of an unqualified endorsement) imposes on him a liability similiar to that of a guarantor of the instrument.

Bills are drawn payable on demand or at sight, i.e. when first presented to the drawee, or at a stated time after sight or after the date of the bill. The mere creation of the bill by the drawer cannot bind the drawee upon it as a contract, even though the latter may owe as much money as is called for in the bill. To become obligated the drawee must "accept" the instrument.

Although not popularly understood to be such, the check is a bill of exchange (a "demand bill upon a bank" is the statutory definition). The right to draw a check is founded on the fact that the bank owes the drawer money payable on demand, his so-called deposit. One bank may draw a check upon another bank with which it carries a balance or account, but this instrument would usually be called a draft. The chief use of these drafts is to enable their purchasers to make remittances to persons in distant places to whom they owe money or with whom they wish to establish credits. In a given country the sight or demand exchange available upon any foreign country consists in greatest part but not wholly of such bank drafts.

Bills are drawn by merchants upon other merchants, that is, by sellers or exporters upon the corresponding buyers or importers, but these drafts are much more prevalent in foreign than in domestic trade. Such bills may be on demand but are usually payable a stated number of days after sight. They commonly have the shipping documents covering the goods sold attached to them, primarily to serve as collateral security. In the foreign trade these bills are usually but not always drawn payable in the money of the country of the drawee, e.g. in pounds sterling upon a drawee in England, in francs upon a drawee in France. These instruments have two chief uses: to enable the exporter to obtain payment for his goods in his home money, whether by sale or by collection of the draft, and to enable both merchants to throw upon some bank the burden of financing the goods during their transit. The second use is realized whenever a bank purchases the draft or makes an advance upon it as collateral.

A. C. WHITAKER

See: INTERNATIONAL TRADE; FOREIGN EXCHANGE; BANKING, COMMERCIAL; COMMERCE; NEGOTIABLE INSTRUMENTS; ACCEPTANCE; CHECK.

Consult: FOR HISTORY: Goldschmidt, L., *Universalgeschichte des Handelsrechts* (3rd ed. Stuttgart 1891); Endemann, W., *Studien in der romanisch-kanonistichen Wirtschafts- und Rechtslehre bis gegen Ende des siebzehnten Jahrhunderts*, 2 vols. (Berlin 1874–83); Huvelin, Paul, *Essai historique sur le droit des marchés et des foires* (Paris 1897); *Documents inédits sur le commerce de Marseille au moyen-âge*, ed. by Louis Blancard, 2 vols. (Marseille 1884–85); Freundt, Carl, *Das Wechselrecht der Postglossatoren*, 2 vols. (Leipsic 1899–1909); Cole, A. H., "Evolution of the Foreign Exchange Market of the United States" in *Journal of Economic and Business History*, vol. i (1929) 384–421.

FOR THE MODERN BILL OF EXCHANGE: Escher, F., *Foreign Exchange Explained* (New York 1924) chs. i, vii, viii, xiii; Cross, I. B., *Domestic and Foreign Exchange* (New York 1924) chs. iii, iv, vii, viii; Whitaker, A. C., *Foreign Exchange* (New York 1922) chs. i, ii, vi, vii, ix, x; Samuel, A. M., *The Working of the Bill of Exchange* (2nd ed. London 1929) p. 7–30; League of Nations, Economic Committee, *Unification of Laws Relating to Bills of Exchange and Promissory Notes* (Geneva 1923); Brannan, J. D., *The Negotiable Instruments Law Annotated* (4th ed. rev. by Z. Chafee, Jr., Cincinnati 1926) p. 810–64, 935–56; Chalmers, M. D., *A Digest of the Law of Bills of Exchange* (9th ed. London 1927).

BILLINGS, JOHN SHAW (1838–1913), American vital statistician and leader of the medical profession. In the course of thirty years' work in the office of the surgeon general (1865–95) he created almost single handed a great medical library and edited the first series of its monumental *Index Catalogue* (16 vols., Washington 1880–95). As medical adviser to the trustees of Johns Hopkins Hospital in Baltimore he abolished the old fashioned clinical lecture and introduced many marked improvements in hospital administration and medical training. He was one of the most widely consulted public health experts during the twenty years preceding 1895. In 1879 he was elected president of the American Public Health Association in recognition of his services in the yellow fever campaign in Memphis. After the merging of the libraries of the Astor, Lenox and Tilden foundations to form the New York Public Library (1895), Billings was appointed its first director and in this position practically created the institution as it now stands. He sketched the plan for the building, supervised the reclassification of the books, secured funds from Carnegie and obtained land from the city for over forty of the free circulating libraries constituted as branches of the central library.

In the field of statistics Billings' contributions are no less distinguished. While in charge of the vital statistics of the tenth census (1880) he suggested to the young engineer, Hermann Hollerith, that the laborious work of hand tabulation could be replaced by mechanical devices and by the use of a card with holes punched to represent the items; he thus initiated the present mechanical tabulation systems used throughout the world. Billings argued for uniform registration of births and deaths in all the states before "registration areas" were established. He was the first American to construct reasonably accurate life tables of unselected populations and to use them intelligently as measures of community health (1879–80). Being interested in the relation of morbidity and mortality to geographical conditions, he tabulated as part of his work on the eleventh census (1890) the mortality of several large cities, taking as his units small sanitary districts which were determined by consultation with the local authorities. Special reports were issued for Washington and Baltimore (1893), New York and Brooklyn (1894) and for Boston and Philadelphia (1895). This tabulation by small areas, abandoned until 1910 when it was revived in New York City, is now being adopted by a number of large cities and constitutes one of the most significant developments of modern municipal statistics.

ROBERT E. CHADDOCK

Consult: Garrison, Fielding H., *John Shaw Billings* (New York 1915), containing a bibliography of Billings' writings; Mitchell, S. Weir, in National Academy of Sciences, *Biographical Memoirs*, vol. viii (1919) 375–83; Willcox, Walter F., "John Shaw Billings and Federal Vital Statistics" in American Statistical Association, *Journal*, vol. xxi (1926) 257–66.

BILLS OF CREDIT. This term had its origin in issues of promissory notes emitted by American colonies. The first of these was made by the Massachusetts Bay Colony in 1690 to meet an emergency occasioned by the war between England and France. Orderly government in the colony had been disturbed by the forfeiture of its charter in 1684, and the collection of taxes was thus delayed. Soldiers returning from the unsuccessful campaign against Canada clamored for their pay and there was fear of a mutiny. The General Court consequently ordered the issue of bills of credit to the limit of £7000, which was increased the next year to £40,000. The first notes were promptly redeemed, but this new device of anticipating taxes was soon adopted as a regular practise. A second war with France (1702–13) imposed new financial burdens and the issue of bills of credit was accelerated at the same time that measures for securing their retirement were slackened. Redemption was prolonged to three years, then five years, and for bills put out in 1715 the redemption date was 1722.

Coupled with fiscal necessity was the demand for a more ample supply of a monetary medium to satisfy the needs of trade. There was but little specie money in the colony. As the colonies were unable to provide exports in volume adequate to balance their commerce with Europe, there was a constant outward drain of precious metals which were gained from trade with the Spanish colonies to the south. To meet this need bills were issued by the government of Massachusetts in 1711 and 1714 as loans to citizens, on the pledge of real estate. Similar loans were repeated later. These bills circulated side by side with bills of credit and aggravated the difficulties caused by the growing volume of irredeemable currency.

There was scarcely a year until 1750 that new issues of bills of credit were not put out by Massachusetts. Their volume steadily increased

until in 1750 there were £1,819,000 outstanding, constituting two fifths of the total amount issued to that date. Redemption could be accomplished only by taxation; but to this there was strong opposition. Depreciation increased and prices rose violently with accompanying burdens upon wage earners, salaried classes and lenders of money. Instead of complete redemption futile efforts were made to replace old issues by new issues at fixed scales of depreciation, so that trading was harassed by the current circulation of old tenor notes, middle tenor notes and new tenor notes having varying degrees of value. In 1750 the notes of Massachusetts were worth in specie but one tenth of their face value.

Other colonies, under the plea of emergency, followed the example of Massachusetts: South Carolina in 1703; New Hampshire, Connecticut, New York and New Jersey in 1709; Rhode Island in 1710; and North Carolina in 1712. Somewhat later the other colonies, influenced more by the needs of trade than by war emergency, also issued bills: Pennsylvania in 1723; Maryland in 1734; Delaware in 1739; Virginia in 1755; and Georgia in 1760. These issues were more carefully safeguarded and consequently depreciation was not so marked. Some of the other British North American and West Indian provinces also emitted bills.

The English government attempted to curb the issues. In vain colonial governors called attention to the dishonoring of public faith as well as to the demoralization of industry and trade caused by the circulation of depreciated money. Bills could be redeemed only by taxation and the colonists were jealous about this privilege. Efforts to restrain issues were regarded as an unjustifiable interference with local liberties. Parliament finally exercised its prerogative; in 1751 it forbade any further issue of legal tender bills by the New England colonies and in 1764 extended this prohibition to the other colonies.

It was almost inevitable that the colonists should resort to the issue of bills of credit during the revolt against England. The Continental Congress had no definite authority to collect revenue; and even the Articles of Confederation withheld any compulsory power of taxation. The colonists had little accumulated wealth and for such property as they had there were no financial institutions to convert it into forms available for loans. Nor could the rebellious colonies expect to obtain credit in foreign countries until the establishment of a stable government. The colonists, moreover, were familiar with the services which had been rendered by forced issues of promissory notes; and perhaps the recent prohibition of such issues by the royal government made them all the more popular. During the years 1775 to 1779 the Continental Congress authorized forty different issues amounting to $241,552,000; and the individual colonies put out nearly $209,524,000 in addition. The issues of the continental treasury, if depreciation be taken into account, furnished nearly half of its total income during the years 1775 to 1783. Continental notes were not specifically declared to be legal tender; but efforts were made to secure legislation to punish those who refused bills. Such legislation was difficult to enforce and as the issues multiplied their depreciation was disclosed by the rapid increase in prices. By the end of 1779 the value of continental currency in specie was 40 to 1. To remedy the situation Congress turned to the old device of extinguishing the old issues by a new one. This was done at a rate of 20 for 1. A considerable portion of the bills were thus redeemed, but those outstanding still continued to depreciate. Although after 1780 Congress ceased to issue bills of credit, by 1781 the outstanding bills were valued at 100 to 1 and soon ceased to pass as currency. Notwithstanding the debacle resulting from the issue of continental money, after the revolution seven states resorted to new emissions. The legislatures of most of these states were under the influence of debt burdened farmers.

The Articles of Confederation expressly gave Congress power to emit bills. The articles were prepared and were passed by the Continental Congress during a period of active emission; but when they were approved by the last state in 1781 bills were no longer being issued. The constitution adopted in 1789 forbade the states to issue bills of credit, but it was silent as to the power of Congress. Early drafts of the constitution gave Congress power "to borrow money and emit bills on the credit of the United States"; but subsequently "and emit bills" was struck out by a vote of nine to two. There was, however, no direct prohibition of issuing bills of credit and it was a debatable question whether Congress possessed this right among its "implied" powers. Emergency led Congress to issue notes in 1812, 1837, 1846, 1857 and during the Civil War period. None was made legal tender until 1862, and the legality of these was strongly contested because their value in terms of gold had greatly depreciated. In 1869 the

United States Supreme Court decided (Hepburn *v.* Griswold, 8 Wall 603) that the legal tender acts which had been passed during the war were unconstitutional as applied to contracts made prior to their enactment. Although later contracts were not passed upon in this case the reasoning of the majority of the court made it appear that the acts were invalid in all situations. A year later, however, after two new justices had been appointed to the court it was decided (Knox *v.* Lee, 12 Wall 457) that the acts were constitutional in regard to contracts made both before and after their passage. This meant that in the settlement of any private debt the acceptance of greenbacks as legal tender was obligatory.

There was also prolonged controversy as to whether certificates of indebtedness authorized by states and banknotes issued by private corporations were bills of credit and therefore illegal. Missouri, for example, issued certificates in small denominations, receivable in discharge of taxes or debts to the state. In 1830 the Supreme Court decided (Craig *v.* State of Missouri, 4 Peters 410) that the certificates were bills of credit and were therefore unconstitutional; but in 1837 (Briscoe *v.* Bank of Kentucky, 11 Peters 257) it upheld the constitutionality of banknote issues on the ground that they were issued on the credit of a bank rather than on the faith of a state.

DAVIS R. DEWEY

See: PAPER MONEY; LAND BANK SCHEMES; PUBLIC DEBT.

Consult: Dewey, D. R., *Financial History of the United States* (10th ed. New York 1928) p. 21–30, 34–43 and 67–70; Bullock, C. J., *Essays on the Monetary History of the United States* (New York 1900); Phillips, H., *Historical Sketches of the Paper Currency of the American Colonies* (Roxbury 1865–66); Davis, A. M., *Currency and Banking in the Province of Massachusetts Bay*, 2 vols. (New York 1901) vol. i; Douglass, William, *A Discourse Concerning Currencies of British Plantations in America*, reprinted in American Economic Association, *Economic Studies*, vol. ii (1897) no. 5, p. 265–375; Hickox, J. H., *History of the Bills of Credit or Paper Money issued by New York* (Albany 1866); Bronson, H., "A Historical Account of Connecticut Currency, Continental Money and the Finances of the Revolution" in New Haven Colony Historical Society, *Papers*, vol. i (1865) pt. ii; Bullock, C. J., "The Finances of the United States from 1775 to 1789" in University of Wisconsin, *Bulletin*, Economics, Political Science and History series, vol. i (1895) 117–273.

BILLS OF LADING. *See* NEGOTIABLE INSTRUMENTS.

BILLS OF RIGHTS. Bill of Rights is the term commonly applied to the English Statute 1 William and Mary, Session 2, chapter 2, of 1689, the most important of the parliamentary enactments by which legal effect was given to the revolution settlement. Its chief constitutional and political significance lies in the important limitations it imposed on the royal prerogative; it declared to be illegal the suspending of laws by the king, the dispensing with laws as exercised before the revolution, the levying of money without authorization of Parliament and the retention of a standing army in time of peace without Parliament's consent. The statute also asserted the subjects' right of petition and, in the case of Protestants, the additional privilege of bearing arms; it declared that elections to Parliament ought to be free, that freedom of debate therein "ought not to be impeached or questioned in any Court or Place out of Parlyament," "that excessive Baile ought not to be required nor excessive Fines imposed nor cruell and unusuall Punishments inflicted," that jurors ought to be empaneled and returned "duely," that in cases of high treason juries should consist of freeholders only and that "Parlyaments ought to be held frequently." The bill further declared that since James had "abdicated," William and Mary "be and be declared" king and queen "of England, France and Ireland and the dominions thereunto belonging" and provided for the succession on their deaths, limiting it to Protestants and those married to Protestants.

The Bill of Rights, although in form and legal effect an ordinary act of Parliament, has always been ranked with Magna Carta and the Petition of Right as one of the few fundamental documents of the English constitution. Its provisions concerning the succession were supplemented in 1701 by the Statute 12 and 13 William III, chapter 2, known as the Act of Settlement, and the royal declaration against transubstantiation, prescribed in the bill, was abolished in recent times; but most of the other provisions of the act are still the law of the land.

In America, as earlier in England, a "revolution settlement" brought with it the apparent need for formulations of rights. But in this case the representatives of the people were drawing up constitutions for their newly created governments and were therefore enabled to guard more effectively against governmental encroachments on individual rights by embodying these rights in the constituent law itself rather than

in the isolated acts of a purely legislative body. The first "bill of rights" in America after the outbreak of the revolution was that adopted by the constitutional convention of Virginia on June 12, 1776, to accompany the first Virginia constitution, which was agreed to about two weeks later. As adopted it follows closely a draft, still in existence, made by George Mason, and fourteen of its sixteen articles are in substance his. The first constitution of Pennsylvania, prefaced by a "Declaration of Rights" also of sixteen articles, was completed on September 28, 1776, and was followed by those of Maryland, North Carolina, Vermont, Massachusetts and New Hampshire. In the first constitution of New Jersey, of New York, of Georgia and of South Carolina no distinct bill of rights appears, although somewhat similar safeguards are usually included in the body of the constitution. In all subsequent state constitutions in the United States varying types of "bills" or "declarations" of rights are to be found, related in their general character to the early ones and usually following them rather closely in both form and substance.

The draft of the constitution of the United States as completed by the assembly at Philadelphia in 1787 contained no distinct bill of rights. The debates in the several states on the ratification of the constitution, while disclosing a great difference of opinion as to the necessity for one, did indicate a widespread feeling that such a bill was required. Among the amendments proposed the addition of a formal declaration of reserved rights was several times included. Hamilton argued with force against this in number 84 of the *Federalist*, but it was becoming evident that without the assurance of the addition of some such reservations a sufficient number of ratifications was unlikely to be obtained. As a consequence a resolution of the first Congress which met under the new constitution in 1789 proposed twelve amendments, ten of which received the requisite number of ratifications.

These first ten amendments to the federal constitution, popularly known as the "bill of rights," and composed mainly of parts drawn from the earlier state bills of rights, forbid the government of the United States to do certain things and enjoin certain other things upon it. Congress is forbidden to enact any law respecting an establishment of religion or prohibiting its free exercise, to abridge freedom of speech or of the press or the people's right peaceably to assemble and to petition. There shall be no infringement of the people's right to bear arms and no issuance of general warrants. In time of peace there shall be no quartering of soldiers in any house except with its owner's consent, nor in time of war except in a manner to be prescribed by law. Articles 5 and 6 contain specific guaranties of the fair and lawful trial of accused persons, and article 8 forbids in the words of the English Bill of Rights excessive bail or fines and cruel or unusual punishments. Article 7 enjoins trial by jury in all civil cases of any importance and requires that in a reexamination in any United States court of a fact tried by a jury none but the rules of the common law be followed. The last two articles expressly reserve to the people all rights and to the states or the people all powers not specifically enumerated. All these restrictions affect the organs of the national government, not those of the several states, and many of them are identical with limitations originally imposed upon English kings.

But it was not alone the Constitution of the United States which was patterned after the bills of rights adopted in the American states before 1789. These were also the models for the famous French Declaration of the Rights of Man and of the Citizen, drawn up in 1789 and later combined with the constitution of 1791, and for similar declarations in the constitutions of 1793 and 1795. From France these ideas spread throughout Europe and ultimately beyond. The Belgian constitution of 1831, for example, contained a bill of rights, and after the Revolution of 1848 the number of such constitutions increases. The revolutions and the creation of new states which accompanied or followed the World War naturally brought about the adoption of many new constitutions containing for the most part bills of rights on which the influence of the French Declaration of 1789 is obvious. Among the more important are the constitutions of the new German Empire in 1919 and of Bavaria in the same year, of Austria and Czechoslovakia in 1920, Poland in 1921, Greece in 1927 and Lithuania in 1928. As early as 1857 Mexico had a constitution with a bill of rights. Turkey adopted one in 1924.

The basic theory underlying the early bills of rights is a belief in the rights of individual men and in rights existing in the law of nature independent of states or their laws, as set forth especially in Locke's *Second Treatise of Government* (1690). Some of these rights were regarded

as alienable and might be entrusted by a people to its government for due compensation, but there are others of which no man is ever capable of divesting himself or his posterity even by consent or for compensation; they are inalienable. An instrument of government ought then to consist of two parts: a "frame" or form of government in which the first of these two kinds of rights, the alienable ones, are entrusted to the various organs of the state under proper safeguards for due compensation in the form of just and effective government; and a "bill of rights" enumerating the inalienable rights of the people which they cannot delegate to their government and which the latter is explicitly forbidden ever to infringe. Such was the theory, and it was never put in a form more succinct than in the *Essex Result*, written in 1778 by Theophilus Parsons, later chief justice of the supreme judicial court of Massachusetts (*Memoir of Theophilus Parsons*, Boston 1859, app. i).

C. H. McIlwain

See: Constitutions; Natural Rights; Civil Liberties; Civil Rights; Amendments, Constitutional; Individualism.

Consult: Anson, W. R., *The Law and Custom of the Constitution*, 3 vols. (5th ed. Oxford 1922); Story, Joseph, *Commentaries on the Constitution of the United States*, 3 vols. (Boston 1833); Rowland, K. M., *The Life of George Mason*, 2 vols. (New York 1892); Boutmy, E. G., *Études de droit constitutionnel* (7th ed. Paris 1923), tr. by E. M. Dicey (London 1891); Aulard, F. V. Alphonse, *Histoire politique de la révolution française* (3rd ed. Paris 1905), tr. by B. Miall as *The French Revolution*, 4 vols. (London 1910); Jellinek, Georg, *Die Erklärung der Menschen- und Bürgerrecht* (3rd ed. Leipsic 1919), tr. by Max Farrand (New York 1901).

BIMETALLISM AND MONOMETALLISM. The standard of a monetary system may be defined as that commodity with whose fluctuations in value the value of the monetary unit also fluctuates. Thus under the gold standard whatever forces operate to increase the value of gold as a commodity also tend to enhance the purchasing power of the monetary unit, and a decrease in the commodity value of gold would be accompanied by a depreciation in the value of money. Under monometallism, although the circulation may include several metallic and paper elements, there is but one standard commodity in terms of which the value of other commodities is measured.

It is commonly asserted that in order to establish any particular metal as the standard it is necessary to provide for the free convertibility of that metal into currency and for the convertibility of the country's currency into the standard metal. At the same time the non-standard elements in the currency system are divorced from the value of the commodity of which they are composed by restriction of the supply in circulation and maintenance of their metallic content below their face value. As long as these arrangements are observed the value of the currency unit cannot depart widely from that of the standard bullion to which each unit gives title. Under the gold standard, for instance, if gold should tend to become more valuable as a commodity than as a coin it would be withdrawn from circulation; and in opposite fashion a relative superabundance of gold as a commodity would be avoided by the increasing absorption of gold in monetary uses. The effect of these convertibility arrangements might, however, be obtained in other ways. It might be within the realm of possibilities to tie an irredeemable paper currency to gold simply by effecting the proper adjustments in its supply. But whether interchangeability is provided or not, the supply of the non-gold elements must be regulated; this is the prime essential of any gold standard system. Legal guaranties of interchangeability are only a means of announcing intention to maintain such regulation.

A bimetallic system is in operation if a nation would maintain the same conditions with respect to two standard commodities as are maintained for one in a monometallic country. The two commodities generally selected or evolved as standards have been silver and gold. Under bimetallic systems mints have been open for the free coinage of both metals into the same currency units and there has been actual, if not legal, exchangeability of gold and silver coin. The relative amounts of the two metals necessary to create the same currency unit is known as the "mint ratio."

The difficulty of effectively maintaining a bimetallic system has been a matter of bitter currency controversy. Monometallists have maintained that a currency cannot be kept stable in terms of two commodities unless by force of sheer coincidence their exchange value does not fluctuate, and that a currency tied to one standard tends to vary in terms of the other. The opening of new mining fields as well as the development of improved technical processes of production must always tend to alter the conditions of supply of the two metals. Furthermore the relative demand for gold and silver in the

arts must undergo constant variation. Changes in the market ratios of these two commodities, the monometallist has insisted, are just as likely to occur as in the case of any other two commodities, such as corn and wheat, pork and beef or iron and copper. To secure the stability of the exchange ratio between gold and silver Alfred Marshall proposed what he called a symetallic standard, under which the government would stand ready to buy or sell a "wedded" pair of gold and silver bars for a fixed amount of currency. The monetary standard would be in effect a single metal representing a compound of gold and silver in a fixed ratio.

Much experience with bimetallism was required before it became generally recognized that the unchanging ratio of gold to silver is a probable outcome of the existence of bimetallic systems in important countries. The durability of the precious metals, the fact that their total monetary stock is always greatly in excess of the output of any single year and of the normal demand for use in the arts, create a situation entirely different from that which prevails in the case of perishable or specialized commodities. For instance, although the production of silver might for a time considerably expand, the relative supplies of the two metals available as bullion need not be altered to any significant degree. The metal tending to become cheaper, in this case silver, would go in increased quantities to the mints, so that the increase in its production would not exert its full force in the bullion market. On the other hand there would be a tendency for gold, the metal becoming relatively scarcer, to leave monetary use and become available in the arts. This tendency of the bullion supply of the metal growing relatively more abundant to be absorbed in monetary uses, and of the metal growing relatively scarcer to be withdrawn from circulation, must operate, according to the bimetallist, as long as the market ratio departs from that fixed at the mints. This principle is known as the compensatory principle or the doctrine of bimetallic flows.

Monetary history does not furnish indisputable demonstrations of the strength of the compensatory principle. American experience tends to throw some doubt on the potency of bimetallic flows. Under the 15 to 1 mint ratio of 1792 gold was undervalued and little of it entered into monetary circulation; whereas, after the acts of 1834 and 1837 which fixed an approximate mint ratio of 16 to 1, little silver was coined. At no time has bimetallism been really effective in the United States. European experience on the other hand has convinced many students of the strength rather than the weakness of bimetallic flows. Practically from the beginning of the nineteenth century to the early seventies the market ratio of gold to silver remained close to 15 1/2 to 1. In view of the enormous changes in the relative outputs of the two metals which occurred during this period it would be difficult to find an explanation of the stability of their market ratio other than that based upon the operation of bimetallism at 15 1/2 to 1 in France and in other countries of the Latin Union. Since France was then a much larger consumer of the precious metals for monetary purposes than the United States it may plausibly be argued that the failure of bimetallism to operate in America under other mint ratios than that of 15 1/2 to 1 supports rather than weakens the case for the compensatory principle.

The advantages claimed for bimetallism are the avoidance of the evils of dislocated exchanges between gold and silver standard countries and the greater stability of the price level under bimetallism than under a monometallic gold or silver standard. In the second half of the nineteenth century, when a number of countries were still on a silver or bimetallic basis or had just demonetized silver, there were many who believed that international bimetallism would furnish a satisfactory solution of the difficult problem of exchanges. At the present time the argument from stability of foreign exchange rates would receive little attention. By means of the gold exchange standard, countries whose circulation consists primarily of paper or silver have found an effective method of stabilizing their exchanges with gold standard currencies.

The price-stability argument, the assertion that the value of the currency unit is less likely to undergo serious fluctuations under bimetallism, is equally out of date. It attracted attention in the last quarter of the nineteenth century when the continuous fall in prices was causing considerable hardship, but lost its force in recent years when the problem of price stabilization came to receive a different emphasis. Various new plans have been devised for the purpose of stabilizing the price level; adherents of such plans commonly hold that bimetallism would either be unnecessary or would increase the complexity of the problem.

The final abandonment of bimetallism seems to be traceable somewhat more to the events and accidents of history than to logical analysis of its

virtues and defects. Students of monetary systems would probably agree that the outlook for bimetallism at the close of the eighteenth century was distinctly favorable. Although the ratio was ineffective, legal provision for bimetallism had prevailed in England; and it might reasonably have been anticipated that when permanent arrangements were made to effect the transition from the regime of depreciated paper after 1797 the double standard would be restored under workable conditions. In England traditions seemed to favor bimetallism because experience had shown its value in avoiding the evils of a "parallel currency," a system under which the two metals had been coined into unrelated units. Although in the early nineties of the eighteenth century the assignats were driving both gold and silver from France, traditions in that country also pointed toward the resumption of bimetallism. A law was enacted in 1803 providing for the free coinage of both metals at the old ratio of 15 1/2 to 1. In the United States also the act of 1792 opened mints to the coinage on private account of both gold and silver.

English currency developments, however, supplied the principal obstacle to the continued operation of bimetallism. From 1717 to 1785 practically no silver had been coined in England and the country's metallic currency tended more and more to consist of gold. With the expulsion of silver from France during the assignat period there was a growing fear that silver might displace gold to an undesirable extent in English circulation; consequently in 1798 an act was passed suspending the coinage of silver and imposing certain limitations upon the legal tender power of silver currency. Later the act of 1816, looking forward to the termination of the regime of depreciated paper, set the mint purchase price at a point which might have resulted in the absorption of a large portion of France's silver. But in anticipation of this supposed danger the act provided that the right of the public to sell silver to the mint would remain in abeyance until the date therefor should be stipulated by proclamation. No such proclamation was ever issued, however, and the coinage act of 1870 superseding that of 1798 made no reference to the purchase price of silver. Silver coins were thus relegated to the classification of a subsidiary currency retained in circulation by the device of undervaluation and restriction of supply.

In the first half of the nineteenth century the burden of absorbing into monetary use the silver production not required at existing prices for commercial purposes fell principally upon France. After the fifties, for twenty years or so, the gold discoveries resulted in heavy mint coinages of the yellow metal. But these fluctuations in supply did not drive either metal completely out of circulation in France; in 1865 some further support for bimetallism was gained by the formation of the Latin Union, which in addition to France comprised Belgium, Italy and Switzerland. In 1866 the Papal States, and in 1867 Greece and Rumania, joined this union.

By the early seventies, however, increasing silver production and the defection of Germany from the ranks of silver standard nations increased the burden upon the bimetallic confederation. When the new German Empire undertook currency reform it copied the gold standard of England, the most important trading nation of the world, rather than the bimetallic standard of its vanquished rival, France. With Germany's decision to abandon silver the Latin Union became discouraged; in 1873 France took steps to check the coinage of silver and shortly thereafter the Latin Union dissolved.

In the United States bimetallism was legally abandoned in 1873 by an act of Congress which closed the mints to the coinage of silver on private account. At that time there was relatively little silver in circulation. By the Bland-Allison Act of 1878, however, the mints were opened to the coinage of a limited amount of silver dollars. The restriction of the supply of silver coinage and the possibility in practise of obtaining gold in exchange for silver currency enabled the treasury to circulate silver dollars on a par with gold. Since the silver in the dollar was worth as bullion varying amounts ranging upwards of forty cents, there was a limit, even though gold redeemability might be refused, to the extent to which the value of silver coin could fall in terms of gold. Receiving primary support from gold and potentially partial support from silver, the dollar became the unit of a currency system frequently referred to as the "limping standard."

With the downfall of bimetallism and the continued decline in the gold value of silver, silver standard countries suffered heavily in their remittances to gold standard nations. These silver countries, particularly India, and the silver interests in the United States exerted powerful pressure to secure an international agreement favorable to bimetallism. International conferences were held in Paris (1878, 1881) and in Brussels (1892), but they failed, largely because of the determined opposi-

ıion of England and Germany and the weakness of the support given to the bimetallist cause by France. Silver countries had thereafter no practicable alternative except to attempt to stabilize the gold values of their silver currencies. After the close of the nineteenth century the devices of the exchange standard lessened the cost of affixing their currencies to gold.

HAROLD L. REED

See: MONEY; FOREIGN EXCHANGE; GOLD; SILVER COINAGE; MONETARY UNIONS; MONETARY CONFERENCES; FREE SILVER.

Consult: Darwin, L., *Bimetallism* (London 1897); Giffen, Robert, *The Case Against Bimetallism* (4th ed. London 1896); Walker, F. A., *International Bimetallism* (New York 1896); Russell, Henry B., *International Monetary Conferences* (New York 1898); Helfferich, Karl, *Das Geld* (6th ed. Leipsic 1923), translation ed. by T. E. Gregory, 2 vols. (London 1927) vol. i, chs. ii–vi; Willis, H. P., *A History of the Latin Monetary Union* (Chicago 1901); Hepburn, A. B., *A History of Currency in the United States* (2nd ed. New York 1924); Laughlin, J. L., *History of Bimetallism in the United States* (4th ed. New York 1897).

BINDING, KARL (1841–1920), German jurist and historian. He held professorial positions at Basel, Freiburg i. B., Strasbourg and Leipsic. In his general outlook Binding belonged to the historical school and opposed the natural law approach. He devoted numerous searching studies to the history of Roman and German law and was an outstanding theorist in penal law, which he treated in a number of careful and comprehensive studies. Refuting the accepted vague notions that penal law prescribed behavior he showed in his "theory of norms" that the legal propositions by which the state demanded obedience and guided individual action (*normae agendi*) were independent of and logically prior to penal law, and that penal law was a secondary form of control with the sole function of determining the extent to which behavior contrary to the norms involved punishability as a special legal consequence. In the controversy as to the nature of punishment he sharply opposed the views of the "modern school," that punishment is simply a measure of security against dangerous persons. His own position was that punishment is the public reaction to behavior contrary to the norms, that is, to a breach of the law, and that its function is to uphold the authority of the laws. In this connection Binding worked out the nature and varieties (*dolus* and *culpa*) of guilt.

ERNST VON BELING

Important works: *Die Normen und ihre Uebertretung*, 4 vols. (Leipsic 1872–1920; 4th ed. of vol. i appeared in 1922 and 2nd ed. of vol. ii in 1914–16); *Grundriss zur Vorlesung über gemeines deutsches Strafrecht*, 3 vols. (pt. i in one volume, Leipsic 1879, 8th ed. Leipsic 1913; pt. ii in two volumes, Leipsic 1896–1901, 2nd ed. Leipsic 1902–05); *Handbuch des Strafrechts* (Leipsic 1885); *Grundriss des deutschen Strafprozessrechts* (Leipsic 1881, 5th ed. 1904); *Strafrechtliche und strafprozessuale Abhandlungen*, 2 vols. (Leipsic 1915).

Consult: Nagler, J., "Karl Binding zum Gedächtnis" in *Gerichtssaal*, vol. xci (1925) 1–66; Beling, Ernst, in *Deutsches biographisches Jahrbuch*, Ueberleitungsband ii (1917–20) 495–99.

BINET, ALFRED (1857–1911), French psychologist. He is best known for his work on the measurement of mental abilities. Binet was a student of the natural sciences, of law and of medicine. Although his early work under Charcot and Féré stimulated a particular interest in abnormal psychology he contributed richly to all branches of psychological investigation. In 1892 he became adjunct director of the recently founded psychological laboratory at the Sorbonne and from 1894 until his death he was its director.

Binet was a prodigious writer. His researches are recorded chiefly in the journal *L'année psychologique*, which he founded in 1895 and in which may be traced the gradual development of his interest in intelligence testing. Very early in his career he set out to determine the differences in mental traits between individuals. He dwelt upon the possibility of measuring "richness of inspiration, accuracy of judgment and the general ability of the mind." To this end he devised simple tests differentiating between the intelligent and unintelligent. He compared children in these categories with reference to head measurements and skin sensitivity, made anthropological measurements of abnormal boys and studied handwriting, palmistry and physiognomy as possible indicators of intelligence.

In 1900 the Société Libre pour l'Étude Psychologique de l'Enfant, an association of psychologists and school teachers working on practical psychological problems in the schools, was founded under Binet's leadership. In 1904 Binet was appointed member of a commission to formulate recommendations for the administration of special classes in the public schools. His work on this commission led him to construct in collaboration with Simon a scale of tests to aid in the diagnosis of feeblemindedness. The rough scale which appeared in 1905, with the tests graded merely in order of difficulty,

is nevertheless significant as the first standardized scale for the measurement of intelligence. A revision appeared in 1908 and with it the important concept of mental age. Binet again revised the scale in 1911, the year of his death. It has since been widely used and frequently modified, especially in the United States.

Binet's work is characterized by originality and sound common sense. Distinctly practical in his outlook he did not build up any complex theory of intelligence. Although more refined statistical procedures than he used have since been applied, Binet's contribution to the measurement of intelligence is the most important of his generation.

R. PINTNER

Consult: Simon, Th., "Alfred Binet" in *L'année psychologique*, vol. xviii (1912) 1–14; Claparède, Ed., "Alfred Binet" in *Archives de psychologie*, vol. xi (1911) 376–88, tr. by Mary Louch in *Child Study*, vol. v (1912) 18–24, 97–102; Larguier des Bancels, J., "L'oeuvre d'Alfred Binet" in *L'année psychologique*, vol. xviii (1912) 15–32; Martin, Robert, *Alfred Binet* (Paris 1924); Peterson, Joseph, *Early Conceptions and Tests of Intelligence* (New York 1925) p. 117–267.

BIOLOGY, as its name implies (Greek: *bios*, life; *logos*, discourse), is the science of life. The term itself was coined by Lamarck and Treviranus independently and in the same year, 1802, as a comprehensive designation for the science of all living organisms, whether plant or animal. The lack of such a designation prior to the nineteenth century is indicative of the late recognition of biology as a separate branch of science. Earlier biological theories and discoveries, like early chemical or geological theories, took their place as parts of complete cosmologies, to which they gave content and from which they drew their meaning. The observations of life among primitive peoples clearly possess this generalized character, while all the biological discussions of antiquity are to be viewed rather as materialistic or idealistic interpretations of the world than as attempts to distinguish between living and inert nature.

Biology as a unified science could come into existence only after the recognition of a principle or set of principles informing all living things and distinguishing them from inert matter. Partial insights accumulated gradually, but it was only in the nineteenth century that such recognition became explicit and general. The older philosophical interpretations had first to give way to a series of disparate and experimental approaches to the universe. The development of physics in the seventeenth and chemistry in the eighteenth century laid the groundwork for all modern science. It was the recognition of the cell as the basis of all life which supplied a theoretical principle unifying the older studies of plant and of animal life, drawing together too studies of structure, anatomy and morphology, and of function and physiology. After the middle of the nineteenth century it was possible to look back and visualize all the earlier work in anatomy or taxonomy as biological work. The dramatic reception of the doctrine of evolution impressed firmly on contemporary thought the reality and importance of biological science. The research and study of the twentieth century have resulted in the development of a multitude of separate and often very distinct subdivisions of biology—cytology, microbiology, bacteriology, embryology, endocrinology, genetics—as well as the older studies of anatomy, morphology and physiology. The study of living organisms is becoming affiliated with other sciences, with organic chemistry, with psychology, with eugenics, until it is again more accurate to speak of biological sciences than of biology. The biological approach has, however, left a definite impress on current thought, while in the separate fields biology continues to develop funds of knowledge which no student of society can afford to neglect.

The history of biology in early times can be traced only very sketchily. The study of living things has always been closely related to the practise of medicine, and those early traces of biological knowledge which are to be found in Babylonia or Egypt are derived from medical science. In early Greece too it was Hippocrates and his predecessors who laid the foundation for the contributions of Democritus and Aristotle. In the work of the former the study of living organisms is subordinated to a very completely elaborated materialistic interpretation of the universe. It is with Aristotle (384–322 B.C.) that we get the first attempt at scientific observation and description of animal and human life. His treatises *On the History of Animals*, *On the Parts of Animals* and *On the Reproduction of Animals* not only summarize a large part of what was previously known about animal life but contain a multitude of new facts resulting from Aristotle's own observations and dissections, descriptions of numerous forms from the higher mammals down to the sponges and many accounts of anatomical structure.

Nothing comparable to the achievements of

Aristotle appeared for over eighteen centuries. The Alexandrian philosophers kept up some medical studies; Pliny (23–79 A.D.) wrote more copiously than had Aristotle on natural history, but he was exceedingly uncritical and unreliable; Galen (*c.* 130–200 A.D.) contributed much to our knowledge of anatomy. Then for a long period the western world became absorbed in mystical discussions while the knowledge of antiquity was kept alive largely by the Arabian scholars. With the early Renaissance there was a new interest in all the forms of life; the stimulus to detailed observation of the human body came first from the painters—Leonardo da Vinci but exemplified a current interest. It is not surprising that the work of the period was chiefly anatomical. Andreas Vesalius (1514–64), perhaps the outstanding figure in the history of anatomy, broke away from ancient tradition and despite opposition and even personal danger carried on epoch making investigations of the structure of the human body. About the same time the German Cordus (1515–44) established botany on a scientific basis. A new direction was given to scientific development by William Harvey (1578–1657), court physician to Charles I, through his discovery of the circulation of the blood and his original researches on embryonic development. Harvey was the chief scientific exponent of a mechanical concept of nature which was finding expression in the works of Descartes and Leibnitz and gradually replacing the authority of the Aristotelian doctrines. But his greatest importance lies in the added impetus which his work gave to the study of anatomy, making the outstanding scientific achievement of the seventeenth century the accumulation of a mass of anatomical descriptions and generalizations which have been the basis of all later developments in this field.

Toward the latter part of the seventeenth century the perfection of the microscope made possible the exploration of a new world of living things. It enabled Hooke, Grew, Malpighi, Schwammerdam and Leeuwenhoek to provide the basis of our knowledge of the minute structure of plant and animal life. Leeuwenhoek (1632–1723) was the first to reveal the existence of the world of micro-organisms; he also discovered the human spermatozoon. The work of these microscopists was of particular importance in that it laid the foundation for the formulation of the cell theory.

These new discoveries, undermining the older theories without as yet providing the fundamental concepts for a new series of directed observations, led the biologists of the seventeenth and eighteenth centuries to a preoccupation with systematic description and classification. The great leader in this movement was the Swedish naturalist, Linnaeus (1707–78), who originated our binomial system of nomenclature and described in his great work, the *Systema naturae* (1st ed. Leyden 1735), all the then known species of the plant and animal kingdoms. Early in the nineteenth century knowledge of the relationships between groups of animals as well as of structure and classification was greatly advanced by Cuvier (1769–1832), a pioneer in the application of the comparative method to anatomy and palaeontology. The work of Cuvier's contemporary, Lamarck, added much to our knowledge of the invertebrate animals. Lamarck (1744–1829), however, is chiefly noteworthy as the first to give a thoroughgoing exposition of the theory of organic evolution, although his evolutionary speculations and those of his colleague, Saint-Hilaire, met with strong opposition and the dogma of the fixity of species remained a commonly accepted doctrine.

When studies on the minute structure of plant and animal tissues led to the formulation of the cell theory by Schleiden and Schwann in 1838 and 1839, modern biology as a separate science had reached the beginning of its period of maturity. This generalization had far reaching consequences in the development of morphology, embryology, histology and physiology. The improvements of the microscope which made possible the study of cells also led to a greatly increased knowledge of the minute forms of plant and animal life. The long and vigorously contested controversy as to whether these minute forms might originate spontaneously out of organic infusions was finally settled in the negative by the work of Pasteur (1822–95) and Tyndall (1820–93), who showed that there is no critical and conclusive evidence that life is ever generated except from some antecedent organism. Pasteur in particular demonstrated that micro-organisms are the causative agents of putrefaction and fermentation, knowledge which has proved of great practical as well as theoretical value. Pasteur's studies led him to think that such organisms might be responsible also for the causation and spread of infectious diseases. He found that two diseases of silk worms are caused by micro-organisms and contributed to the demonstration that anthrax, or splenic fever, is caused by a bacillus. These discoveries,

leading to the determination of the bacterial origin of several diseases, have revolutionized the science of medicine and have contributed greatly to the successful results of surgery.

Throughout the eighteenth century the study of living organisms had been definitely limited by the vagueness of the current knowledge of chemical reactions. The development of the science of chemistry by Priestly and Lavoisier had removed some of these limitations and at the same time given a new impetus to philosophic speculation. In the early nineteenth century the progress of organic chemistry gave the biologist a new tool with which to work, while the formulation of the theory of the indestructibility of energy completed the general theoretical substructure of early nineteenth century science.

With this new technical and theoretical equipment it was to be expected that biology would develop through a multiplication of detailed and specific studies. And thus for a time it did. But it was with the enunciation of the theory of organic evolution by Charles Darwin in 1859 that biology received its fundamental modern impress and assumed a dominant place in the complex of natural sciences. The idea of evolution was not entirely new, as enthusiastic historians soon demonstrated; it had been set forth in a quite developed form by Lamarck a century previously. But despite its obvious value as a unifying concept it had never before received widespread attention. The progress of the science of geology and the multiplication of detailed studies had furnished Darwin with a firmer substructure for his theory; at the same time scientists were more in need of such a logical framework. The social and philosophical implications of the doctrine of evolution were immediately apparent; it substantiated the fervent belief of the nineteenth century in progress, while the subsidiary doctrine of natural selection justified in striking fashion the emphasis of contemporary liberals on free competition and free enterprise.

This taking over of the concept of evolution into the general cultural life gave a new importance to the science of biology, a new weight to all its conclusions. At the same time the doctrine itself influenced the course of development of knowledge of living things. In providing a unifying theory it gave new impetus to the study of anatomy and morphology and especially to the little known field of embryology. In the search for proof or confutation of the theory the younger scientists unearthed masses of conflicting but valuable data. In the last decade of the nineteenth century cytology received the greatest attention, and technical methods were developed to a high point. The nervous system in particular was studied in great detail, with the consequent laying of a foundation for the affiliation of biology with psychology. The discovery about 1880 of the course and significance of fertilization, almost as important as the discovery of the circulation of the blood although less heralded, made possible future work in heredity. During the same years new studies in microbiology, especially in bacteriology, and in vegetable morphology greatly increased the range of biological knowledge.

The inevitable result of this activity was a revaluation of the assumptions and hypotheses of the doctrine of evolution. The earlier attacks on the entire concept were not renewed; instead biologists began to divide into opposing groups on the basis of their explanation of the process of evolution. Darwin himself had put forth a variety of explanations; greatest emphasis was laid on the role of natural selection in determining the evolution of species, but he thought also that environment might have a direct influence on bodily changes. The neo-Darwinians, most eminent among whom was August Weismann (1834–1914), made natural selection the sole cause of evolution. Another group, reviving Lamarck's contention that acquired characters might be inherited, attacked the arguments of the neo-Darwinists. The controversy tended to become sterile and contributed to that waning of the influence of Darwinism at the close of the nineteenth century which was both marked and hastened by the appearance and popularity of such philosophies as those of Carlyle and Nietzsche.

Biology during the twentieth century has been essentially experimental, and the enunciation of general theories has been followed by an attention to particular researches. In the study of heredity, while the concept of evolution remains as one of the basic presuppositions, detailed experiment is providing richer and more confusing knowledge of processes. The rediscovery of the work of Mendel (1822–84), the appreciation of the importance of mutations by de Vries (1848–) and other studies have set the problem in different terms. At the same time biology is expanded so that it meets and mingles with other sciences. The study of heredity inevitably leads to the study of eugenics and population with all their

social implications. Biological geography has come to add to the group of facts assembled by geographers or anthropologists. Some of the most striking recent work has been in the field of biochemistry, with experiments on colloids and on fermentation and especially with the discovery of the role of internal secretions. The importance of biology for psychology is still not easily estimated.

Modern biology shows as yet no tendency to develop a new series of unifying generalizations. It has remained almost entirely unaffected by the revolutionary concepts of the physical sciences; in the doctrine of emergent evolution (*see* EVOLUTION) one can see a philosophical reaction to certain modern trends; but in general biologists, not too greatly troubled by the lack of unified concepts, are devoting themselves to research on specific problems. This multiplicity of detailed studies and hypotheses makes it impossible to summarize even briefly the substance of modern biology. It is possible only to give some indication of the character of the generalizations still accepted, the substantial core of the science—the base from which new studies proceed—and the concepts which have entered most generally into the contemporary body of scientific knowledge.

It has become apparent that the fundamental processes of growth, assimilation, metabolism, respiration, excretion and irritability are much the same in all organisms from the simplest plants to the highest forms of animal life. Whether or not life processes are absolutely distinct from the activities of inorganic objects, living beings present a number of fairly distinctive peculiarities. Living substance, or protoplasm, is chemically very complex and unstable; it varies in composition not only in different organisms but also in different organs of the body. Protoplasm is not merely one substance, but a group of highly complex substances, always associated in living bodies with many other materials such as water, salts and numerous substances in the form of food or waste products. This fact renders the synthetic formation of protoplasm by the chemist a task of stupendous, if not altogether insuperable, difficulty.

Protoplasm, or in Huxley's famous phrase "the physical basis of life," undergoes a twofold process of waste and repair which is called metabolism; it is formed out of simpler constituents and it breaks down again into waste products. The building up processes are responsible for growth, which in living substance takes place not by the addition of material to the outside, as in the growth of most inorganic bodies, but by the incorporation of assimilable materials throughout the mass. This remarkable power of converting very diverse food materials into a specific variety of protoplasm is one of the most distinctive of the attributes of living creatures. It constitutes the basis of individuality. Each organism is a kind of vortex through which matter is continually passing but whose form remains fairly constant amid an ever changing content. The process of metabolism in its reverse aspect liberates energy, derived largely from the oxidation of organic compounds, for the performance of the functions of the organic body. Metabolism is thus the basic feature of life activity.

Another general peculiarity of living creatures is their tendency to undergo cyclical changes. In higher forms this is exhibited in the phenomena of growth, development and finally death, each form tending to go through its cycle in about a given time, whether it be but a few days, three score and ten years or many centuries, as with the giant redwood trees of California. All organisms have the power of replacing individuals through the process of reproduction. This process always involves some form changes, even in the fission of the simplest bacteria, but in all higher forms it is associated with the phenomenon of development. In the more complex organisms development leads to natural death as the final culmination of a series of vital activities. Among lower organisms, however, death is usually a fortuitous event. The process of simple fission enables the organism to live in its descendants and, barring accidents, such organisms may be potentially immortal.

The property of irritability which is common to all organisms enables them to react to the forces of the outer world. Responses to stimuli are exhibited by plants as well as by animals but it is only in the latter that behavior, as distinguished from the vegetative functions of life, comes to constitute a conspicuous and striking feature of vital activity.

Of all the properties of living beings the power of adaptation is perhaps the most distinctive. The parts of an organism are not only admirably fitted for the performance of their special functions, but the activities of the several parts are subordinated to a definite end: the preservation of the individual and the perpetuation of its kind. Organisms continually adjust themselves to meet the changes in their environment.

Spencer's famous definition of life as "the continuous adjustment of internal relations to external relations" lays emphasis upon this process of adjustment or adaptation as the very essence of vital activity. Meeting an object of prey a carnivorous animal may respond by making efforts at pursuit and capture. If these are successful food is devoured; its presence in the stomach brings about an adaptive reaction in the secretion of gastric juice; then follow other adaptive reactions on the part of the alimentary canal and finally the absorption, transportation and assimilation of the products of digestion. Organisms frequently restore lost parts by a series of activities apparently guided by some directive agency to the realization of this end. Living creatures adapt themselves to changed conditions in manifold ways: muscles become stronger by exercise; bones become thicker when subjected to added strain; skin develops protective calluses as a result of frequent contact; and the individual may become acclimated to changes of temperature and immunized to various diseases. A large part of the activities involved in the process of living consists in making responses of an adaptive kind.

It is this remarkable adaptiveness which has led many to the view that mere physical and chemical processes can never provide a satisfactory explanation of vital phenomena. Those who hold to what Loeb has called "the mechanistic conception of life" believe that life phenomena are explicable in the last analysis in terms of the laws which obtain for non-living matter. Certainly chemical and physical processes constitute a large part of the activities of the organism; but we have no way of knowing whether all the phenomena of life will eventually prove susceptible of a mechanistic explanation. The vitalists believe that there will always be some unexplained residue. They contend that life is something *sui generis* and postulate some teleological principle or entelechy as its coordinating and directing agency. This fundamental conflict of assumptions the progress of the science of biology has not resolved.

It has been said that recognition of the cellular constitution of living matter is one of the theoretical bases of modern biology. We now know that in all but possibly some of the very simplest forms of life protoplasm is organized into bodies known as cells; each cell has a certain individuality of its own although all are dependent to a considerable degree upon other cells with which they are associated. All cells are known to arise by the division of previous cells, *omnis cellula e cellula*. In higher organisms all are descendants of the fertilized ovum or egg cell, which is a cell set apart for the function of reproduction. Some of the cells of the embryo produce other reproductive cells, but the majority of them are modified to form the epithelial, muscular, nervous and other cells which make up the organs and tissues of the body. Since the primary germ or sex cells form therefore both body cells and other germ cells there is a continuous series of cell generations from one organism to the next and through an indefinite series of organisms. It is this continuity which forms the physical basis of heredity.

The basis of August Weismann's well known doctrine of the continuity of the germ plasm was an emphasis on the distinctiveness of germ plasm and body plasm. According to this doctrine body plasm is produced from germ plasm, but the latter is derived not from the body, as had been commonly held previously, but from antecedent germ plasm. Thus offspring resemble their parents because both are derived from a continuous stream of germinal substance which is carried by successive bodies in a relatively unmodified form.

This method of interpreting heredity is a very simple and natural one. It was used by Weismann as an argument against the Lamarckian theory of the transmission of acquired characters. For if the germ plasm is not, strictly speaking, derived from the body it would follow that acquired characters, as distinguished from those which owe their origin to the germ cells, would probably not be transmitted to the offspring. Those who reject the Lamarckian theory usually appeal, like Weismann, to the operation of natural selection as an explanation of evolutionary changes. Darwin chose the term natural selection to indicate the similarity of the evolutionary process to the artificial selection practised by breeders of plants and animals. By choosing for parents those forms which happen to vary in the direction in which he desires to improve his stock the breeder is able to produce many different varieties suited to his purposes.

Darwin had been greatly impressed by the striking accomplishments of selective breeding. If it could be demonstrated that something analogous occurs in nature what might it not have accomplished in the millions of years during which life has existed on the earth? The idea that a continual selection takes place in nature was suggested to both Darwin and Alfred Russel

Wallace by Malthus' *An Essay on the Principle of Population* (London 1798), which demonstrated that the tendency of peoples to multiply at a geometric rate naturally leads to overcrowding, scarcity of food and other unfavorable conditions with the result that increase in numbers automatically brings about its own check. It could scarcely be otherwise than that animals and plants, which tend to multiply at a geometric rate, should also be subjected to the same struggle for existence and checks to natural increase which are found in human populations. Only a small part of the organisms which are produced can possibly survive. Inasmuch as organisms breed up to the limits of subsistence, and since numbers must remain about the same year after year, only two organisms, on the average, will survive to replace their two parents. All organisms vary, and as some are better fitted to survive than others the individuals which are preserved will in general be those which are best adapted to their conditions of life. Hence, as Darwin and Wallace argued, there is continually going on in nature a selective survival dependent on differences in hereditary endowments. Darwin amply proved that there was much variability among species in nature as well as among those under domestication. Hence the survival of the fittest has every opportunity to operate and under the circumstances can scarcely fail to do so.

Thus natural selection, according to the Darwinian theory, constitutes the chief factor in evolutionary changes. It acts on every peculiarity of the organism, internal or external, whose variations may increase or decrease the chances of survival. It is ever tending to bring about a better adaptation of the organism to its environment. It acts moreover only for the benefit of the species concerned. As Darwin admitted, nothing could afford a more serious difficulty to his theory than the evolution of structures of no value to their possessor, but solely of service to another species. From the nature of the case everything produced by natural selection must have a utilitarian significance for its possessor. This consequence of the theory is one of considerable interest in relation to its application to the field of human relations.

One of the most important theoretical bearings of the doctrine of natural selection is its relation to teleology, for it would explain the apparent purposiveness of organic nature by means of natural causes. This constitutes perhaps its chief interest for the philosopher and the theologian. The biologist, however, is primarily interested in whether or not it affords a satisfactory explanation of organic evolution. On this point biologists entertain many different opinions. Some consider that its influence is trivial and concerned only with the elimination of a certain number of ill adapted variants and that it contributes nothing to the progressive development of the species. Others, like Weismann who speaks of "the all sufficiency of natural selection," attribute evolution practically to this cause alone. All sorts of intermediate positions have been developed by recent biologists but natural selection remains as the most widely accepted single theory concerning the cause of organic evolution.

There is no doubt that natural selection is operative in the human species as well as in lower organisms, but the way in which it acts is conditioned by the kind of civilization which develops in any given time and place. Some writers have contended that because of our advances in medical and sanitary science and our custom of fostering the weaklings who would have perished in a more primitive regime the action of natural selection has been almost completely abolished. There is, nevertheless, much evidence that selective elimination still goes on. It is manifested in the enhanced death rate of persons with an inherited proclivity to various defects and diseases. Haemophilia, or bleeding, transmitted as a sex linked Mendelian character, is a frequent cause of death. Persons with an inherited tendency to contract tuberculosis or other germ diseases tend to be eliminated by natural selection. Most of all, natural selection is conducive to the elimination of the feeble-minded, among whom the death rate is relatively high and the infant mortality frequently excessive. Were it not for the higher fecundity of the intellectually subnormal, natural selection would probably tend to get rid of this stratum of humanity with a satisfactory degree of rapidity.

Selective forces act in the human species in many ways. The eugenicists and the sociologists have made many studies of the operation of the process. Thus de Lapouge in his work *Les sélections sociales* (Paris 1896) has distinguished between military, political, religious and economic selection. Of all the forms of selection occurring in human society, that resulting from warfare has elicited the most discussion. It is an interesting fact, bearing on the possible contributions of biology to a science of society, that both militarists and pacifists appeal to the prin-

ciple of selection in supporting their case. Several writers who admit that modern warfare tends to eliminate the best individuals of all contending parties nevertheless maintain that it leads to the supremacy of the best endowed groups and hence to the replacement of inferior by superior peoples. The last few centuries, for instance, have witnessed an enormous expansion of the Caucasian race which has displaced more primitive peoples who had the misfortune to be in the way. But if war has led in some instances to biological advancement, most modern wars between civilized nations cannot be said to have had this effect. Usually they do not lead to biological replacement and are in no way defensible from the standpoint of biological evolution.

Group conflict, however, has probably played an important role in the early development of the human species as it has in the evolution of social animals. Animal societies secure certain advantages for their members and may be regarded as among the many devices evolved by selection as an aid to survival. First among these advantages is that of protection. In the members of societies of ants, bees, wasps and termites the instinct to resist attacks upon the group are strongly developed. In herds of wild hogs, cattle and horses an attack upon one individual will arouse the hostility of the whole group, and this tendency toward mutual defense affords a valuable protection against predatory carnivores that might overcome an isolated individual.

There are other advantages besides mutual protection conferred by social relationships. Sometimes a society is an offensive as well as a protective association, as in the case of packs of wolves and colonies of driver ants. Or again it may be in part industrial, as with the bees, ants, termites and beavers. Animal societies present more than mere analogies with the social organizations of human beings. Both kinds of organizations have a common root and mode of origin, and they have much the same biological significance. Like animal societies, human societies depend to a large extent upon social instincts and impulses. To understand the nature of man one must go far back into the earlier stages of evolution and try to gain some idea of the forces which have shaped the course of his development. Herein lies one of the chief contributions of biology to the study of human society.

It is not alone the value of a knowledge of the biological factors in social phenomena which constitutes the importance of biology for the student of society. He must also be interested in the profound influence of discoveries in the biological sciences on the development of civilization. This influence in its earliest and most unorganized form is very conspicuous in such a field as that of agriculture. When man first began to cultivate the soil he made it possible to secure a much larger supply of food than had previously been available. The domestication of animals furnished him with beasts of burden, clothing and meat; and the cultivation of grains and fruits not only contributed to support a greater population but produced marked changes in the character of social life. The enormous increase in population which occurred during the nineteenth century was due in no small measure to knowledge of plant physiology, of the causes and cures of plant diseases, of the methods of improving varieties by selected breeding, of soil bacteriology, of effective methods of fertilizing and cultivating the soil, and of the methods of preparing and preserving the products of plant life.

Ever since the dawn of civilization man has obtained food and clothing from the lower animals. A modern packing house taking advantage of the most recent biological discoveries utilizes animal products in much more numerous ways and even makes extracts from the various endocrine glands. But the most conspicuous effects of advancing biological knowledge are observed in relation to the role of smaller forms of animal and plant life. Although many of these, such as the insects which effect the cross pollination of plants, are of benefit to the agriculturalists, there are hordes of predatory insects and other forms which directly and indirectly do an enormous amount of damage. It is estimated that the losses due to insect pests in the United States amount annually to about $800,000,000. There are also numerous parasitic worms which injure plants and a larger number which infest animals. About a hundred species prey upon men. Some very destructive plant diseases are caused by protozoans; others are due to yeasts, fungi and bacteria. Tracing these diseases to their causes often leads to a discovery of a remedy. Man is engaged in a continuous conflict with numerous small creatures which attack his cultivated products, both plant and animal, and he has profited greatly in this struggle by his increased knowledge of the world of life.

Biological knowledge has been of even greater practical value in relation to medicine and hygiene. Anatomy and physiology form the foun-

dation of our knowledge of both the normal and the abnormal functioning of our bodies. Some diseases, such as cretinism and diabetes, are caused by an insufficiency of a specific internal secretion, or hormone, and when the proper hormone is supplied a marked improvement frequently follows. Some of the most striking achievements of modern medicine are based upon the control of bacteria. The almost complete elimination of yellow fever, the marked decrease of malaria, typhoid fever, cholera and the plague, the wonderful achievements of antiseptic surgery and the discovery of effective vaccines and sera have contributed much to the reduction of human mortality. The modern interest in public health programs has been both stimulated and made possible by increasing biological knowledge; along these lines further developments are to be expected.

Biology assumes an even greater social significance through its contributions to our knowledge of the processes of heredity. In this new field the discoveries are as yet too partial to be applied with any such certainty as the simpler anatomical or medical knowledge. Great as are the advances which have been made in the study of eugenics, biologists as yet have only the crudest techniques for preventing the perpetuation of undesirable human characteristics and are still less able to produce desired combinations of traits.

Again and again, particularly since the general acceptance of the theory of evolution, philosophers and social scientists have turned to biology in the hope that it might furnish a clue to the ends of individual and social existence. If life has developed from simplicity to complexity through certain paths, cannot the next steps be plotted? The idea of human society as an organism with definite biological laws of growth has had a particular appeal for numerous periods. But the doctrine of evolution itself combats the idea of teleological development, while the increase of biological knowledge has broken down the old classifications of species and groups and raised a doubt as to the reality of any unilateral path of progress. Students of society are being forced to a realization that they cannot look to natural laws for values or goals. Biology is unable even to define the limits of health without reference to non-biological standards of acceptable or undesirable equilibria. Social health must be an even more relative concept. Certain diseases biology can help to banish; it can give some clues as to the nature and limits of all life processes; it can predict the results of some kinds of action; but to the question of final values biology, like all other sciences, can give no answer. Its partial replies are none the less to be sought and used.

S. J. HOLMES

See: EVOLUTION; ORGANISM, SOCIAL; MECHANISM AND VITALISM; HEREDITY; ENVIRONMENT; EUGENICS; POPULATION; RACE; MAN; ANIMAL SOCIETIES; HUMAN NATURE; PSYCHOLOGY; MEDICINE; SCIENCE.

Consult: Nordenskiöld, Erik, *Biologens historia*, 3 vols. (Stockholm 1920–24), tr. by L. B. Eyre (New York 1928); Dampier-Wetham, W. C. D., *A History of Science and its Relation with Philosophy and Religion* (Cambridge, Eng. 1929) chs. vi, viii; Rádl, Emmanuel, *Geschichte der biologischen Theorien* (Leipsic, pt. i, 2nd ed. 1913; pt. ii 1909), tr. by E. J. Hatfield (London 1930); Spencer, Herbert, *Principles of Biology*, 2 vols. (rev. ed. London 1898–99); Holmes, S. J., *An Introduction to General Biology* (New York 1926); Jennings, H. S., *The Biological Basis of Human Nature* (New York 1930); Woodger, J. W., *Biological Principles* (London 1929); Huxley, Julian, *Essays of a Biologist* (London 1923); Parshley, Howard M., "Biology" in *History and Prospects of the Social Sciences*, ed. by H. E. Barnes (New York 1925); Hankins, F. H., *An Introduction to the Study of Society* (New York 1928) chs. vi–vii; Sorokin, P., *Contemporary Sociological Theories* (New York 1928) chs. iv–vii.

BIOMETRY. *See* ANTHROPOMETRY; BIOLOGY.

BIPARTISAN BOARDS. *See* BOARDS, ADMINISTRATIVE.

BIRKBECK, GEORGE (1776–1841), English educational reformer. He studied medicine in London and in Edinburgh, where Brougham, Jeffrey and Francis Horner were among his friends. In 1799 he became professor of natural philosophy at the Andersonian Institution in Glasgow, where he established lectures in science for artisans in 1800. Sympathetic observation of their needs determined his action, and simple language in teaching and the use of effective experiments insured his success. When he left Glasgow in 1804, shortly to become a medical practitioner in London, the mechanics' class was continued and in 1823 became the Glasgow Mechanics' Institution. Meanwhile in 1821 Leonard Horner, inspired by the Glasgow example, founded the Edinburgh School of Arts, and the success of both these ventures led to the founding, under Birkbeck's auspices and with the support of Brougham, of the London Mechanics' Institution in 1823. This institution is now Birkbeck College of the University of London and has maintained a continuous tradi-

tion of part time adult education under the partial control of its students. Mechanics' institutes spread rapidly throughout the British Isles, while the examples of Glasgow and London, in particular, stimulated parallel developments in France and the United States. It was Brougham who became the particular champion of the movement, but Birkbeck was active as president of the London Mechanics' Institution until his death, lecturing there regularly on a great variety of subjects and giving financial aid toward the construction of a building. Birkbeck helped to establish other institutions in London, in which he also lectured. Moreover he was a founder and member of the council of University College in London. He also played a prominent part in the agitation which had for its object the repeal of the tax on newspapers.

MABEL PHYTHIAN

Consult: Godard, J. G., *George Birkbeck* (2nd ed. London 1888); Burns, C. D., *A Short History of Birkbeck College* (London 1924).

BIRKMEYER, KARL VON (1847–1920), German jurist. He was a professor of law at the universities of Rostock and of Munich (1886–1912). As one of the leaders of the "classical school" of criminal law Birkmeyer ardently defended the principle of free will as the fundamental basis of responsibility and upheld the notion that the primary purpose of punishment is retribution proportionate to the crime, not excluding, however, the lesser purposes of amending and deterring the criminal. Birkmeyer further drew a sharp distinction between punishment and purely preventive measures not depending on the question of guilt. In conjunction with J. Nagler and others he edited a series of treatises in criticism of the sociological school of Liszt (*Kritische Beiträge zur Strafrechtsreform*, 16 vols., Leipsic 1908–14). He also contributed to the *Vergleichende Darstellung des deutschen und ausländischen Strafrechts* (1905–09), published in view of the preparation of a new penal code for Germany.

ALFRED VON OVERBECK

Important works: "Ueber Ursachenbegriff und Causalzusammenhang im Strafrecht" in *Gerichtssaal*, vol. xxxvii (1885) 257–357; *Die Lehre von der Teilnahme* (Berlin 1890); *Deutsches Strafprozessrecht* (Berlin 1898); "Schutzstrafe und Vergeltungsstrafe" in *Gerichtssaal*, vol. lxvii (1906) 401–23; *Strafe und sichernde Massnahmen* (Munich 1906); *Was lässt von Liszt vom Strafrecht übrig? Eine Warnung vor der modernen Richtung im Strafrecht* (Munich 1907); *Studien zu dem Hauptgrundsatz der modernen Richtung im Strafrecht; "Nicht die Tat, sondern der Täter ist zu bestrafen"* (Leipsic 1909); *Schuld und Gefährlichkeit in ihrer Bedeutung für die Strafbemessung* (Leipsic 1914).

Consult: Beling, Ernst, in *Kritische Vierteljahrsschrift für Gesetzgebung und Rechtswissenschaft*, vol. lvi (1923) 307–24.

BIRNEY, JAMES GILLESPIE (1792–1857), American antislavery politician and writer. Birney is the outstanding example of the few slaveholders who abandoned faith in gradual emancipation and became political abolitionists. He was born at Danville, Kentucky, of wealthy Irish Protestant parents, and was educated at Transylvania University and later at Princeton. After admission to the bar in 1814 and a short practise in Danville he removed to Madison County, Alabama, in 1818. Here he secured the passage of a constitutional provision allowing the legislature to abolish slavery, and the enactment of two laws against importation of slaves for sale, both of which were soon repealed. In 1826 he became interested in the movement to colonize freedmen in Liberia and active in the American Colonization Society. Strongly favoring emancipation by state law he returned to Kentucky in the belief that it was the most favorable abolitionist battleground. He emancipated his slaves in 1834, and when later he inherited others he freed them also. Encountering vigorous opposition to his ideas he moved to Ohio, where he started *The Philanthropist* (1836–37) and aided in the "underground railway" by which slaves were spirited into Canada. In 1837 Birney became secretary of the American Anti-Slavery Society and removed to New York. He was indefatigable in urging emancipation by state and federal action and strongly opposed William Lloyd Garrison's program of non-political agitation, Garrison believing apparently that slaveholders might be shamed into manumitting their slaves or else, by a dissolution of the Union, be left to practise the sinful system of slavery without interference. In 1839 Birney was named for president of the United States by a small convention at Warsaw, New York, but declined the designation. In 1840 Birney published *The American Churches, the Bulwarks of American Slavery* (2nd ed. Newburyport, Mass. 1842), was elected vice president of the World's Anti-Slavery Convention at London and ran for president of the United States as candidate of the Liberty party, receiving over 7000 votes. As candidate again in 1844 he

received 62,300 votes, giving Polk the critical state of New York.

DIXON RYAN FOX

Consult: Birney, William, *James G. Birney and His Times* (New York 1890); Stanwood, E., *History of the Presidency* (rev. ed. Boston 1928); Garrison, W. P. and F. J., *William Lloyd Garrison*, 4 vols. (New York 1885–89).

BIRTH CONTROL. This term has now come into general use to designate practises designed to prevent conception by the employment of mechanical, chemical and other means. Although for such practises the word contraception is more accurate, the term birth control is now commonly applied to them as well as to those extreme forms of contraception, such as the surgical operations vasectomy and salpingectomy, which may result in permanent sterility. In its broader connotation the term includes a much wider variety of practises designed to reduce the number of births or to adjust them to economic or ethical standards, including celibacy, postponement of marriage, abstention from intercourse, *coitus interruptus*, *coitus reservatus*, long periods of nursing, various surgical operations, abortion and even castration as practised by certain religious sects, notably the Russian Skoptsi. Infanticide, especially of females, seems sometimes to have aimed to reduce the fertility of the social group. Hence we may class it with abortion as a crude substitute for contraceptive knowledge. There are certain other conditions which affect the fertility of a population, such as child marriages, war and dangerous occupations, and proof of ability to support a family as a prerequisite of marriage; but these cannot be classed among measures of conscious birth limitation. It seems probable that some of the initiatory ceremonies accompanied by severe mutilations of the sex organs, as among the primitive Australians, may have injured the reproductive powers, but opinions differ as to their effect and as to their purpose. The term under consideration is now also occasionally used to imply a highly rational social policy of birth regulation, that is, an increase or decrease of numbers and control of quality of the population in conformity to increased knowledge and social needs.

Methods of birth control have varied with the type of culture and the amount of available knowledge. Infanticide (*q.v.*) has been and still is widely practised among primitive peoples and was prevalent in all the east Mediterranean cultures of antiquity. Female infanticide has been widely practised in China and seems to have been nearly ubiquitous in India. In Europe, after lapsing during the Middle Ages perhaps because of its severe condemnation by Christian morality, infanticide was revived with the industrial revolution; but in recent times it has again ceased to be an appreciable factor in population limitation although it often serves as a solution for individual difficulties.

The use of abortion (*q.v.*) as a device for the control of births is also widespread. The methods used among primitive peoples—bodily violence and the taking of various concoctions and drugs—are not always effective, especially when the principal reliance is placed on magico-religious rituals. It has been practised in historical civilizations in both the Occident and the Orient and within recent years has been legalized by the government of Soviet Russia. Moreover it has become so fully a part of accepted custom even in Austria, Germany, France, England and the United States that a considerable body of opinion in these countries favors its legalization as a health measure. The only alternative would seem to be the legalization of contraceptive information and practise.

The prohibition of sexual relations between spouses for more or less extended periods has been well nigh universal among primitive peoples. The only class of these tabus which has had an appreciable effect on the prevention of births is that relating to the period following childbirth. Such tabu periods sometimes extend to two, three or even four years. There is considerable evidence that similar abstention until the child was weaned was practised in ancient Egypt, India and Persia and is now in vogue in Egypt, India, China and Turkey. Among Europeans, however, there seems never to have been a pronounced social requirement of prolonged abstention. Ecclesiastical authorities even when opposed to birth control by artificial means approve the restriction of intercourse to the so-called "safe" period or *tempus ageneseos*. Such a method is of doubtful efficacy. Popular tradition and ecclesiastical maxim place the sterile period midway between menstruations, but there is now clinical evidence that the six to eight days preceding menstruation is the most sterile period and that the traditional period is a highly fertile one. Long abstention when attainable nullifies a primary object of marriage and may produce such nervous tension and irritability as to destroy marital happi-

ness. In actual practise it is found to aggravate prostitution and sexual irregularities. It is not therefore a method of birth control of wide applicability under existing marital and social conditions.

Postponement of marriage has also acted as an instrument for the prevention of births. Espousal of females among primitives usually takes place before or shortly after puberty. In the ancient empires marriage was everywhere a duty and fertile motherhood usually a sign of divine favor. However, in Rome during the empire avoidance of marriage became so prevalent that Augustus passed laws against it. It was under Christianity that celibacy (*q.v.*) was elevated to the highest ethical status and even as late as the Council of Trent (1545–63) was praised by ecclesiastical authority as superior to marriage. During the Middle Ages celibacy other than religious was infrequent, but late marriages were common among the lower orders of society. Whatever economic and psychological restrictions still remained were nullified by the commercial and industrial changes of modern times. Today neither deliberate avoidance nor postponement of marriage is sufficiently extensive among western peoples to affect the birth rate greatly except in restricted social classes. Undue postponement seems certain to be accompanied by prostitution, irregular unions and increase of venereal diseases unless free unions under conventionalized conditions are approved. For this reason marriage at an opportune age, with the practise of contraception for an indefinite period thereafter, is widely advocated in the interest of health, morality and social well-being.

Magical contraceptive practises are reported from many tribal peoples, but effective methods such as the use of chemical substances or tampons of soft absorbent material are not unknown to them, especially to the Africans. There is evidence that practical methods were employed by the ancient Jews, the German tribes, the Arabs, the Greeks and the Romans. Methods now in use in China and India are for the most part ineffectual magical rites. In Europe during the Middle Ages the limit of fertility for most marriages was set by nature. An Arabic manual of the sixteenth century, translated into the French as *Les maîtres d'amour*, gave some account of chemical methods. Theilhaber asserts that Arabian physicians were cognizant of the protective pessary and of chemically treated suppositories. By the middle sixteenth century sheaths of fine linen and, shortly thereafter, of lamb's gut were used in Italy. This device, which probably was much older, was recommended by Gabriello Fallopius, Italian anatomist, for the prevention of infection and was first described by him in a work of 1564. Certain sophisticated elements, especially in France and Italy, doubtless knew of effective methods a considerable time before 1800, and there is evidence that in the former country such knowledge was rather widely disseminated even among the peasantry.

But in general the populations of western Europe entered the nineteenth century with little knowledge of contraception. A quarter of a century later, however, such knowledge was spreading more or less rapidly in England and also in the United States. In France the decline in the birth rate became pronounced after 1830. In 1842 Bishop Bouvier of Le Mans represented to the papal authorities that the prevention of conception was becoming very common and that its classification among the deadly sins was creating confessional difficulties. The Curia Sacra Poenitentiaria replied that the confessor need not inquire into individual practise unless his opinion was asked. There is thus evidence that contraceptive practises were attracting public attention in continental Europe before 1850.

In England what is now known as the birth control movement has its ostensible historical source in the population doctrines of Malthus. While he had developed the theory that the greatest evils from which mankind suffers are due primarily to an excessive rate of multiplication his attachment to traditional morality prevented his drawing the obvious conclusion. Nor did he greatly relieve his dark picture of human destiny when he declared in his second edition that man must choose between poverty, vice, pestilence, crime and war on the one hand and "moral restraint" on the other. By "moral restraint" he meant "a restraint from marriage, from prudential motives, with a conduct strictly moral during the period of restraint." He himself pointed out, however, that late marriage was all too likely to result in the even greater evil of sexual irregularities. His timidity thus led him into a dilemma. Some of his more radical contemporaries, among them James Mill, Bentham and Grote, were not long in drawing the logical conclusions from the combination of Malthusianism, utilitarianism and liberal economic theory. In the article "Colony" in the Supplement to the *Encyclopaedia Britannica*

(5th ed. 1818) Mill broached the subject of artificial limitation of numbers. Three years later he said, "The grand practical problem, therefore, is to find the means of limiting the number of births."

The foremost position, however, among the early English neo-Malthusians belongs unquestionably to Francis Place. In his *Illustrations and Proofs of the Principle of Population* (London 1822) Place denounced the doctrine of moral restraint as out of harmony with human nature and added, "The remedy can alone be found in preventives." He argued eloquently and effectively for "such precautionary measures as would, without being injurious to health or destructive of female delicacy, prevent conception." He said nothing, however, about methods, but recent research has revealed that he very probably wrote and undoubtedly sponsored the distribution of the so-called "diabolical handbills" of 1823, in which the evils of large families and the moist sponge method of avoiding them were set forth. He was also responsible for the conversion to neo-Malthusianism of Richard Carlile, who published a rather coarse essay on "What is Love?" in his *Republican* (May 6, 1825). Slightly altered and reissued the next year as *Every Woman's Book; or, What Is Love?* it was the first book in the English language devoted exclusively to contraceptive theory and practise.

This work was soon followed by R. D. Owen's *Moral Physiology* (New York 1830), which discussed methods. It passed through many editions. By far the most influential tract of the century, however, and the first important one by a medical man was *The Fruits of Philosophy; or, The Private Companion of Young Married People* by Dr. Charles Knowlton, a Massachusetts physician (first published anonymously at New York, January, 1832; reprinted with additions, Boston 1833; reprinted in England about 1834). Although he was fined at Taunton and jailed at Cambridge the author continued quietly to circulate this pamphlet. In England more than forty thousand copies of it were sold before it became the basis of a famous trial in 1877.

Meanwhile Dr. George Drysdale had published a widely influential work, *The Elements of Social Science* (London 1854), which passed through thirty-five English editions and was translated into at least ten European languages. In it the author sought to establish a more rational basis for sexual ethics; and he presented the case for small families from the economic, ethical and medical viewpoints. Among the considerable pamphlet literature of this period should be specially mentioned one by an American physician, Dr. R. T. Thrall, entitled *Sexual Physiology* (New York and London 1866). The most influential neo-Malthusian periodical of the century was the *National Reformer*, 1860–93, edited for many years by Charles Bradlaugh. When in 1877 Bradlaugh and Mrs. Annie Besant were tried in court for selling Knowlton's pamphlet the propaganda of the neo-Malthusians became much more active and intense. The effect of the now famous trial was electric. About 185,000 copies of the pamphlet were sold in the next three and one half years. The sale of similar tracts was enormously stimulated and an extraordinary demand created for contraceptive devices. Among the new pamphlets was Mrs. Besant's *Law of Population* (1st ed. January, 1879), of which about 175,000 copies were sold in twelve years. Mention should also be made of a sixpenny brochure by Dr. H. A. Allbutt entitled *The Wife's Handbook* (London 1887), the sales of which have now passed the half million mark.

The interest aroused by the Bradlaugh-Besant trial led to the formation of the Malthusian League in 1877 with Bradlaugh as president and Mrs. Besant as secretary; it was reorganized the next year with Dr. C. R. Drysdale as president. The first number of its official organ, *The Malthusian: A Crusade Against Poverty*, was published in 1879. In 1922 this league became the New Generation League and its organ *The New Generation*. During and since the war Dr. Marie Stopes has been an outstanding leader among English neo-Malthusians. In addition to being an active propagandist she was largely responsible for the opening in 1921 of a Mother's Clinic for Constructive Birth Control in London and for the formation of a society with similar title having as its organ *The Birth Control News*. There were reported to be over forty clinics in English cities in 1929. Meanwhile the entire nation has been engaged in active discussion of birth control in all its aspects, stimulated by the deliberations of the National Council of Public Morals and of its special committees on the decline of the birth rate, on the ethics of birth control and on the medical aspects of birth control.

Little is known of the early propagandist movement in the United States. That it was effective is shown by the above mentioned works by Owen, Knowlton and Thrall, by the views

and practises of the Oneida Community and by the very early decline of the American birth rate. After the Civil War fear was frequently expressed that the native stock would be extinguished by an undue restriction of fertility. The passage of the congressional enactment of 1873 (*infra*) was in part designed to restrict the circulation of contraceptive information and devices. While these continued slowly to spread, there was no organized propaganda on a large scale until the arrest of Margaret Sanger, a public nurse, at New York in September, 1914, and later of her husband, for the distribution of her pamphlet *Family Limitation*. The public interest aroused by these events was utilized to reorganize on March 31, 1915, the National Birth Control League, which had been first formed by Mrs. Sanger in 1914. Branches were soon founded in various cities and several states. In 1919 the Voluntary Parenthood League was formed with Mrs. Mary Ware Dennett as president to agitate for the modification of federal laws. The first American conference on birth control at New York in 1921 attracted wide attention because of police interference. At its close various bodies combined to form the American Birth Control League, which adopted as its official organ *The Birth Control Review*, a monthly journal which had been published since February, 1917, with Mrs. Sanger as editor. This league has sought the modification of state laws and the passage of a federal law legalizing the giving of contraceptive information by "physicians only." In 1923 it established at New York the first successful birth control clinic in America. This was under expert medical direction and found its legal authority in an earlier decision of the state court of appeals permitting the giving of contraceptive information to any wife diseased or threatened with disease. The following year a clinic was opened in Chicago; others followed in Baltimore, Detroit, Cleveland, Newark and elsewhere. A police raid on the New York clinic on April 15, 1929, and the arrest of the physicians in charge resulted in wide protest; the indictments were dismissed shortly thereafter.

Following the English trial of 1877 the neo-Malthusian movement soon became world wide. Leagues were formed for propagandist purposes in Holland (1885), Germany (1889), France (1895), Bohemia (1901), Spain (1904), Brazil (1905), Belgium (1906), Cuba (1907), Switzerland (1908), Sweden (1911), Italy (1913) and Mexico (1918). Famous trials in Belgium, France, India and Australia stimulated interest. The World War gave an immense impetus to population studies. Mrs. Sanger toured the world in 1922 in the interest of the movement, arousing considerable discussion in Japan, China and India. Several Central and South American states have manifested a favorable governmental attitude toward contraceptive propaganda. On the other hand restrictive measures have been taken in France and Italy. Meanwhile the ideas of birth control advocates have been given repeated expression on an international scale through the International Neo-Malthusian Conferences held at Paris (1900), Liège (1905), The Hague (1910), Dresden (1911), London (1922) and New York (1925).

There has never been legal restriction of birth control propaganda in England other than the general laws against obscenity. Recently attempts have been made by Roman Catholics and others both in and out of Parliament to create the presumption that contraceptive literature is of necessity obscene. In New South Wales the supreme court in 1888 sustained the right of publication of Mrs. Besant's *Law of Population*. France had no law against the dissemination of contraceptive information or devices until 1920, when a very drastic law was enacted. The Mussolini government in 1925 established similar restrictions. On the other hand the Mexican government in the same year gave official approval and active support to birth control propaganda. Recently also the Japanese government has relaxed its opposition.

There seems to have been no special legal restriction in this country until the New York legislature specifically included contraceptive information and materials in an obscenity act of 1869. In 1873, largely under the influence of Anthony Comstock, Congress enacted Section 211 of the Penal Code. The primary aim of this law was to prevent the transmission of pornographic publications through the mails, but it specifically forbade the mailing of any printed matter or any drug or device designed to prevent conception. It made no distinction between the lewd and the scientific and did not exempt the medical profession. In quick succession the legislatures of all states except North Carolina and New Mexico passed similar but quite varied laws. Twenty-four of these laws make the giving of contraceptive information a crime; seventeen accomplish a similar restriction by prohibiting any information which will corrupt the morals of youth.

The principal opposition to the movement on ethical grounds has come from orthodox religionists, especially those of the Roman Catholic faith. They argue that children constitute the natural and socially necessary culmination of marriage and that family relationships furnish an invaluable life discipline. These seem sound arguments against induced sterility but not against an intelligent regulation of family size. The support of a small family on a high standard seems to produce as wholesome life values and character traits for all concerned as does the deadening struggle for mere existence among a swarming progeny. Unrestrained reproduction promotes sensuality and indelicacy. Catholic spokesmen do not oppose family limitation as such, because they approve abstention and restriction of intercourse to the mid-menstrual period. They allege, however, that the use of artificial checks is "unnatural" and hence sinful. Their ethical argument thus centers about the means employed rather than about the motives or primary effect. With reference to this the British Committee on the Ethics of Birth Control said, "Civilization itself has been the story of man's control over nature, mainly by mechanical means." Moreover there is evidence that Catholic theologians have approved the use of means of preventing infection by men having illicit relations, declaring such means "morally indifferent in themselves" (Drysdale, C. V., "Roman Catholics and Birth Control," and discussion with A. Vermeersch, in *Birth Control Review*, vol. xiii, 1929, p. 23–24).

Socially constructive ethical arguments favoring birth control point out the close relationship between the control of conception and the advancement of material well-being; the elevation of the status of wifehood and womanhood; benefits to the health and education of children when their numbers and the intervals between them are adjusted to parental health and resources; the senseless immorality of repeated and unwanted pregnancies followed by abortion, infanticide and high infant mortality, together with waste of parental strength, income and marital felicity. Birth control frees women from enslavement to reproduction and introduces an era of voluntary motherhood. In fact there are now few strata in the population where the very large families of two and more generations ago are not looked upon as disgraceful evidences of improvidence and unrestrained sexual indulgence. Control is a primary means of attacking poverty and of elevating social life above the appetitive level of reproduction and food getting. By obviating the suspicion of increasing the population for future wars it is an essential prerequisite of effective world organization for permanent peace. It thus becomes one of the ethical imperatives of a civilized community. Whatever moral charges may truthfully be brought against it in the light of a rational morality may really be ascribed to the high state of individual freedom and well-being which is emerging and to the groping that must accompany the efforts of men and women to achieve a larger mastery of their own destinies.

Opponents of contraception advance the contention that it is deleterious to physical and mental health. In brief they contend that the use of contraceptives induces sterility, produces fibroids of the womb, disturbs feminine physiology by interfering with the far reaching consequences of pregnancy and creates a feeling of unsatisfied sex craving which leads to over-indulgence or destroys marital harmony. While these contentions apply mainly to induced sterility and not to birth restriction, there is wide difference of opinion as to their validity. Medical opinion as officially expressed has been slow to support birth control openly, but recent years have brought out numerous expressions of approval by medical societies in England, Germany and the United States. The Medical Committee of the British National Council of Public Morals declared unanimously that "no impediment should be placed in the way of those married couples who desire information as to contraceptives, when this is needed for medical reasons or because of excessive childbearing or poverty." If there are ill effects from contraception they are probably slight, limited to individual cases or particular devices or offset by the general progress of medical science. The fact is that with wider use of contraceptives the health and longevity of women have increased and infant mortality has decreased. The causal connection seems clear. Medical opinion strongly supports the view that in the interest of maternal health and infant vigor two or three years should elapse between births. Contraception is frequently prescribed as a measure of mental hygiene to allay the haunting fear of pregnancy which often handicaps marital felicity. An increasing number of physicians and hospitals are giving contraceptive information in specific cases such as pronounced psychopathy in either mate, tuberculosis, venereal infection, heart disease, heritable defect, and in those

cases where there is danger of too many or too frequent births. Contraception thus is beginning to play an expanding role in preventive therapy.

The birth control movement has stimulated a vast amount of research into the causes of the decline of the birth rate and the extent and consequences of differential fertility. Recently active search for more facile and effective means of contraception has been undertaken. This has involved experimentation with various mammals, including monkeys, as well as further study of the anatomy, physiology and chemistry of human reproduction. Topics of investigation by gynaecologists, geneticists and biochemists include: the time of ovulation and concurrent vaginal reactions; effects of irradiation by X-ray; effect of lead and dietary changes on fertility; spermatoxins and spermaticides; improved methods of sterilization, temporary and permanent, by tying the *vas deferens* or the Fallopian tubes or by uterine electric cauterization; methods of arrest of ovulation; artificial initiation of the menses; and immunization. A considerable number of these researches have been instigated by the Committee on Maternal Health of New York, Dr. R. L. Dickinson, secretary. The Brush Foundation of Cleveland under the direction of Professor T. Wingate Todd has undertaken study along some of these lines, as has also the Institute of Sex-Physiology at Edinburgh under Dr. F. A. E. Crew. Finally considerable attention is being given to the improvement of existing methods, a field of study greatly benefited by the establishment of clinics under medical direction.

In spite of vigorous opposition and insecure legal basis birth control has become an accepted procedure for an increasing portion of the public. It is clearly the main factor in the recent decline of the birth rate among the white stocks of mankind. By 1900 the French population was approaching a stationary state; the upper classes in several countries and especially in the great cities were no longer reproducing themselves, a statement applicable also to much of the Old American element in this country. Some decline was necessitated by the decrease in the death rate and the great prolongation of life, but the decline has been far from uniform as between nations, classes and urban as against rural groups. French demographers and publicists have frequently pleaded for a release of fertility; the bugaboo of the "yellow peril" has often been held up before western nations; recently prophecies of a Slavic inundation of western Europe have been numerous. There seems to be no present danger of colored race domination. Not only are the white stocks increasing faster than the colored, but they are in secure possession of most of the valuable, sparsely settled areas of the globe. The birth control movement is spreading to China, India, Japan and Russia.

Birth control greatly accentuates the processes of reproductive selection in the population of the advanced nations. Opponents of the movement even though they may reject eugenist claims frequently point out that it is highly dysgenic in effect. As methods of contraception are perfected, however, and spread to all classes such effect will be largely if not wholly overcome. Moreover the movement for the segregation or sterilization of certain types gains headway. No eugenic policy can be made effective except through control of the fertility of different strains, either voluntary or compulsory. Changes in the relative fertility of different stocks may be expected to affect the cultural future of western nations largely because culture is itself a social inheritance. Thus, for example, the relatively rapid multiplication of Catholics as compared with Protestants, Jews and non-believers seems already to be a factor of considerable cultural significance in New England and other eastern states, as indeed also in both England and Germany. Birth control is also altering the age distribution of the population; there will be a smaller proportion of youth and a greater social burden of old age. The full significance of these and other effects of the birth control movement is now far from clear. That it has promoted individual health, well-being and marital happiness seems on the whole clear enough; but whether there is a complete harmony between rationalized individual desires and social necessities is not clear. It is within the bounds of possibility that the populations of western nations may decline in both quality and quantity. Such results even though imminent cannot be avoided by attacks on birth control for this has now spread beyond all recall. They are to be avoided only by the development of an intelligent population policy based on greater knowledge of individual and social needs than is now available.

FRANK H. HANKINS

See: BIRTHS; POPULATION; EUGENICS; BIRTH CUSTOMS; ABORTION; INFANTICIDE; CELIBACY; FEMINISM; STANDARD OF LIVING; FAMILY; MARRIAGE; SEX

EDUCATION; VENEREAL DISEASES; PROSTITUTION; WOMAN, POSITION IN SOCIETY; CENSORSHIP.

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BIRTH CUSTOMS. In lower and advanced cultures the various customs which are observed in connection with the birth of a child have reference not only to its welfare, in both the present life and the afterworld, but also to the welfare of the mother, to that of the community and to the establishment of the child's relation to the community and, in certain cases, to the father.

It is a general rule among peoples of primitive culture that a woman ceases to cohabit with her husband from an early stage of pregnancy until the child is weaned. Since the behavior of animal females is similar, the custom is probably of biological origin, although like most birth customs it has received subsequent interpretations, connected in this instance with the notion of impurity. The rigorous isolation of women, often in special huts, and the tabus to which they are subject during delivery and the lying-in period, tabus which are in every respect similar to those observed during menstruation, apparently pertained originally to the lochial state. They have, however, by a natural confusion come to be extended to the child, who is considered to have been born in a state of impurity and who must therefore be purified by means of water, inunction, fumigation and so forth. The food of pregnant women is the object of much attention in lower cultures. Many articles of diet are forbidden while others are especially sought in order that they may impart their virtues to the child, whose conception is sometimes ascribed to the food eaten by the mother.

The birth of a child is in lower cultures very generally held to establish the relation of marriage between the parents. The husband commonly becomes known as "the father of So-and-so" and thereby acquires an indissoluble relation to the mother's group. This relation is often emphasized by the extension to the hus-

band of the tabus of childbirth, a sympathetic association which assumes its most striking form in the custom of the "couvade," or masculine childbed, whereby the invalidism of the lying-in period is simulated by the husband. The custom, which is widely distributed among both matrilinear and patrilinear peoples, does not appear to be related to patriarchal claims, but probably owes its origin to superstitious autosuggestion associated with sympathetic magic.

The actual process of childbirth is not in the most primitive cultures attended with many observances; the mother often retires among the bushes to be delivered, washes the newborn child in a stream or pool and resumes her work or march. In slightly higher cultures, however, childbirth is the occasion for the observance of many superstitions such as the use of amulets and charms, the keeping up of fires, the waving of brands and cudgels to repel evil spirits and witchcraft; measures to facilitate delivery are often employed, such as the opening of doors and lids and the untying of knots.

In many communities the first act after the birth of a child is the decision as to whether it shall be permitted to live. The decision may be made by the mother, the father or a representative council of the community. If allowed to live the child is generally at once accepted, in a preliminary manner at least, as a member of the group. Often the women who gather to inspect it take it up or spit on it or suckle it; sometimes the child is at once adopted by a foster mother. Such usages appear to emphasize the communal parentage, a sentiment conspicuous in the lowest cultures. In patriarchal communities the child is first acknowledged by the father, whose acceptance of the relation constitutes admission of the child to the social group, and with the act of acknowledgment are sometimes combined tests intended to establish the child's legitimacy.

The disposal of the afterbirth, which is regarded as containing an outlying portion of the child's soul, is the object of much care in lower cultures. It is commonly buried under a tree, which is thereafter identified with the child, or at a marked spot where it is available for use by "the maker of babies" (Queensland); it may be given as food to sacred animals (Tobo Bataks) or cooked and eaten by the relatives (Palaeo-Siberians).

The earliest ceremonial observances connected with the newborn, in both individual and cultural chronology, have a religious rather than a social character. Hence the religious aspect tends in higher cultures to displace the social and civic aspect of those rites. The child is frequently presented to the gods or a communion is somehow established between him and the gods or ancestors. The custom of holding the child up to the moon is very general; occasionally it is held up to the sun (Tarahumara of Mexico).

The bestowal of a name upon the child is by far the most important and widespread ceremony associated with birth; most other rites, whatever their function, tend to cluster round the ceremony of naming. This ceremony is often not performed until some years after birth; it may occur at the puberty initiation or when the child begins to walk or to speak or when it is weaned. Before it is named the child is not regarded as a complete individual or as a full member of the community, for his name is regarded as part, and in some respects the most essential part, of his being. Hence the process of naming is viewed in the lower cultures as an act of divination whereby the real name, often that of an ancestor who is reincarnated in the child, is discovered. It is commonly kept secret, a nickname being substituted for ordinary use. A new name may be assumed at crises of life, such as initiation, serious illness or marriage. Because of the grave dangers and disabilities a child is likely to incur before it has received a name, the ceremony of naming is usually performed soon after birth. It is sometimes thought that the child would not live more than three days unless this were done (Cherokee) or that it would be sickly and could not thrive, a belief which is still prevalent in the countryside of Europe.

Similarly the ceremonies of admission into the clan, tribe or religious community, which regularly take place at puberty or later, tend ultimately in the evolution of the group to be carried out soon after birth so as to obviate the perils to which the child is exposed before their performance. Body paintings and tattooings, the perforation of the ear lobes and of the nasal septum, are often performed post mortem if a child dies before acquiring the tribal marks which alone can insure his being recognized and admitted to the company of his deceased ancestors. Those marks and mutilations are accordingly in some tribes bestowed soon after birth. Likewise admission to the totemic group, although usually a manhood ceremony, is sometimes secured directly after birth by anointing the child with grease or by giving it broth prepared from the totem animal (Bechuana).

Even an operation such as circumcision, which is avowedly regarded among the Jews themselves as a specific preparation for marriage and often immediately precedes it, may come to be regularly performed at the first opportunity after birth (e.g. Jews and ancient Mexicans). The view that the mutilation recommends itself to uncultured peoples on hygienic grounds is untenable, if only on account of their conspicuous indifference to sanitary considerations. The rite takes in most instances the form of an incision without amputation, and it may have originated as an imitation of the excision or artificial defloration practised on girls in most lower cultures, which has fallen into disuse with the growth of the claim to bridal virginity. Although practised by all Semites circumcision remained unconnected with religion except among the Jews, whose national customs, marking citizenship of the religious state, tended to acquire a religious character and who therefore practised infant circumcision; with the Arabs, however, circumcision is a puberty rite and is not prescribed by the Koran.

An equally widespread rite, that of consecration by water, was held by the Jews in almost as much honor as circumcision. Controversies took place among the rabbis as to which of the two rites was the more essential mark of Judaism. Incorporation into the totemic group by inunction with the fat of the totem or smearing with its blood or with that of the totemic brethren is often replaced by washing or sprinkling with water into which "medicine" has usually been infused or over which spells have been pronounced; or it may be replaced by immersion in sacred springs or streams. Most frequently, as in North and Central America, South and West Africa, Malaya, Papua, Polynesia, Tibet, Japan and among the ancient Teutons and Romans, such baptismal consecration forms part of the name giving ceremony. Water is in most lower and many of the higher cultures regarded as the direct vehicle of the powers that bring forth. It is primarily the life giving, the generating and therefore the regenerating element. The ceremony of name giving by consecration with water was known among the Amerind tribes as "being born again." The notions of regeneration and of assimilation with the divine sources of creative power are much more fundamental in all baptismal rites than that of purification, which, although emphasized among later Judaic sects, gives place to the original notion in most theological as well as popular conceptions of baptism.

Among the Jews the "water of purification" originally contained "medicine" prepared from the ashes of a heifer, the sacred animal of the bull god of Israel. But water from the sacred and mystic river Jordan or any consecrated water came to be used by the less orthodox sects, preference being given in early Christian times to "living water," that is, the water of a flowing stream. Baptism was especially employed in the admission of proselytes to Judaism, who were thus spared the ungentile rite of circumcision, and in the admission of neophytes to particular sects undertaking special vows. It came thus to be regarded as the typical mode of admission into any religious community and was employed similarly in the consecration of catechumens to the Isiac and Eleusinian mysteries. A sponsor vouching to the bishop for the character of an adult pagan convert was required in the early Christian centuries and played the same part as the mystagogue in the Greek mysteries.

In the first Christian centuries baptism retained the character of an adult ceremony of admission. Tertullian and other church fathers advised the delay of the rite for as long as possible and it was generally thought that the age of thirty, corresponding to the traditional age of Christ at his baptism, was the most suitable. A separate ceremony, known as "sealing" and consisting of sprinkling with water in the name of the Trinity, was used for infants. Like the corresponding Roman name giving ceremony it took place on the eighth day. Just as parental anxiety for the welfare of the children had caused totemic and other puberty and manhood ceremonies to be anticipated and performed on infants, the sacrament of baptism came at an early period to be fused with the rite of "sealing" and thus tended in spite of theological protests to revert to its ethnic function as the vehicle of naming and to retain all the significances primitively connected with that rite.

ROBERT BRIFFAULT

See: BIRTHS; REGISTRATION; ABORTION; INFANTICIDE; BIRTH CONTROL; MAGIC; RELIGION; TABU; RITUAL; DEATH CUSTOMS.

Consult: Ploss, H., and Bartels, Max and Paul, *Das Weib in der Natur- und Völkerkunde*, 3 vols. (11th ed. Berlin 1927), with separate index volume; Ploss, H., *Das Kind in Brauch und Sitte der Völker*, ed. by B. Renz, 2 vols. (3rd ed. Leipsic 1911–12); Briffault, R., *The Mothers*, 3 vols. (London 1927) vol. ii, p. 366–97; Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927–28) vol. iii, p. 1904–

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BIRTH RATES. *See* BIRTHS.

BIRTHS. The population of the earth increases by births and decreases by deaths. There were centuries in the history of mankind when births exceeded deaths and others when deaths exceeded births. The last century showed an exceptionally high excess of births over deaths due to a reduction of mortality. In the current century the surplus has been smaller as a consequence of a reduction of natality. According to the most recent estimates of the International Statistical Institute, the average annual excess of births over deaths from 1920 to 1928 was 15.7 millions or seven eighths of 1 percent of the world population. This is an indirect estimate based on a comparison of census results, since we know very little about the actual number of births and deaths. Many countries, large and small, have no registration system whatever and many countries have utterly inadequate registration of births and deaths. The total yearly number of births in South America may be two or three or four millions. For China a guess of nine millions would be quite as justifiable as a guess of eighteen millions. Taking the earth as a whole, all we can say is that the yearly number of births is very likely not lower than forty-five and not higher than seventy-five millions.

The only major part of the world for which we have accurate birth data over an extensive period is western and northern Europe (Belgium, Denmark, Great Britain and northern Ireland, Irish Free State, Finland, France, Germany, Saar territory, Netherlands, Luxemburg, Norway, Sweden and Switzerland). Around 1850 three and a half million children a year were born in that territory. Fifty years later the number of births was four and three quarters millions. At present it is again about three and a half millions. If similar statistics existed for the United States the results would probably read about as follows: around 1850 one million children a year were born; fifty years later the number of births was two and a quarter millions; at present it is two and a half millions.

TABLE I

BIRTHS IN WESTERN AND NORTHERN EUROPE, 1841–1928

PERIOD	BIRTHS (IN THOUSANDS)	PERIOD	BIRTHS (IN THOUSANDS)
1841–1845	3481	1896–1900	4616
1846–1850	3473	1901–1905	4686
1851–1855	3524	1906–1910	4591
1856–1860	3714	1911–1914	4337
1861–1865	3899	1915–1919	3064
1866–1870	4017	1920–1921	4320
1871–1875	4210	1922–1923	3866
1876–1880	4416	1924–1925	3713
1881–1885	4385	1926	3613
1886–1890	4372	1927	3452
1891–1895	4461	1928	3484

Source: Kuczynski, R. R., *The Balance of Births and Deaths*, vol. i, p. 9.

The considerable decrease of births in western and northern Europe and the slight increase of births in the United States during the last generation occurred in a period when population increased by almost 20 percent in the former territory and by almost 60 percent in the latter. It is indeed only by relating births to population that we can obtain an adequate picture of the trend of natality.

The simplest method of relating births to population is to compute the birth rate, i.e. the rate of newly born per 1000 of the average population. This birth rate in western and northern Europe, as indicated by the scanty statistics available for the early period, fluctuated considerably from 1750 to 1815 and tended downward in the twenty-five years following the Napoleonic wars. Then for almost half a century the birth rate on the whole remained constant. It is true that in retrospect the sharp decrease characteristic of modern times seems to have begun by the late seventies; yet in 1881–85 the birth rate was still 31.4 as compared with 30.8 to 32.8 in the eight preceding quinquennial periods. The decisive factor was the continued decrease of the birth rate in the eighties. The

rate dropped below 31 in 1887 and never reached 31 again. It fell definitely below 28 in 1905, below 25 in 1911, below 22 in 1922 and below 19 in 1927. Consequently the second half of the eighties must be considered as the turning point in the trend of the birth rate in western and northern Europe. The decrease was slow up to the beginning of the twentieth century but has become more rapid since 1909. The temporary rise in 1920, due to the many marriages postponed on account of the war, was soon followed by a new, exceptionally rapid decline.

TABLE II

BIRTH RATE IN WESTERN AND NORTHERN EUROPE, 1841–1928

PERIOD	BIRTH RATE	PERIOD	BIRTH RATE
1841–1845	31.9	1896–1900	29.4
1846–1850	30.9	1901–1905	28.4
1851–1855	30.8	1906–1910	26.6
1856–1860	31.7	1911–1914	24.2
1861–1865	32.1	1915–1919	17.0
1866–1870	32.0	1920–1921	23.8
1871–1875	32.7	1922–1923	21.0
1876–1880	32.8	1924–1925	19.9
1881–1885	31.4	1926	19.2
1886–1890	30.2	1927	18.2
1891–1895	29.7	1928	18.3

Source: Kuczynski, R. R., *The Balance of Births and Deaths*, vol. i, p. 9.

For the United States, where no comprehensive birth statistics exist, an estimate based on the white children enumerated in the censuses indicates that the birth rate was extraordinarily high from 1790 to 1820, probably exceeding 50 throughout that period, and that it fell to about 42 in the forties and fifties, to about 38 or 37 in the sixties and seventies and from then on gradually to about 30 at the turn of the century and to about 26 in 1910–19. In 1928 it probably did not exceed 21.

A comparison of the birth rates for the whites in the United States and in western and northern Europe shows that in the middle of the nineteenth century the rate was considerably higher in the United States. But since the birth rate on the whole did not decline in western and northern Europe before the second half of the eighties, the difference eventually became smaller. In the first decade of this century the birth rate in both territories was about the same. The second decade, which included the World War, once more accentuated the difference. But in the past ten years the decline in the United States was again greater than in Europe.

The birth rate shows the percentage by which a population increases through the birth of children, but since it is calculated without regard to the sex and age composition of the population it does not afford an adequate gauge for the measurement of fertility. If in a given population the percentage of women of child bearing age is large, the birth rate is likely to be high even if fertility is small; while if the percentage of women of child bearing age is small, the birth rate is likely to be low even if fertility is large. The fact that in Colorado the percentage of women of child bearing age among the total population increased between 1860 and 1870 from 3.2 to 20.1 must have led to an enormous increase of the birth rate whatever may have been the number of births per 1000 women of child bearing age. It has become customary therefore to measure fertility by relating the number of births to the number of women of child bearing age. If, then, child bearing age is assumed to cover the period from 15 to 50 years, the general fertility rate is the number of births per 1000 women of 15 to 50 years.

The general fertility rate on the whole has followed the same trend as the birth rate, both in the United States and in western and northern Europe. This is due to the fact that in such large territories the percentage of women of child bearing age actually varies much less than one might expect in view of the enormous difference in distribution of population by age and sex.

TABLE III

WOMEN OF CHILD BEARING AGE IN PERCENT OF TOTAL POPULATION, 1860–1920

YEAR	UNITED STATES	WESTERN AND NORTHERN EUROPE
1860	24.34	25.89
1870	24.99	25.40
1880	24.67	25.03
1890	25.19	25.29
1900	25.49	25.70
1910	25.97	25.89
1920	25.95	27.84

Source: For the United States the percentages are derived from Census Reports. For Europe see Kuczynski, R. R., *The Balance of Births and Deaths*, vol. i, p. 17, 106–10, 112.

It is evident that if the percentage of women of child bearing age in western and northern Europe was 25.89 both in 1860 and in 1910, the fertility rate must have decreased in 1910 as compared with 1860 in exactly the same proportion as the birth rate. On the other hand even an apparently slight change in the percentage of women of child bearing age is apt materially to influence the development of the birth rate. From 1911–14 to 1926 the birth rate

in western and northern Europe dropped from 24.16 to 19.19, a decrease of 21 percent. But since the percentage of the women of child bearing age increased at the same time from 26 to 28, the general fertility rate declined much more, namely from 2416÷26 = 92.9 to 1919÷28 = 68.5, or by 26 percent. Similarly the fall of the birth rate in the United States from 42 in 1851–60 to 26 in 1911–19 does not tell the whole story since the percentage of women of child bearing age rose at the same time from 24.2 to 26.

The general fertility rate indicates how much the women of child bearing age add to the population through births. However, since it is calculated without regard to the specific age composition of the women of child bearing age, it does not afford an adequate gauge for the measurement of the actual fertility of those women. If among the women of child bearing age the percentage of women between 25 and 35 years is large, the general fertility rate is likely to be high even if the specific fertility in each age group is low. It is equally true that if the percentage of women between 25 and 35 years is small, the general fertility rate is likely to be low even if the specific fertility in each group is high. Because of the increased percentage of women between 25 and 35 Norway in 1890–91 had almost the same general fertility rate as it had fifteen years earlier although the fertility in almost each age group decreased considerably. It therefore becomes necessary to compute specific fertility rates by the age of mothers.

Fertility rates for the individual years of age would then seem to afford a perfect measure of fertility as a whole. But the result appears cumbrous since it involves the consideration of about forty different fertility rates. However, the problem of fusing the different annual rates into one numerical expression is easy to solve. It is merely necessary to add the different specific fertility rates. The sum thus obtained—which may be called the total fertility—indicates exactly how many children, with present fertility, would be born to 1000 women throughout the entire child bearing period.

Forty or fifty years ago the total fertility was 4000 or 5000 in all countries of western and northern Europe with the exception of France and Ireland, where it was about 3000; in 1927–28 it was everywhere below 3000 and averaged about 2200. In the United States it dropped from 6000 or 7000 at the beginning of the nineteenth century to about 3000 in 1919–20 and to perhaps 2500 in 1928.

In studying the past or present increase of population no distinction need be made between male and female births. But for every study of future development, especially in countries with a strongly declining natality, it is advisable to restrict the investigation to the female births, to the potential future mothers. One will then find the number of girls born to each woman or the gross reproduction rate.

TABLE IV

GROSS REPRODUCTION RATE AND BIRTH RATE, 1926

AREA	GROSS REPRODUCTION RATE	BIRTH RATE
United States		
New Hampshire	1.24	19.2
Massachusetts	1.15	19.9
Rhode Island	1.15	19.6
Connecticut	1.08	18.2
New York	1.09	19.7
New Jersey	1.13	19.7
Pennsylvania	1.33	21.6
Ohio	1.13	18.8
Indiana	1.23	20.1
Illinois	1.07	18.6
Michigan	1.38	22.5
Wisconsin	1.21	19.3
Minnesota	1.22	19.8
Iowa	1.16	18.9
North Dakota	1.58	23.2
Nebraska	1.24	20.4
Kansas	1.22	19.3
Delaware	1.06	17.5
Maryland	1.22	20.8
Virginia	1.44	22.9
West Virginia	1.70	26.3
North Carolina	1.82	28.8
Florida	1.49	26.4
Kentucky	1.49	24.0
Montana	0.91	14.2
Idaho	1.21	17.8
Wyoming	1.18	18.6
Arizona	1.16	18.9
Utah	1.71	25.6
Washington	0.96	16.3
Oregon	1.03	16.8
California	1.16	19.2
Western and Northern Europe		
Finland	1.43	21.7
Norway	1.33	19.7
Denmark	1.27	20.5
Sweden	1.11	16.9
France	1.15	18.8
Germany	1.07	19.5
England and Wales	1.05	17.8

Source: For Europe see Kuczynski, R. R., *The Balance of Births and Deaths*, vol. i, p. 35; for the United States the figures and their derivation will be found in the forthcoming second volume of this work.

Since the proportion of female to male births is practically the same everywhere, the gross reproduction rate follows the same trend as the total fertility. The number of girls born to each woman in the United States was probably about 3 at the beginning of the last century and about 2 or 2.5 in the various west and north European countries (except France and Ireland) in the eighties. By 1926 it had dropped to about 1.3 in the United States and 1.12 in western and northern Europe.

In comparing the American with the European rates it should be kept in mind that birth records in most American states are not as complete as those in western and northern Europe. The low rates of some of the western states in particular may be disregarded because of inadequate registration. The gross reproduction rates would then appear to vary in the United States between 1.06 and 1.82, as compared with 1.05 to 1.43 in western and northern Europe. While the East and the Middle West seem on the whole to have reproduction rates similar to those of western and northern Europe, the rates in some southern and western states remain considerably higher. But those southern and western states have too small a population materially to affect the results for the entire country.

Table IV shows that the relation of the birth rate to the gross reproduction rate varies widely. Massachusetts, France and Sweden have about the same reproduction rate but their birth rates are 19.9, 18.8 and 16.9 respectively. Germany and Norway, New York and New Hampshire have about the same birth rate, but their reproduction rates are 1.07 and 1.33, 1.09 and 1.24 respectively.

The gross reproduction rate shows how many girls are born to each woman in the course of her lifetime, but since it does not take into account that a certain part of those girls die before having passed through child bearing age it fails to indicate the number of future mothers born to each woman. A gross reproduction rate of 1, such as prevailed in England and Germany in 1927–28, obviously implies that natality is no longer sufficient to enable the population to hold its own, since even with the lowest conceivable mortality some of the mothers now living would not be replaced. But a reproduction rate of 1 does not indicate how large the genuine deficit actually is, nor does a rate of 1.2 indicate whether with present mortality the population is apt to hold its own. In order to ascertain to what extent with present fertility and present mortality a population is reproducing itself it is necessary to apply the special fertility rates for female births to the number of women who according to the life table survive the respective years of age in the child bearing period. The number thus found which indicates how many future mothers will be born to each woman is the net reproduction rate.

The net reproduction rate of course must always be smaller than the gross reproduction rate. Both rates could only be equal if all newly born girls reached and passed through the child bearing age, that is to say, if they lived through the entire thirty-five years from 15 to 50. But the difference between the net and the gross reproduction rates has decreased in the course of time with decreasing mortality. It was very large forty or fifty years ago, when, for instance, in Germany the average number of years lived between 15 and 50 was but twenty. It was rather small in the United States in 1919–20, when the average number for the white females was twenty-eight. The gross reproduction rate at that time—not taking into account the deficiency in registration—was 1.38 while the net reproduction rate was 1.13. In the meantime the birth rate in the

TABLE V

GROSS AND NET REPRODUCTION RATES FOR WHITES IN THE UNITED STATES, 1919–20

STATES	GROSS REPRODUCTION RATE	NET REPRODUCTION RATE
Massachusetts	1.34	1.09
Connecticut	1.45	1.19
New York	1.23	1.00
Pennsylvania	1.53	1.23
Ohio	1.24	1.03
Indiana	1.32	1.08
Michigan	1.50	1.20
Wisconsin	1.36	1.14
Minnesota	1.39	1.17
Kansas	1.35	1.15
Maryland	1.41	1.14
Virginia	1.73	1.43
North Carolina	2.01	1.65
South Carolina	1.77	1.46
Kentucky	1.65	1.34
Utah	2.01	1.66
Washington	1.15	0.97
Oregon	1.10	0.94
California	1.02	0.85
Total	1.38	1.13

Source: See the forthcoming vol. II of R. R. Kuczynski's *The Balance of Births and Deaths*.

United States Registration Area has dropped from 23.0 to 19.3. Fertility has decreased much more than mortality and the net reproduction rate probably no longer exceeds 1. In western and northern Europe the net reproduction rate in 1926 was 0.93 and has further declined.

With fertility and mortality such as now prevail both in the United States and in western and northern Europe, a population is bound to die out. This process of course will be rather slow. With the present age composition it would be decades before there actually would be an excess of deaths over births, and even in western and northern Europe it would be centuries before the population would be half of what it is now. The process might be accelerated by emigration, although it will not of course be affected by immigration so far as the present population and its descendants are concerned. It could be stopped by an essential change in mortality or in fertility. But the future reduction of mortality in those ages which alone are decisive, that is, those under fifty years, cannot be very great after all that has already been accomplished. The margin left for improvement has become too slight to be counted upon as a means to affect essentially the trend of population. For fertility the range of possibilities is far wider. Fertility might increase again; there are those who believe that such an increase will occur with increasing prosperity. However, in the past an increase of prosperity has not as a rule resulted in an increase of fertility. On the other hand it is possible that by reason of more widespread propaganda for birth control fertility will continue to decrease. While it is true that the decrease of fertility in the last forty years is mainly due to birth control in one form or another, it might come to pass that the motives for birth control would be counteracted by other motives which might again make it desirable to rear more children. Any prediction would be mere guess work.

R. R. KUCZYNSKI

See: POPULATION; STATISTICS; REGISTRATION; ILLEGITIMACY; CHILD MORTALITY; BIRTH CONTROL; ABORTION; EUGENICS.

Consult: Kuczynski, R. R., *The Balance of Births and Deaths*, vol. i– (New York 1928–); Newsholme, Arthur, *The Elements of Vital Statistics* (new ed. New York 1924) chs. viii–ix; World Population Conference, *Proceedings*, ed. by Margaret Sanger (London 1927) p. 129–249; Dublin, Louis I., and Lotka, Alfred J., "On the True Rate of Natural Increase" in American Statistical Association, *Journal*, vol. xx (1925) 305–39.

BISMARCK, OTTO EDUARD LEOPOLD, PRINZ VON (1815–98), German statesman. Bismarck was born at Schönhausen of an old Prussian family. He entered the diplomatic profession and served as secretary of the Prussian embassy to the Imperial Diet at Frankfort, becoming plenipotentiary the same year (1851). His vigorous public repudiation of current democratic doctrines and his protests against the subordinate part played by Prussia in the Germanic Federation, which had succeeded the old empire in 1815 under Austria's continued hegemony, had already gained for him his sovereign's favorable regard, and after serving as ambassador in St. Petersburg and in Paris he received the office of minister president in 1862. Convinced that three wars must be fought before Prussia would be strong enough to assert primacy in Germany, Bismarck sought and found occasions for them. By the war with Denmark in 1864 he gained for Prussia the duchies of Schleswig and Holstein and therewith a larger seaboard. At the close of the victorious war with Austria two years later he required that country to withdraw from the Bund and forced the North German states into a new confederation under Prussian leadership. Finally by the war of 1870 with France he put an end to Louis Napoleon's meddling in German affairs and welded all the German states into a revived empire enlarged by the recovery of the old imperial territories of Alsace and Lorraine.

For the following twenty years Bismarck was the foremost figure in European politics. He is customarily identified with nationalism of a particularly egoistic type. It is true that in his political schemes and calculations he put his country first, systematically following the principle of *do ut des*; nevertheless he resolutely abstained from aggression and to the last regarded Germany as a "saturated state" which had neither need nor wish for extended frontiers and asked only to be left alone. His governing motive was the maintenance of the existing territorial status, particularly where disturbance might menace good relations with Russia and Austria-Hungary or between those states themselves.

In domestic policy Bismarck was an avowed opportunist. He tolerated parliamentarism as an unavoidable necessity and based the Diets of the North German Federation and the later empire on universal suffrage; nevertheless by way of counterpoise he created only one minister, the chancellor (himself), who was to be responsible

solely to the emperor, and gave to Prussia a dominant voice in the Council of Sovereigns, which shared power with the popular chamber. He also accepted political allies wherever he could find them, working successively with Conservatives, National-Liberals and then again with Conservatives.

The period of his chancellorship was one of continuous internal development. He reintroduced protection for both industry and agriculture, nationalized the Prussian railways, built canals, notably the Kiel canal connecting the North Sea with the Baltic, and subsidized shipping companies, which in return organized mail and traffic services. He also acquired extensive territories in west, east and southwest Africa and in Polynesia, with a view to their development as trading settlements.

The working classes shared in the growing prosperity. Work was abundant and better paid and insurance laws providing for sickness, disablement and old age were enacted, as well as a generous system of state supervised accident insurance free from the uncertainties of litigation incidental to the more customary "employers' liability" legislation. Bismarck was with reason regarded as the foremost exponent of state socialism in his day. In his solicitude for the welfare of the laboring classes "reasons of state" weighed strongly with him—he once spoke of the social insurance laws as a "bribe"—yet he was also impelled by genuine ethical and even religious motives and he never ceased to contend that a Christian state which accepted that name must be willing to give effect to the principles of the faith it professed.

Nevertheless Bismarck's firm belief in force as an instrument of national policy was responsible for several unqualified misadventures. Such were his bitter struggle with the Roman Catholic church (the so-called *Kulturkampf*), following the promulgation in 1870 of the dogma of papal infallibility, which he regarded as an attempt by the Vatican to invade the prerogatives of monarchy and the civil power; his attempt to frustrate the Social Democrats by rigorous coercive measures; and the exasperating policy of repression which he applied against the nationalist Poles of eastern Prussia. In all these exploits he was eventually defeated.

During the reign of William I, to whom he was attached by an unusual degree of personal loyalty, Bismarck dominated the political scene. With the accession, however, of the strong willed, impetuous William II (1888) a clash of wills soon appeared inevitable, and the break occurred in 1890. Forced to resign, Bismarck retired to Friedrichsruh, where he spent his last eight years in preparing his memoirs and in contributing to the *Hamburger Nachrichten* sharp and caustic criticisms of the "new course" of German politics under the young emperor.

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Works: Bismarck, Otto von, *Die gesammelten Werke*, vols. i-xiii (Berlin 1924–30)

Consult: Bismarck, Otto von, *Gedanken und Erinnerungen*, 3 vols. (Stuttgart 1898–1922), the first two volumes tr. by A. J. Butler as *Bismarck the Man, and the Statesman*, 2 vols. (London 1898); Matter, Paul, *Bismarck et son temps*, 3 vols. (Paris 1905–08); Egelhaaf, Gottlob, *Bismarck* (2nd ed. Stuttgart 1918); Robertson, C. G., *Bismarck* (London 1918); Fuller, J. V., *Bismarck's Diplomacy at its Zenith* (Cambridge, Mass. 1922); Dawson, W. H., *The German Empire 1867–1914*, 2 vols. (London 1919). For guides to more detailed studies: Singer, A., *Bismarck in der Litteratur* (2nd ed. Vienna 1912), and Hagen, Maximilian von, *Das Bismarckbild in der Litteratur der Gegenwart* (Berlin 1929).

BISSOLATI, LEONIDA (1857–1920), Italian Socialist leader. He was born at Cremona, studied law and philosophy at the University of Bologna and became one of the first propagators of socialist ideas among the Cremonese rural population. He collaborated with Filippo Turati in the founding of *La critica sociale* (1890) and in 1896 became editor of the new official Socialist central organ, the *Avanti*, at Rome. A year later he was elected to the Italian parliament. At first a revolutionary socialist, Bissolati later became one of the leaders of the reformist wing of the Socialist party. Expelled from the party in 1912 because of his support of the Libyan war Bissolati thereupon formed a new party (Il Partito Socialista Riformista) and published the *Azione* as its organ. The party, however, never achieved any great influence. The three main points in its platform were universal suffrage (including illiterates), free trade and secession from the Triple Alliance. Bissolati favored Italy's entrance into the World War on the side of the Entente and later himself served as a volunteer in the Italian army. He accepted a position as minister without portfolio in 1916 and was also a member of Orlando's cabinet in 1917. After the war he was one of the few real Wilsonians in Europe. True to the principle of nationality he bravely proposed, in his famous speech in Milan, the abandonment of the German territories in the South Tyrol and the Greek Dodecanese islands.

He also worked, although unsuccessfully, for an accord with the Jugoslavs.

ROBERTO MICHELS

Consult: Bonomi, Ivanoe, *Leonida Bissolati e il movimento socialista in Italia* (Milan 1929); Rubbiani, Ferruccio, *Il pensiero politico di Leonida Bissolati* (Florence 1921); Ricci, Umberto, *Politica ed economia* (Rome 1919) p. 219–29; Michels, Roberto, *Storia critica del movimento socialista italiano* (Florence 1926).

BJÖRNSON, BJÖRNSTJERNE (1832–1910), Norwegian author and publicist. He was the center of every national and social movement for half a century and, without holding office, the undisputed first citizen of Norway. A great lyric poet, a distinguished writer of fiction and drama, a journalist and lecturer, he used his powers to rouse and unify the Norwegian people and to inspire them with his ideal of patriotism as service and devotion. Björnson fought for the liberation of Norway from intellectual bondage to Denmark and political bondage to Sweden, but his fight was carried on without bitterness or hatred. One of his ultimate objects was the establishment of a cooperative union of the three Scandinavian nations, and he saw in Norwegian dependence an insurmountable obstacle to the achievement of this end. By his popular peasant romances he revealed to the Norwegians themselves the values hidden in the common country people who had been least influenced by foreign culture. By his dramas on subjects taken from the sagas he aimed to give the young Norwegian nation a "gallery of ancestors."

In the seventies Björnson experienced an inner revolution. Under the influence of Darwin and Spencer he abandoned his Christian faith, insisting that as high a morality could be founded on evolution as on religion. Obeying the dictum of Georg Brandes that literature should be concerned with present day problems he began in 1874 a long series of dramas and novels in which he used a modern background. He fought for a higher standard of ethics in the press, in business, in politics and in private life. The most heated discussion was precipitated by his play, *A Gauntlet* (1883), in which he makes woman throw down the gauntlet to man, demanding of him an equal standard of purity. In 1903 he received the Nobel Prize in literature.

HANNA ASTRUP LARSEN

Consult: Gran, Gerhard, *Björnstjerne Björnson, Høvdingen* (Christiania 1910); Collin, C. C. D., *Björnstjerne Björnson*, 2 vols. (2nd ed. Christiania 1923); Topsöe-Jensen, H. G., *Den skandinaviske Litteratur fra 1870 til vore dage* (Copenhagen 1928), tr. by I. Anderson as *Scandinavian Literature from Brandes to our Day* (New York 1929) p. 43–53.

BLACHE, PAUL M. J. VIDAL DE LA. *See* VIDAL DE LA BLACHE, PAUL M. J.

BLACK DEATH. The Black Death was a particularly severe visitation of plague which passed over Europe between 1346 and 1350. The origin of the name is obscure and apparently not contemporary; *pestilentia* or *magna pestilentia* was the designation common at the time. Authorities differ as to whether the epidemic began in China or in northern India. Appearing in Europe first at the port of Caffa on the Black Sea, it was evidently ship-borne into southern and western Europe—to Constantinople, Messina, Genoa, Marseille and Avignon —and thence to the north. Vivid descriptions of its progress and ravages come from many of the great cities of Europe, and its psychological effects in spreading terror and extravagance everywhere may be traced in almost every contemporary chronicler. The most impressive literary description is to be found in Boccaccio's preface to the *Decameron*. The plague is said to have intensified and stimulated the spread of such hysterical and pathological movements as the dancing mania, the activities of the Flagellants and of the devil worshiping Luciferians and the violent and ruthless persecution of the Jews, who were accused of bringing on the plague by the poisoning of the wells. It is also asserted, without much possibility of proof, that the plague contributed to the formation of a more critical attitude toward existing social and religious institutions and, according to some writers, even paved the way for the Renaissance and the Protestant revolt.

With regard to economic conditions the plague has not usually been held responsible for grave effects except in England. There it has been credited by many writers, especially by J. E. Thorold Rogers in his *Six Centuries of Work and Wages* (2 vols., London 1884; 11th ed., 1 vol., 1912) and *A History of Agriculture and Prices in England* (Oxford 1866–1902), with having effected a revolutionary transformation of rural organization and the disappearance of serfdom. According to this theory the process of the commutation of praedial services had very nearly been completed before the outbreak of the plague. The huge mortality resulting from the Black Death caused a scarcity of labor and

with it came a rise in wages. The landlords, desiring to overcome this, attempted to force the peasants back into the serfdom from which the commutation of labor services had almost released them before the Black Death. This led to the Peasants' Revolt of 1381. This theory has been invalidated by further investigation, in the course of which the progress of the plague has been subjected to a more searching documentary scrutiny in England than in any other country.

In England the Black Death appeared first on the coast of Dorset in July, 1348; in East Anglia and in London the plague was most severe during the later spring of 1349; it was at its worst in southwest Wales in the same months and in north Wales lasted on into 1350. In York the mortality was heaviest from May to July, 1349, and in Lancashire there is apparently evidence that the months September, 1349, to January, 1350, were the most fatal. The rates of mortality recorded vary considerably and are not usually reliable since it is often impossible to ascertain the total normal population. In selected groups percentages may be worked out; 40 percent among the clergy is a fairly authoritative estimate, but it might reasonably be argued that the clergy were particularly exposed to infection; among adult lay tenants rates as high as 75 percent and as low as 4 percent may readily be found; in monasteries the rates differ from under 10 percent to 45 percent or 50 percent.

Medical authorities have recently advanced the suggestion that the epidemic included both bubonic and primary pneumonic plague and that the two types ran concurrently. This fact would go far to explain discrepancies in the percentages alleged by historians, because both the methods of transmission and the rates of infection appear to be very different. Bubonic plague is spread mainly by the flea which lives upon the rat; pneumonic plague, on the other hand, may also be transmitted by direct personal contagion. In modern India the rate of infection in epidemics of bubonic plague seems to be well under 10 percent; wherever pneumonic plague occurs the rate is almost indefinitely higher. It is probable that the exceptionally high death rates prevailing in the spring of 1349 in eastern England were due primarily to the pneumonic type. It has also been established in India that the distribution of infection in neighboring villages is erratic and quite incalculable. The same appears to be true of the distribution of the Black Death. One township of a manor might lose seventy tenants while the neighboring township counted only two deaths. A loss of one third of the population appears to be indicated in many cases, and a much greater loss in a few villages and towns. But in view of the limited statistics available and of modern parallels it would be unscientific to make any generalization as to the death rate throughout the country.

The great need of historians for a large body of statistics recorded on a uniform plan is better met by the Bishop of Winchester's "Pipe Roll" than by any other known group of records. Full details are given of about sixty manors scattered over seven counties from Southwark to Taunton. On all but four or five of these manors the pestilence appeared, but the resulting deaths were far from uniform. The economic influence of the losses cannot be reconciled with traditional descriptions. In the great majority of cases there were survivors ready to take the place of the dead landholders, and within five or ten years no uncultivated lands remained. No correspondingly large body of manorial evidence has been collected for any northern county, and it appears probable that the northern villages were far less uniformly infected than those of the south, while the type of labor service in use and the general manorial organization differed so substantially from those of the normal "three-field" districts that we must beware of arguing from southern analogies. The only possible cause of immunity which may be tentatively suggested by the evidence is isolation, which evidently protected the richer classes to some extent.

The effects of the Black Death on the system of rural economy varied sharply, but it is now most generally agreed that they were comparatively slight and evanescent. A temporary system of nine-year leases was adopted in some districts; in others the system of leasing land, both demesne and villein holdings, which was already making rapid progress, received considerable stimulus. The custom of consolidation and enclosure of acre strips was evidently rendered easier. In some districts sheep farming was stimulated, but usually the increase of flocks could only be slow and gradual. There was heavy mortality among both sheep and cattle in 1350–51. Broadly speaking, the old system was in fairly regular action again ten years after 1349, when the generation of children spared by the pestilence had grown up. The same period for recovery in the woolen industry is suggested by H. L. Gray.

The effect of the pestilence on wages is more

difficult to estimate. Rogers asserted that there was an immediate and permanent rise of 48 percent, and more recent writers have laid great stress upon the evidence of the Statutes of Labourers and the cases of excess payments brought before the justices. On the other hand, as Maitland has demonstrated, there existed a very large surplus of labor services at Wilburton, and this single example is confirmed beyond all doubt by the accounts at Winchester, where very heavy mortality did not suffice to destroy the surplus. The cases of excess agricultural wages brought before the justices appear to be few in relation to the area from which they were drawn; the trouble was more acute among craftsmen. It is difficult to discover who was paying the excess rates; possibly the wealthier tenants were competing with the lord for labor. Rates of payments are so intricate, the Statutes so inadequate in their categories and the methods of "dodging" them by block contracts so many that few writers would venture to give a precise figure to the rise, which had begun before 1349 and was, moreover, long overdue. In many cases, however, wages formed a small item in the manorial budget and therefore did not greatly influence methods of husbandry. Elaborate and widespread evidence marshaled by T. W. Page has entirely disposed of the opinion that commutation was almost complete before 1349 and that the Peasants' Revolt was the result of an attempt to revive praedial services. All that can safely be said is that commutation proceeded after the Black Death somewhat more quickly than before. Well organized estates, however, and especially the monastic estates, tenaciously maintained the marks of servile status, and it was a question of status rather than of economic disabilities that produced the anti-seigneurial elements of the Peasants' Revolt. The plague merely gave birth in many cases to a smoldering feeling of discontent and an inarticulate desire for change, which found its outlet in the rising of 1381. Nevertheless it is true that the financial organization and administrative methods of the manor tended to break down in the later fourteenth century; payments in kind or in service were disappearing at the top of the social scale and they disappear rapidly in the manor after 1381 or 1400. But again, broadly speaking, their disappearance is *post*, and not *propter, pestilenciam* and must be ascribed to the concurrence of a number of causes. The effect of the Black Death was mainly psychological in that it made fundamental changes appear possible. Wherever precise evidence can be obtained concerning towns (e.g. York) it seems to confirm the testimony of the villages showing heavy death rolls with a rapid filling up of vacant places and without serious check to industry. It cannot be emphasized too strongly that disinterested records alone are safe evidence and that literary and ecclesiastical evidence has been overemphasized. The negative conclusions of English historians appear to be confirmed by the fact that no economic controversy has arisen on this point elsewhere in Europe. The whole problem, however, requires at present synthetic treatment rather than more local research.

A. E. LEVETT

See: EPIDEMICS; MOBILITY, SOCIAL; SERFDOM; ENCLOSURES; LABOURERS, STATUTES OF; AGRARIAN MOVEMENTS, SECT. III, GREAT BRITAIN.

Consult: Creighton, Charles, *A History of Epidemics in Britain*, 2 vols. (Cambridge, Eng. 1891-94) ch. iii; Sticker, G., *Abhandlungen aus der Seuchengeschichte und Seuchenlehre*, 2 vols. (Giessen 1908–12); Kovalevsky (Kowalewsky), M. M., *Die ökonomische Entwicklung Europas*, tr. from the Russian, 7 vols. (Berlin 1901–14) vol. v, p. 222–445; Nohl, J., *Der schwarze Tod* (Potsdam 1924), tr. by C. H. Clarke (London 1926); Coulton, G. G., *The Black Death* (London 1929); Page, T. W., *Die Umwandlung der Frohndienste in Geldrenten in den östlichen, mittleren und südlichen Grafschaften Englands* (Baltimore 1897), English translation in American Economic Association, *Publications*, 3rd ser., vol. i, no. 2 (1900); Thompson, A. Hamilton, "Registers of John Gynewell, Bishop of Lincoln . . . 1347–1350" in *Archaeological Journal*, vol. lxviii (1911) 301–60, and "The Pestilences of the 14th Century in the Diocese of York" in *Archaeological Journal*, vol. lxxi (1914) 97–154; Gray, H. L., "The Commutation of Villein Services in England before the Black Death" in *English Historical Review*, vol. xxix (1914) 625–56; Levett, A. E., and Ballard, A., *The Black Death on the Estates of the See of Winchester*, Oxford Studies in Social and Legal History series, vol. v (Oxford 1916); Power, E. E., "The Effects of the Black Death on Rural Organization in England" in *History*, vol. iii (1918) 109–16; Levett, A. E., "The Financial Organization of the Manor" in *Economic History Review*, vol. i (1927) 65–86; Robo, E., "The Black Death in the Hundred of Farnham" in *English Historical Review*, vol. xliv (1929) 560–72; Rees, W., *South Wales and the March, 1284–1415* (Oxford 1924); Robbins, Helen, "A Comparison of the Effects of the Black Death on the Economic Organization of France and England" in *Journal of Political Economy*, vol. xxxvi (1928) 447–79. For the older view see the works of Rogers mentioned in the text; also Jessopp, A., *The Coming of the Friars* (London 1889); Gasquet, F. A., *The Black Death of 1348 and 1349* (2nd ed. London 1908).

BLACKLIST. A blacklist is a designation of persons, either directly or by reference to types or instances of conduct or expression, for invidi-

ous discrimination. Blacklists are a recognizable although not precisely definable sub-class of a class of phenomena which would include at one extreme a private mental note that some person is not to be admitted to intimate friendship and at the other a prohibition by positive law. The forms and procedure of effective blacklisting are various. A blacklist by a single powerful individual—by a newspaper proprietor, for example, against certain advertisers or a certain class of news—may be as formidable as a blacklist by an organization. Such a semi-articulate blacklist as has been enforced when a boy is said to have "queered" himself in college may be more effectual than an *index prohibitorum* published by pontifical authority.

The mores of any fairly homogeneous group or class enforce variously a variety of blacklists, express or implied. Different times, places and conditions result in differences in blacklists, but the differences are mainly in form and degree. The same sorts of likes and dislikes, fears, prejudices, ideals and aspirations which produced ostracism at Athens and proscription at Rome operate nowadays at every political election to put members of defeated parties on a blacklist of ineligibles for appointive office. The *index expurgatorius* of Christian Science differs only in name from that of the Church of Rome. Those to whom both seem anachronisms might be advised to consider as well the resemblances as the differences of their own efforts to enforce cherished discriminations. Even the members of the Society of Friends, to whom coercion is repugnant, approach effective blacklisting, within the range of their influence, by their aggregate of individual attitudes towards certain human weaknesses and passions.

We all support some blacklists and detest others. Members of the National Consumers' League, whose "White List" by implication blacklists commercial establishments in which certain standards of consideration for customers and employees do not prevail, may hotly resent a blacklist of "enemies of the republic" (including officers of the Consumers' League) circulated by the Daughters of the American Revolution. The resulting inference that blacklisting in the abstract is ethically neutral must, however, be qualified; for the word blacklist in its usual application to extralegal coercion unquestionably carries an opprobrious connotation. If we take at random widely removed instances of blacklisting, such as the laborer blacklisted by employers, the college professor of pronounced views who is "not reappointed," the merchant given a bad credit rating by a commercial agency, it is clear that the effect of blacklisting may be the same as if blacklisted persons were subjected to legal punishment on accusation of acts not forbidden by general law and without opportunity to disprove or justify—a power which American constitutions deny even to government. It is felt that it is only by due process of law that a person may properly be subjected to a serious penalty or stigma, and there is an accentuated ethical revulsion from the concurrence of public officials in extralegal discriminations. A recent instance of such concurrence is the circulation by the Chemical Warfare Service of the War Department of a blacklist of persons alleged to be "conspiring" to undermine the government, which contained the names of a number of highly respected social workers who had also been blacklisted by various patriotic and commercial organizations. A more frequent practise is that whereby municipal authorities deny or curtail opportunities of addressing public meetings to persons whose names are on similar blacklists. Moreover due process of law itself may seem vitiated when prosecutions of producers of books or plays under indefinite obscenity statutes appear to be auxiliary to the blacklist of an antivice society rather than responsive to the law's own ideal impersonal automatism. Even the explicit incorporation into law of such blacklists as are involved in prohibition, the protective tariff and laws penalizing political or economic heresy or the teaching of evolution will not abate the feeling of many that these measures are oppressive—because effective coercion, whether legal or extralegal, should enforce only the harmonious collective will of a whole society.

But every individual makes irreconcilable demands for security and for advantage, and society as a whole is a bedlam of conflicting wills. The limits within which it may truly be said to have a harmonious collective will are narrow. Civilization, increasing the importance and autonomy of the individual, undermining ancient sanctions, disintegrating ancient mores, has narrowed them. It will not tolerate the harmony of primitive society, in which blacklists were not needed because concurrence in tabus was universal. It cannot satisfy the longing which each of us has for such a harmony—unless it can somehow diffuse throughout its

members such an obligation of reciprocity in mutual service as Malinowski found in Polynesia. But the longing, whether or not it can ever be satisfied, is as ineradicable as the longing for individual freedom with which it seems incompatible. The recent approach of civilized communities under pressure of war to the one-mindedness of primitive societies was to many a positive satisfaction. Harmony had been achieved in war time by coercion. Why not also in time of peace? Bolshevism in Russia, Fascism in Italy, in this country the post-war epidemic of blacklisting to enforce political and moral conformities—all are perhaps in a measure explainable as expressions of revived belief in the practical possibility of establishing coercively, upon one's own terms, a repose which is not the proximate destiny of civilized man.

WALTER NELLES

See: BLACKLIST, LABOR; BOYCOTT; PATRIOTIC SOCIETIES; CONSUMERS' LEAGUES; CENSORSHIP; OSTRACISM.

Consult: Putnam, G. H., *The Censorship of the Church of Rome*, 2 vols. (New York 1906–07); Chafee, Zechariah, Jr., *The Inquiring Mind* (New York 1928); Villard, O. G., "What the Blue Menace Means" in *Harper's Magazine*, vol. clvii (1928) 529–40; Mussey, H. R., "The Christian Science Censor" in *The Nation*, vol. cxxx (1930) 147–49, 175–78.
See also bibliography for BOYCOTT and BLACKLIST, LABOR.

BLACKLIST, LABOR. The blacklist in industrial relations is one of the employers' weapons in conflicts with trade unions; it is the nearest analogy to the boycott exercised by trade unions. The action may be that of a single employer who lists the persons whom he will not employ; or it may be that of a group or an association of employers who agree among themselves not to employ certain designated classes of persons and who exchange lists of names of employees who have been discovered to fall within the proscribed limits. Such a list is intended as a rule to prevent the employment of active trade unionists or of persons whose activities in behalf of trade unions have brought them into unusual prominence. Leaders of an unsuccessful strike are sometimes unable to secure employment in the plant where the strike took place or in any plant in the same locality; this ban is said in certain instances to follow the individual throughout the industry. Membership in a radical political organization or association with persons who hold such membership has been at times a bar to employment, but the actual preparation of a political blacklist is probably rare.

The labor blacklist in some form or other has probably existed from the beginning of trade union organization. In 1833 the building employers in Great Britain required their employees who had been members of the Operative Builders Union to sign the "document," a contract binding the signer to renounce his connection with the union. The "document" has constantly tended to reappear in British labor history, even down to the World War. In the United States the "document" appeared in the seventies and eighties of the last century and was known as the "iron clad" contract; in the twentieth century it is designated by trade unionists as the "yellow dog" contract. From the existence of such contracts some form of blacklist may be inferred, for without it the contract would be of limited effectiveness. Commons' *History of Labor in the United States* mentions the use of blacklist as early as 1835, when cotton manufacturers in Paterson, New Jersey, blacklisted the children of strikers (vol. i, p. 421). It refers to the blacklist as coming into general use in the period following the panic of 1873. The Webbs in their *History of Trade Unionism* speak of it as an established practise in Great Britain in 1871 (rev. ed. London 1920, p. 284).

The methods employed in the maintenance of the blacklist cannot be described with finality because the procedure is usually secret. This grows out of the fact that its effectiveness depends as a rule upon secrecy and the further fact that its practise is in many states illegal. However, the following methods are known to have been employed at different times and in different industries: the circulation of lists among allied employers; information given over the telephone or through correspondence by former employers whose names are given by an applicant for work; and the use of "clearance" cards or "grade books" on which an employee's record is inscribed by his last employer and which has to be presented when he applies for a new position. This practise has been common in the shipping industry and to a lesser extent among the railroads. Another method is that of a central employment office maintained by a group of employers and serving an industry or a locality. The applicant for work must first secure the approval of the central office where elaborate records are on file which make possible the weeding out of trade unionists or agitators. Examples of the use of this method are described in Carroll D. Wright's *Labor Disturb-*

ances in the State of Colorado (published by U. S. Bureau of Labor, Washington 1905) and in Paul Brissenden's "The Butte Miners and the Rustling Card" (*American Economic Review*, vol. x, 1920, p. 755–75).

It is equally impossible to estimate the extent of the use of the blacklist in the United States. Direct evidence is hard to obtain, because an employer maintaining a blacklist will seldom admit it, and a worker who is refused employment usually has nothing more dependable than his suspicions on which to found his belief that he is the victim of a blacklist. Nevertheless in printed sources and legal testimony we have some indication of the prevalence of the practise. Richard T. Ely in his *Labor Movement in America*, published as early as 1886, referred to the blacklist as an established practise and cited some specific examples (new ed. New York 1905, p. 110–11). Labor leaders testifying before the Industrial Commission of 1901 were very positive in their assertions about its use (U. S. Industrial Commission, *Report on the Relations and Conditions of Capital and Labor Employed in the Mining Industry*, Washington 1901, vol. xii, p. 248, 328, 349, 356). Laidler in his *Boycotts and the Labor Struggle* presents a convincing array of testimony as to the prevalence of the blacklist, quoted from the statements of labor leaders, economists, editors and public officials. Direct testimony concerning the practise may be found in proceedings in the courts under both common law and statutes involving suits for damages and the constitutionality of legislation. Convincing evidence of the blacklist appears in the *Report on the Steel Strike of 1919* by the Commission of Inquiry of the Interchurch World Movement (New York 1920).

Perhaps the most positive evidence of the widespread use of the blacklist is indirect and to be inferred from the use of what is known as the "spy system." The employment of spies or "under cover" men by many American employers is a practise that is widely known. Certain detective agencies specializing in this type of work frankly advertise the nature of the service they are prepared to render. Evidence concerning the spy system ranges from confidential circulars prepared by such agencies and occasional editorial comment in publications of anti-trade union employers' organizations to sworn testimony in court and documentary evidence of unquestioned authenticity. This evidence indicates clearly that one of the most important purposes of the system is the identification and elimination of active trade unionists.

The effectiveness of the blacklist is difficult to measure. Some of the employing corporations that have been most successful in maintaining an open or non-union shop are known to have been most active in the use of spies and blacklists. Campaigns for organization in non-union territory are constantly blocked by the discharge of men known to have joined the union or to have shown a sympathetic interest in the progress of the campaign. The effectiveness of the blacklist is probably due in large part to psychological forces. Knowledge of its existence tends to create an atmosphere of suspicion and fear that is inimical both to the independence of the worker and to his willingness to join with others in any project of which the employer is likely to disapprove. The defenses of the worker and of his union against the blacklist are necessarily limited. Blacklisting is one of the reasons for the employment of professional union organizers who are beyond the reach of the economic power of the employers. Migration to another locality, a change of trade or the adoption of a new name and similar measures entailing hardships offer some way of escape for the affected individuals.

In the absence of statute the blacklist, in the form of a mere exchange of information, is not illegal. However, if the information is false or given with malicious intent and results in a failure to procure employment, the courts will entertain an action in damages. Twenty-five or more states have enacted statutes declaring some forms of the labor blacklist illegal. These have generally been sustained as a legitimate exercise of the police power by the courts where they have come up for adjudication. Their effectiveness is limited both by specific limitations in the statutes themselves and by the numerous ways by which a blacklist can be maintained without publicity.

JOHN A. FITCH

See: BLACKLIST; EMPLOYERS' ASSOCIATIONS; TRADE UNIONS; LABOR CONTRACT; LABOR DISPUTES; STRIKE; BOYCOTT; ESPIONAGE; INDUSTRIAL RELATIONS.

Consult: Commons, J. R., and Andrews, J. B., *Principles of Labor Legislation* (rev. ed. New York 1927) p. 123–25; Strong, W. J., "Blacklisting: the New Slavery" in *The Arena*, vol. xxi (1899) 273–92; Laidler, H. W., *Boycotts and the Labor Struggle* (New York 1914) chs. ii, xiii and xviii; Blum, Solomon, *Labor Economics* (New York 1925) p. 134–35, 403–05; Catlin, Warren B., *The Labor Problem in the United States and Great Britain* (New York 1926); Sayre, F. B., *A Selection of Cases and Other Authorities in Labor Law* (Cambridge, Mass. 1923) p. 468–78.

BLACKLIST, WAR. *See* TRADING WITH THE ENEMY.

BLACKMAIL. *See* EXTORTION.

BLACKSTONE, WILLIAM (1723–80), English jurist. Blackstone was educated at Oxford and called to the bar by the Middle Temple. He was not at first successful in the practise of his profession. Turning his attention to the literary side of the law he edited Magna Carta, wrote essays on consanguinity, copyholders and other topics, and began the preparation of his *Reports*. On the advice of Murray, the future Lord Mansfield, he gave lectures on English law at Oxford and there became in 1758 the first Vinerian professor of English law; and it was his pre-Vinerian and Vinerian lectures which he revised and incorporated in the four volumes of his renowned *Commentaries on the Laws of England* (1765–69). His success as teacher and writer had resuscitated his practise at the bar, and during the latter part of his life he not only took an active interest in prison reform but was a member of Parliament (1768–70) and for ten years a judge of the Common Pleas (1770–80).

Blackstone inaugurated university instruction in English law. In his use of the lecture method he merely followed the readers in the Inns of Court; but, by making English law a subject of university study and thus placing it beside the civil law of Rome, which from mediaeval times had been taught at Oxford and Cambridge, he departed from the narrow professional attitude of the Inns of Court toward legal education. Arguing for a systematic theoretical study of English law Blackstone not only taught its continuity, unity and reason but in the spirit of humanism, as evidenced by the *Commentaries*, he brought the law into close association with university studies in history, philosophy and politics. His great achievement, however, was his reduction to lucid and systematic statement of that disordered bulk of laws which had gradually accumulated since the days of Bracton. Although Blackstone lacked the originality and force of some of his predecessors in English legal literature, such as Bracton, Coke and Hale, his *Commentaries*, written in a style at once dignified, urbane and clear, are the most complete survey of the English legal system ever composed by a single hand. They made English law as a system of justice comparable with the Roman law and with the continental civil law.

Since Blackstone was not in any marked degree either an original thinker or a proficient analyst, that part of his work dealing with legal and political philosophy consists in the main of a somewhat confused borrowing from Pufendorf, Locke and Montesquieu. It contains nevertheless a few suggestive and forceful lines of Blackstone's own thought, in which, notably in his doctrines of social contract and sovereignty, he improves on Locke. Some of his views on law and government are a *mélange* of conflicting movements in the legal and political thought of the eighteenth century. Like other writers of his age he tends to confuse law and ethics. Certain of his contradictions, such as his inconsistent statements on the supremacy of natural law and of parliamentary legislation, must be read, however, in the light of the general tenor of his whole treatise; for apart from ornamental phrases to the effect that a statute is void if contrary to natural law, a mediaeval doctrine which he derived from the philosophical speculation of Locke, it is clear that Blackstone held to the doctrine of parliamentary sovereignty. His tendency to accept and elaborate older doctrines that were not in harmony with the practise of his own time is illustrated by his doctrine of the royal prerogative, more appropriate to the Stuart period than to the eighteenth century, and by his doctrine that the sources of English law were statute and custom, whereas even in his day they had come to be statute and judicial precedent. His acceptance of Montesquieu's theory of the division of powers illustrates his tendency to adopt doctrines propounded by other jurists without adequate attention on his own part to the facts of English legal and political life.

Possessed of supreme literary judgment, Blackstone was eminently successful in his explanation of the principles of law in the light of their historical development; and as a legal historian who possessed both learning and vision he illustrated in the *Commentaries* the truths, stressed at a later time by Maitland, that the history of English law involves the comparison of foreign legal systems and that in general the history of law is the history of ideas. His emphasis on the value of deeply rooted customs and on the gradual development of law makes him also a precursor of Savigny and the historical school of the early nineteenth century.

While Blackstone at various places in the *Commentaries* advanced proposals for sane legal reform he represented par excellence the Tory conservatism of English legal thought in the

middle of the eighteenth century. It was his complacent optimism, an almost complete satisfaction with the English laws and institutions of his time, which provoked the bitter criticism of Jeremy Bentham, who in 1763 had heard his Oxford lectures, and of John Austin. Thus "by repulsion," as Maine has observed, Blackstone influenced the growth of the movement for utilitarian legal reform and the development of the school of analytical jurists.

Blackstone's *Commentaries*, partly because of their influence on professorial legal writers, have been one of the chief factors in the improvement of English and American legal literature. They have been a pattern in authorship followed by leading jurists such as Kent, Story and Dicey, who have composed books on institutional lines. Although in England his influence on legal development has been slight as compared with that of the masterful Coke, in America Blackstone has proved to be one of the dominant creative forces in the evolution of laws and institutions. The widespread influence of his book on the eve of independence furthered the process of the reception of English law in the legal systems of the colonies; after the Declaration of Independence it helped check the tendency to adopt French law in the older states and was a powerful instrument for the extension of English law to the new states that were being formed from the western territories. In the framing of the federal and state constitutions Blackstone's *Commentaries* were in part a vehicle for the transmission of the leading ideas of Locke and Montesquieu.

H. D. HAZELTINE

Works: A list of English and foreign editions, adaptations and abridgments of the *Commentaries* will be found in the article on Blackstone in the *Dictionary of National Biography*. A recent standard edition is by W. D. Lewis, 2 vols. (Philadelphia 1922).

Consult: Foss, Edward, *Biographia juridica* (London 1870); Bentham, Jeremy, *A Comment on the Commentaries; a Criticism of William Blackstone's Commentaries on the Laws of England*, ed. by C. W. Everett (Oxford 1928), with introduction; Dicey, A. V., "Blackstone's Commentaries" in *National Review*, vol. liv (1909–10) 653–75, and *Lectures on the Relation between Law and Public Opinion in England during the Nineteenth Century* (2nd ed. London 1914); Thayer, James Bradley, "Teaching of English Law at Universities" in his *Legal Essays* (Boston 1908) p. 367–87; Warren, Charles, *History of the American Bar* (Boston 1911) p. 157–87; Holdsworth, W. S., *Historians and Anglo-American Law* (New York 1928) p. 54–60; Birkenhead, Earl of (F. E. Smith), *Fourteen English Judges* (London 1926) p. 197–223; Pound, Roscoe, *Spirit of the Common Law* (Boston 1921).

BLACKWELL, ELIZABETH (1821–1910), Anglo-American pioneer in the medical education of women and the first woman physician of modern times. She was born in England but came to the United States with her family when she was eleven. In 1845 she began her medical education, at first teaching herself and later receiving private instruction. She was heavily handicapped by lack of finances as well as by the current prejudices against professional women. After being denied admission to several colleges she was finally accepted by the Geneva Medical School of Western New York, from which she was graduated in 1849, the first woman in the United States to secure a medical degree. Thereafter she studied in Paris and in London, returning to the United States in 1850. When refused a position in the department for women of a New York dispensary, she founded, with the assistance of her younger sister, Dr. Emily Blackwell, and with the support of a group of Quakers, the organization which later became part of the New York Infirmary and College for Women. In 1858–59 she visited England on a lecture tour, and was the first woman to register under the Medical Act of 1858. Ten years later she settled in England, where she aided in organizing the London School of Medicine for Women and participated in the current movement for social hygiene.

In her autobiographical book, *Pioneer Work in Opening the Medical Profession to Women* (London 1895, rev. ed. London 1914), she discloses the fact that at the outset her choice of a career developed not so much from an interest in medicine as from a conviction of the need for women in such work. This attitude was based not on any "anti-man" or "women's rights" sentiments but on a deep sense of moral obligation which was apparent also in her speeches and many essays on the subject of the education of the young and in her endeavors for the elimination of the double standard of morality. The immediate result of her entering the medical profession was a hasty shutting down of the bars which had been left open because women had not been expected to come in. Although the long struggle against the entrance of women is not yet entirely terminated it has become possible for thousands of women to do easily what required so much effort and perseverance on the part of Elizabeth Blackwell.

LORINE PRUETTE

Consult: Strachey, Ray, *The Cause* (London 1928) chs.

ix–x; Woody, Thomas, *A History of Women's Education in the United States*, 2 vols. (New York 1929) vol. ii, p. 340–62.

BLACKWELL, LUCY STONE. *See* STONE, LUCY.

BLAINE, JAMES GILLESPIE (1830–93), American statesman. Blaine acquired his first political experience, after seven years of teaching, in the state politics of Maine and as editor of the *Kennebec Journal* at Augusta. He was one of the founders of the Republican party in Maine, became its state chairman (1859–81), was elected to the state legislature (1858) and to the House of Representatives (1863–76) and was appointed senator in 1876. As speaker of the House (1869–75) he consolidated his political position and by 1876 had become an important presidential possibility, but he was defeated for the nomination by Hayes. A major factor contributing to his defeat was the charge that he had used the speakership in 1869 to aid railroads in which he was financially interested—a charge which his friends thought disproved by his speech in the House explaining the incriminating "Mulligan Letters" (1876) but which others thought at best "not proven." This episode alienated the Mugwumps, the reform group headed by Carl Schurz. Their opposition, along with the enmity of Conkling and his "Stalwarts" within the party itself, kept Blaine from the nomination again in 1880, and in 1884, when he did receive it, was an important factor in his defeat by Cleveland.

Blaine's career, which he himself sketched in his *Twenty Years of Congress* (2 vols., Norwich, Conn. 1884–86), remains one of the most brilliant in American politics. The "Plumed Knight" to his friends, his "magnetic" charm, persuasive eloquence and undoubted ability made him a power for a generation. His most significant contribution was in his molding of foreign policy as secretary of state under Garfield (1881) and Harrison (1889–92). At a time when American diplomacy was dominated by formula he built up a constructive policy and sought to make it an expression of the fact that America was now a world power. Circumstances and politics thwarted his plans, which were probably premature, and gave him an undeserved reputation as meddler and blusterer. But the chief elements of his policy were a desire for closer relations with Latin America and opposition to the extension of British power to the sphere of possible American influence. To secure an American controlled canal across the Isthmus of Panama he sought abrogation of the Clayton-Bulwer Treaty. He considered the Hawaiian Islands part of the American system and looked forward to their annexation. After a firm stand on the Bering question he submitted the controversy to arbitration. Although in 1881 Arthur and Frelinghuysen thwarted his plans for a congress of American states he had the satisfaction, on his return to office in 1889, of greeting the first pan-American conference. He was, however, unable to persuade his party to cement, by the granting of tariff preference to Latin America, the cordial relationships he had built up at that gathering.

L. B. SHIPPEE

Consult: Stanwood, E., *James Gillespie Blaine*, American Statesmen series, vol. xxxiv (Boston 1917); Tyler, Alice F., *The Foreign Policy of James G. Blaine* (Minneapolis 1927); Lockey, Joseph B., in *The American Secretaries of State and Their Diplomacy*, ed. by S. F. Bemis, 10 vols. (New York 1927–29) vol. vii, p. 261–97, and vol. viii, p. 107–84.

BLAIR, FRANCIS PRESTON (1791–1876), American editor and partisan of Andrew Jackson. He graduated in 1811 from Transylvania University in Kentucky, his native state, and threw himself at once into political life, where he showed marked talents as a writer. In 1830 President Jackson invited him to join in founding the Washington *Globe*, which Blair edited and conducted as the official mouthpiece of the Democratic party until 1845 when President Polk forced him to resign for political reasons. In order that the public might have a better vision of the happenings in Congress Blair established and published the *Congressional Globe* to record its debates and acts. This was the forerunner of the *Congressional Record*, now issued by Congress itself. During all this activity his pen displayed rare power; he was the partisan editor par excellence and as a member of Jackson's "Kitchen Cabinet" he exercised extraordinary influence not only upon the president but also upon the entire political life of the country. His social attitude is to be deduced from his advocacy of legislative control of judicial decisions, cheap western lands, the abolition of imprisonment for debt and direct election of the president, as well as from his bitter opposition to nullification and extension of slavery. Although he maintained that Congress had the power to levy tariffs, nevertheless he urged a steady downward revision. A political party was to him merely an instrument for

registering the will of a group; throughout his career he prided himself on being not only a Democrat but a democrat, even during the decade following 1856 when he was affiliated with the Republican party, of which he was one of the founders.

OSWALD GARRISON VILLARD

Consult: Buell, A. C., *History of Andrew Jackson*, 2 vols. (London 1904) vol. ii, p. 288–94; Bowers, Claude G., *The Party Battles of the Jackson Period* (New York 1922) p. 160–70, 242–59.

BLAKE, EDWARD (1833–1912), Canadian jurist and statesman. He was born in Upper Canada and was called to the bar in 1856. After the federation of 1867 he served as counsel in many leading test cases before the Judicial Committee of the Privy Council. Through his breadth of learning and the clarity of his juristic conceptions he not only acquired a reputation as one of the greatest constitutional lawyers of his day but succeeded in imparting a new dignity to the Canadian bar. His term as minister of justice (1875–77) was notable for the creation of the Supreme Court of Canada, which enabled the Canadian judiciary to handle many appeals which would otherwise have gone to England, as well as for important changes and modifications in the prerogative instruments of the governor general's office. These changes accentuated the autonomy of the Dominion and paved the way for those definitions, conventions and customs which today guide the governor general in his capacity as personal representative of the king. Blake was also a leading exponent of provincial rights and laid the permanent foundations on which the structure of provincial legislative power in Canada has been built.

Blake's career as statesman was not especially effective. In 1879 he became leader of the Liberal opposition to Macdonald's government, but retired in 1887 in favor of Laurier. His famous "Aurora Speech" in 1874, the result of his brief identification with the "Canada First" movement, has been called a landmark in Canadian politics. By no means original in content, it advocated federation of the empire, reorganization of the dominion senate, proportional representation, extension of the franchise and compulsory voting.

W. P. M. KENNEDY

Consult: Kennedy, W. P. M., *The Constitution of Canada* (Oxford 1922) p. 340–44, 420–23; Keith, A. B., *Responsible Government in the Dominions*, 2 vols. (2nd ed. Oxford 1928); Wallace, W. S., "The Mystery of Edward Blake" in *Canadian Magazine*, vol. xxxix (1912) 395–400, and "The Growth of Canadian National Feeling" in *Canadian Historical Review*, vol. i (1920) 136–65, and "Edward Blake's Aurora Speech, 1874" in *Canadian Historical Review*, vol. ii (1921) 249–71.

BLANC, LOUIS (1811–82), French statesman, historian and theorist of socialism. Blanc came of a royalist family; his grandfather was guillotined during the French Revolution and his father had served under Joseph Bonaparte, whose downfall brought poverty to the family and to Blanc in his student days. After the Revolution of 1830 Blanc was editor of *Bon sens* and later of the *National*, and thus came in contact with the political and social problems of his day, which he described in the *Histoire de dix ans* (5 vols., Paris 1841–44, 12th ed. 1877–83; English translation, 2 vols., London 1844–45). In 1847 he joined the staff of *La réforme*, a paper of the extreme left, and in the following year was nominated by the people of Paris to the provisional government of 1848, in which with the workman, Albert, he represented the socialist element. The bourgeois majority was hostile to Blanc, who soon came under suspicion in connection with the workers' demonstration of March 17. The Luxembourg Labor Commission, of which he was president, was deprived of real power, and the *ateliers nationaux* (*q.v.*) organized by the minister of public works, Marie, were a caricature of Blanc's proposal. Compromised despite himself in the events of May 15, by vote of the Constituent Assembly on August 26 Blanc was referred for trial to the Supreme Court of Bourges. In England, whither Blanc fled before the trial, he wrote a number of works justifying his part in the Revolution of 1848, among them the *Pages de l'histoire de la révolution de février 1848* (Paris 1850), and completed his monumental *Histoire de la révolution française* (12 vols., Paris 1847–62; new ed. 15 vols., 1878), in which as a careful historian he permitted texts and sources to speak for themselves. He refused to return to France before the downfall of the Second Empire in September, 1870. Elected to the National Assembly in February, 1871, he sat with the extreme left, protesting against the severity of the repressive measures, without condoning, however, the violence of the Commune. From 1876 until his death Blanc was a member of the Chamber of Deputies, where he headed a small group of idealist radicals who refused to follow Clemenceau and Gambetta, and led in the struggle to secure an amnesty for the condemned Communards.

A politician of rare integrity, Blanc was faithful during his long and varied career to the ideal of social reorganization which would eliminate evils, root and branch. His plan was outlined at first in *Organisation du travail* (Paris 1839, 9th ed. 1850; tr. by M. P. Dickoré, Cincinnati 1911) and remained substantially unchanged despite many criticisms, particularly from the followers of Proudhon and the "pure" revolutionists. Although some elements of his doctrine can be traced to his precursors—the emphasis on organization to Saint-Simon, the critique of competition to Fourier, the belief in the essential goodness of man to Rousseau, the recognition of the role of environment and evolution to Montesquieu—Blanc displayed a certain originality in his constructive proposals, particularly in the function assigned to the state. For the unlimited competition of individuals Blanc wished to substitute a universal system of workmen's associations, of *ateliers sociaux*, based on the principle "from each according to his ability, to each according to his needs." The immense social capital would be collectively owned, the compensation for labor based on the amount of time devoted to work and the exchange of goods facilitated by the use of paper money representing accumulated labor. The government through its "minister of progress" should provide the initial stimulus for the new system by financing the early associations and should later supervise the functioning of the entire system. In the transition stage the government should nationalize railroads, mines, the Bank of France and the storage and marketing facilities of wholesale and retail trade. Blanc insisted that only with the assistance of the state could this social transformation be accomplished.

GEORGES BOURGIN

Consult: Tchernoff, J., *Louis Blanc* (Paris 1904); Renard, E., *La vie et l'oeuvre de Louis Blanc* (Toulouse 1922), with a complete bibliography of Blanc's writings; Pechan, H., *Louis Blanc, als Wegbereiter des modernen Sozialismus* (Jena 1929).

BLANQUI, JÉRÔME ADOLPHE (1798–1854), French economist. Blanqui had a distinguished career; he was the successor of J. B. Say at the Conservatoire des Arts et Métiers (1833), head of the École Spéciale du Commerce (1830–54), member of the Académie des Sciences Morales et Politiques and first editor of the *Journal des économistes*. His writing, although extensive and erudite, exhibited little theoretical originality. His best known work, *Histoire de l'économie politique*, was the first general treatise on the subject. Regarding political economy as embracing systems of policy as well as a body of doctrines, he interwove economic history and the history of economics in an enlightening if at times superficial manner.

His dominant interests, however, were industrial and commercial history and the welfare of the working classes. Although a liberal and a follower of Adam Smith he was much impressed by Sismondi's writings and advocated positive governmental action for the protection of workers. At the time of his death he was engaged in an extensive investigation into the condition of the French agricultural classes.

PAUL T. HOMAN

Important works: *Histoire de l'économie politique en Europe, depuis les anciens jusqu'à nos jours*, 2 vols. (Paris 1838; 5th ed. in 1 vol., 1882), tr. by E. J. Leonard from 4th ed. (New York 1880); *Résumé de l'histoire du commerce et de l'industrie* (Paris 1826); *Précis élémentaire d'économie politique* (Paris 1826, 3rd ed. 1857).

Consult: Duvoir, Léon, *Recherche des tendances interventionnistes* (Paris 1901) chs. iii–iv; Krawtschenko, Nikolaus, "J. A. Blanqui—der erste Verkünder der Idee des internationalen Arbeiterschutzes" in *Jahrbücher für Nationalökonomie und Statistik*, 3rd ser., vol. xl (1910) 349–52.

BLANQUI, LOUIS AUGUSTE (1805–81), French revolutionist whose name is connected with the current of French radical thought known as Blanquism. Blanqui, whose father had been a member of the Convention in 1793, made early revolutionary contacts when as a student at the Lycée Charlemagne he joined the Paris branch of the Carbonari and was initiated into their conspirative methods. In the Revolution of 1830 and in every subsequent revolutionary uprising in France Blanqui was a prominent figure. His leadership and influence were especially remarkable because he was imprisoned intermittently for forty of the remaining years of his life, sometimes under sentence of death. He led the unsuccessful uprising of 1839, was outstanding in the opposition to the Provisional Government following the Revolution of 1848 and was involved in the uprising of August 14, 1870, during the period of the Paris Commune. Throughout his career Blanqui advocated revolution by coups d'état carried out by secret organizations of carefully selected, armed members rather than by any deliberative procedure or mass organization. In the course of time his revolutionary program gained in clarity. In the thirties he was willing to struggle for the estab-

lishment of a republican form of government as a step toward the ultimate goal of a communistic society which would guarantee to all free education, the right to work and social equality. Later he laid more and more emphasis on the "class struggle," an attitude which was made clear in his attack on Proudhonism. In his "Instruction pour une prise d'armes," written in 1867, Blanqui placed even greater reliance on the workers and on the *déclassé* bourgeoisie whom he considered a "secret ferment" in the capitalist order. According to this program the workers were to arm themselves, seize the government, disarm the bourgeoisie and establish a proletarian dictatorship. Having won power they were to confiscate the large landed estates, establish state control of factories, annul the public debt and introduce a progressive income tax. Blanqui recognized the necessity of placating the peasants by means of special concessions.

After Blanqui's death his followers under Édouard Vaillant tried to continue the revolutionary tradition of their teacher, but under the conditions of the Third Republic they adopted parliamentary methods and formed a socialist group in the French Chamber of Deputies. Some of this group were influential, especially in their inevitable endorsement of the "general strike," in the formation of French syndicalism. After 1900, however, Blanquism was completely merged in the French socialist movement. Internationally Blanquism was a significant factor in the formation of Marxism. Marx came in contact with Blanquism in his early years and during the period of the first International, where Blanquist delegates under the leadership of Eudes were given adequate recognition. There can be no doubt that the Marxian concept of proletarian dictatorship can be traced to Blanqui and that Blanqui's ideas as formulated in his "Instruction" anticipated the strategy of Lenin and of the Bolsheviks.

LEWIS L. LORWIN

Important works: *La patrie en danger* (Paris 1871); *L'armée esclavée et opprimée* (Paris 1880); *Critique sociale*, 2 vols. (Paris 1885).

Consult: Geffroy, Gustave, *L'enfermé* (Paris 1897); Zévaès, A. B., *Auguste Blanqui* (Paris 1920); Dommanget, Maurice, *Auguste Blanqui* (Paris 1924); Postgate, R. W., *Out of the Past* (London 1922) p. 24–25; Mason, E. S., "Blanqui and Communism" in *Political Science Quarterly*, vol. xliv (1929) 498–527; Da Costa, Charles, *Les Blanquistes* (Paris 1912); Wassermann, Suzanne, *Les clubs de Barbès et de Blanqui en 1848* (Paris 1913); Lorwin, Lewis L. (Louis Levine), *Syndicalism in France* (New York 1914) p. 41–42, 58–59.

BLASPHEMY. By first intention the equivalent of evil speaking or libel (*maledicentia*), blasphemy has come by universal usage to mean evil speaking or libel of divinity, its attributes, derivatives and connections. To a very large proportion of mankind it is an act dangerous in itself and disastrous in its consequences—therefore a crime. The root of this attitude reaches very deep in folkways. Names and things early became continuous and interchangeable. Even modern sophisticates are apt to lower their voices and look about them when they mention the absent powerful in a derogatory way, while to the primitive and the ancient mind a name was an extremely near and potent part of a personality, charged with its traits, its power and its fate. Attitudes toward the name consequently were the same as attitudes toward its owner and provoked like reactions. Hence the tabu of names among savages; the Egyptian custom of giving children two names, the personal and true one being secret; and the practise among the Greeks of calling priests attached to the mysteries by their sacred titles only—a practise which has its echoes in the Roman Catholic church where cardinals take new names on mounting the throne of Peter. The names of the dead, of kings and of the gods were similarly tabu. As the name was the life and the power, to mention it was to bring back the dead, to conjure up the blasting power of the king or God. Uttering it with impunity therefore required a certain defensive equipment such as usually pertains to priests and kings. Those who had such an equipment were in a position of advantage; they were "masters of the name" and thus masters of its power. By this mastery Isis, who won possession of the great name of Ra, made herself a goddess; Solomon, the Baal-Shem and the like are able to command the powers of earth and air. Blessings and maledictions of churches are pronounced "in the name of."

Mastery of the name was thus the privilege of the specialized few. In the mouths of the profane its mere sound might kill and its improper use might evoke the wrath of the divinity. Among the Greeks blasphemy was a crime because they feared the wrath of the god, among the Hebrews because they feared the instant blasting power of the name itself. Both peoples punished blasphemy with death, and among others the penalty varied from a fine and banishment to death.

The distinction between the properly

equipped and consequently privileged specialist who is "master of the name" and the profane outsider who is not, provided the basis of the attitude of the western world toward blasphemy. The theocratic law of the Jews, which made blasphemy a deadly sin, became the canon law of the church. The guilty person was, according to Justinian's *Novellae* (lxxvii–lxxviii), subject to the extreme penalty of the law. Its scope became coincident with the doctrines, institutions, privileges and powers of the established order of political and ecclesiastical economy. Any denial or challenge of the orthodoxies concerning God or His attributes or His revealed word, concerning Jesus and His powers or Mary and hers, concerning the authority by divine right of church or state, constituted the crime of blasphemy. It was according to the scholastics the deadliest of all sins, the polar opposite of charity or love.

With the Reformation the incidence of blasphemy changed slightly. Ecclesiastical institutions had multiplied and ecclesiastical claims to the vicarship of God were correspondingly manifold and competitive. Monarchy by divine right grew in power and the offensive quality of blasphemy became more political than ecclesiastical—of course under the rules of the canon law. For even in Protestant countries such as England Christianity was held to be "part and parcel" of the common law and "all blasphemy and profaneness are offenses by the common law." The same held true in the British colonies of North America. Thus it was possible to treat as blasphemy a program of religious tolerance like that of Roger Williams.

It might have been expected that blasphemy would cease to be a crime in the United States after the adoption of the constitution. But the First Amendment merely forbade Congress to legislate concerning "an establishment of religion." Moreover, in almost all the New England states and Maryland, Protestant Christianity was established by law. Even in those of the original thirteen states whose constitutions prohibited religious discrimination or preference, blasphemy was still held to be a crime at common law on the ground that if left unpunished it would tend to cause breaches of the peace, since the vast majority of the population was Christian. Nevertheless the actual number of prosecutions in nineteenth century America was not great because of the general secularization of life positively effected by industry, science and free public education and negatively by the competition of the sects. In England, however, where the church was established, there were no legal difficulties and social conditions were such as to make for more frequent prosecutions. Nokes in his *History of the Crime of Blasphemy* gives tables listing 138 cases of blasphemy prosecution at common law in the period from 1617 to 1922, and 59 additional cases from 1678 to 1842 which were probably at common law. The blasphemy prosecutions of late Victorian times against such noted rationalists as Bradlaugh, Footc, Holyoake, Ramsey, Carlile, Cooper and Watts were the paradoxes of an apparently liberal England. But in 1883 a change in the law was signalized when Lord Coleridge, sitting in the case of Reg. *v.* Ramsey and Foote (*15 Cox Criminal Cases*, 231) declared that "if the decencies of controversy are observed even the fundamentals of religion may be attacked without the writer being guilty of blasphemy." It was not, however, until 1917 that the House of Lords gave its approval to this view in the case of Bowman against the Secular Society Ltd. (1917, *Appeal Cases*, 406).

The gravity of the offense has been shifted from *what* is said to *how* it is said. The connection of the alleged blasphemy with social or political radicalism has become particularly important. In 1926 in Brockton, Massachusetts, one Anthony Bimba was cleared of blasphemy by Judge Ring but found guilty of sedition, of which he was not accused. In 1928 a warrant was issued on a charge of blasphemy for the arrest of H. M. Kallen, a speaker at a Sacco-Vanzetti memorial meeting in Boston. This warrant, however, for reasons not made public, was withdrawn before it was served. The tendency in these cases has been to give blasphemy a secular construction as "breach of the peace," "disorderly conduct," etc., and so to charge the offense where other charges cannot lawfully be made. This, of course, would not rule out the possibility of treating blasphemy as a theological offense where an ecclesiastical establishment acquires enough influence and power.

HORACE M. KALLEN

See: SACRILEGE; CENSORSHIP; FREEDOM OF SPEECH AND OF THE PRESS; INTOLERANCE; LIBEL; SEDITION; ATHEISM.

Consult: Nokes, G. D., *A History of the Crime of Blasphemy* (London 1928); Stephen, J. F., "Blasphemy and Blasphemous Libel" in *Fortnightly Review*, n. s., vol. xxxv (1884) 289–318; Schroeder, Theodore, *Constitutional Free Speech Defined and Defended* (New York 1919).

BLIND. No practical and uniform definition of blindness has been worked out. Several ready to hand definitions have been devised, such as inability to designate form or color, to count upon the hand at a distance of twelve inches, to read writing or print in large characters or to recognize the human face. What is sometimes known as "industrial blindness" is commonly defined as insufficient sight even with the aid of eyeglasses for the execution of economic tasks. More precise definitions based upon medical examination refer to the proportion of visual perception still retained, frequently the possession of not more than one tenth of normal vision in the better eye.

The blind population of the entire world has been roughly estimated as from 3,000,000 to 5,000,000. In the United States the census bureau reported 52,567 blind persons for the year 1920, and computed the total blind population as 74,500. The estimates of special commissions for the blind, which have been created in certain states, have usually been about one third higher than those of the census bureau.

Blindness is more common among males than among females; the ratio in the United States is 134.6 males to 100 females. This excess of males is in some part due to their greater exposure to industrial accidents and to their greater liability to venereal disease. Blindness is found to a larger extent among colored races than among the white, probably in large part because of lack of proper medical care. It occurs in ever increasing measure with the advance of old age. Nearly one half of the blind population in America is over sixty, while only 7.5 percent of the general population are above that age. Under five years of age there are 32 blind persons per 1,000,000; at eighty-five or over there are 15,858.

The causes of blindness and therefore the degree of preventability vary greatly in different sections of the world. Two of the greatest causes of blindness are becoming more negligible every year in civilized countries where proper preventive methods have been introduced. These are *ophthalmia neonatorum*, commonly caused by venereal infection at birth, and trachoma, a highly infectious inflammation of the conjunctiva, partially curable by treatment or operative measures and preventable through isolation of centers of infection. Both are diseases which flourish under unsanitary conditions and lack of skilled medical care. *Ophthalmia neonatorum* is commonest in countries such as India where midwifery is practised with little medical supervision and much superstition. In most civilized countries today the use of preventive measures at the birth of every child, whether or not venereal infection be suspected, is required by law and the rate of blindness from this cause is thereby cut down tremendously. Trachoma has been an epidemic disease of military and civil life since 1798, when Bonaparte and his army invaded Egypt and brought it back with them. So far as it is traceable the disease seems to have originated in Egypt and it is still rife there as well as in southeastern Europe, Arabia, China, Russia and Poland. Trachoma was one of the more important causes of blindness in the United States until 1907, when the new immigration act excluded aliens affected with the disease. Trachoma is now found mainly in certain restricted areas of the country, including localities in which Indians live.

From the returns of the 1920 census it appears that nearly three fourths of the blindness in the United States is attributable to disease; the rest is due to external causes including accidents (alone responsible for about one sixth), poisoning, foreign substances in the eye and malformations. Of the blindness caused by disease over two thirds is chargeable to some specific affection of the eye and a little under one third to some disease of more general character. Among specific diseases of the eye cataract is most prevalent; this disease alone causes about one seventh of all blindness. Less important are glaucoma, atrophy of the optic nerve, *ophthalmia neonatorum*, trachoma, retinal disorders, various corneal disorders (especially corneal ulcer) and other affections including progressive myopia. The leading general diseases causing blindness are measles, meningitis and scarlet fever. Venereal disease plays an important part in the loss of vision; directly and indirectly it is probably responsible for not less than one sixth of all blindness in the United States.

A large part of the blindness due to special ocular disorder is within medical control. As indicated above, *ophthalmia neonatorum* and trachoma are without much difficulty almost entirely preventable. Cataract, glaucoma of an acute nature and not a few other affections of the eye might be greatly reduced in extent.

Blindness from such general diseases as measles, meningitis and scarlet fever is now rapidly decreasing and might be almost entirely suppressed. Progress in the control of communicable diseases will indirectly result in the

decrease of cases of blindness attributable to them. In individual cases blindness resulting from a general disease can often be prevented by early recognition and skilled treatment. As general health conditions, sanitary measures and living standards are improved and with the widespread establishment of eye clinics there will be less occasion for blindness from these causes.

Blindness due to external causes is also in large measure preventable. Blindness from accidents is fundamentally due to neglect or carelessness on the part of the individual and to conditions of modern industry. In industrial establishments the eye may be struck by various substances, especially particles of flying metal; or the sight may be impaired or destroyed by intense light or by contact with heated or noxious chemical substances. Blindness from such causes can be eliminated to a large extent by appropriate safety regulations such as good lighting arrangements, proper exhaust systems for the removal of gases and dusts, hoods or shields for certain operations and the use of goggles wherever necessary. Conditions for the protection of the eye in industry are steadily improving. Legislation requiring the adoption of general safety measures is increasing, although as yet there is but little specific mention of the eye. Workmen's compensation laws, now almost general in the United States, provide another impetus to the movement for the installation of safety devices.

Hereditary blindness, although small in proportion, cannot be controlled since its manner of operation is as yet but little known. The factor of heredity is responsible for most of the non-preventable cases of blindness, which in the United States constitute one fourth of the total. Blindness of hereditary character is found to move through certain diseases, especially cataract, *retinitis pigmentosa*, detachment of the retina, progressive myopia, etc. The hereditary influence is illustrated by the ratios derived from the 1920 census report: 4.2 percent of the blind have one or both parents blind, 9.7 percent blind brothers or sisters and 1.7 percent blind children.

Blindness has always been looked upon as one of the heaviest of human afflictions. In earliest times the blind were treated with but a limited degree of consideration, now and then suffering direct abuse but more often only regarded as hindrances to the able bodied. Often blindness was deemed a divine visitation or punishment for the misdeeds of those stricken or of their forefathers. In later times, particularly with the advent of Christianity, the blind became objects of pity and were encouraged to beg; they became one of the traditional subjects for bestowal of alms by the benevolently inclined. In the Middle Ages shelter and some degree of care were given the blind by the monks in hospices. In the following centuries we find sporadic instances of corporations for the care of the blind and attempts at educating individual blind persons. In spite of this the general attitude of indifference persisted well into the modern period, and not until the last half of the eighteenth century is there any evidence of a sense of social obligation toward the blind.

Even in the twentieth century the blind suffer grievously from misconceptions of their behavior and abilities on the part of a general public which, paradoxically enough, is well disposed toward them. Too often the blind are regarded as little more than beggars, frequently with a special privilege to solicit alms on the assumption that they can do nothing else. Such treatment has a doubly injurious effect: it licenses and encourages the blind person to play upon his infirmity, and it confirms in the public mind a sense of the utter dependence of this class. Another source of trouble is the inability of the public to recognize the vast differences between individual blind persons. The law, reflecting uninformed public opinion, is even slower to recognize the actual needs of the blind. It is not based on a scientific, well rounded conception of the relation of the blind to society at large, although in certain states in America recent legislation in this field shows distinct improvement.

The earliest intelligent attempts to improve the conditions of life for the blind are found in the field of instruction for blind children. The first school for the blind was established by Valentin Haüy in France late in the eighteenth century and its success eventually aroused a great deal of public interest. In the United States the first school for the blind, the Perkins Institute, was established by Samuel Gridley Howe in Boston in 1829; it had some financial public support from the outset. Shortly afterward institutions were founded in New York and Philadelphia. The schools established subsequently throughout the United States achieved from the outset an amount of public support which is significant in differentiating them from

those which had grown up abroad. Those first established in the United States have for the most part remained private undertakings, in the hands of special bodies created for the purpose but with regular state assistance; the later schools have been strictly state institutions. Less than a dozen states are now without special institutions, either private with state support or entirely state supported. In a few states blind and deaf children are educated in the same institution, a policy on the whole undesirable but sometimes excused because of the small number of pupils. In an increasing number of American cities special classes for blind children are being established. There are also what are known as sight saving classes for the partially blind; in some cases these special classes operate under state laws with the aid of state funds. In certain states scholarships are provided for the blind at regular colleges, and the idea of a special college for the blind has been raised but has been generally abandoned. In a few states there are homes for very young or pre-school blind children, combining the features of a kindergarten, nursery and hospital.

The first real mitigation in the condition of the blind came with the invention of raised print by Valentin Haüy, Paris, 1784. Since then a number of different systems of printing for the blind have been evolved, but their usefulness has been impaired by lack of uniformity. A uniform system of raised print known as Revised Braille (*see* BRAILLE) has now been adopted for the United States. Of printing houses for the blind in the United States the chief is the American Printing House at Louisville, which is subsidized by the federal government. There exist also libraries for the blind which in many cases send out books to homes in the neighborhood and sometimes honor requests from the most distant parts of the country. This home use of libraries is greatly facilitated by the free use of the mails accorded to reading matter for the blind. Despite the tremendous value of raised print barely one third of the blind of the United States are able to read any form of it. This is largely due to the occurrence of blindness relatively late in life with consequent lack of enthusiasm for learning the new manner of reading.

Home teaching is a recent development in the attempt to broaden the life of the blind. This covers general intellectual instruction, the use of raised print and instruction in simple handicrafts, especially sewing, the latter being intended to aid the blind partially to support themselves.

The great outstanding problem of the blind today is still an economic one. Eyesight constitutes such an essential physical faculty in the ordinary course of earning a livelihood that those bereft of it find it most difficult and in many cases impossible to enter the ranks of independent wage earners. The field of employment which is open to the blind is exceedingly circumscribed, and economic independence for them is proportionately difficult. History shows examples of certain occupations to which large numbers of the blind flock by tradition. In Mohammedan countries, for example, the blind become teachers of the Koran, which they first learn by heart. Japan has a league of blind masseurs. Begging in the Orient and Africa is an accepted means of support for the blind. On city streets in America the blind vendor of small and often useless wares is an all too customary sight. Accurate data on the number of blind who work and the amount of their earnings are difficult to obtain and no estimate is therefore attempted except for the United States. Here only about one fourth of the blind males can even nominally be regarded as gainfully employed. Of blind males so classed less than one half earn more than $400 a year. Of all the adult blind only about one eighth can be regarded as wholly self-supporting. A small proportion of them have independent means. Really considerable incomes are earned only by those who have special talents or who had achieved highly paid positions before the onset of blindness. The unfavorable economic situation of the blind is however not to be attributed to blindness alone, since a very large proportion of the blind are too old for industrial employment in any case. However, there can be little doubt that with fuller investigation of the subject and with more suitable training a considerably larger field of employment can be found.

Of the blind who are gainfully employed in this country three fifths are engaged in broom making, farming, retail dealing, piano tuning, playing and teaching of music, chair caning, and huckstering. A number in general occupations including professional occupations have continued in their callings after the advent of blindness. This is true of many of those reported as engaged in farming who have been able to continue with minor farm tasks such as milking. Numbers in mechanical and manufacturing pursuits are engaged in some simple

handicraft. Among blind women sewing is the most usual occupation.

Of the blind who are not self-supporting the greater part are cared for by their families, friends or relatives. A small proportion, chiefly the aged, are cared for in special homes for the blind. Others are supported by their earnings in special industrial establishments subsidized by private charity. The majority of the remainder are directly dependent wholly or in part upon public or private charitable agencies.

Special industrial establishments have been organized in the hope that the blind could thereby be made self-supporting, but their limitations soon became apparent. They can accommodate only the blind of early or middle age, of temperamental fitness and of proper industrial qualifications—qualities not found among the greater number of the blind. The restricted nature of possible industries, together with the inability of the blind to compete on even terms with those who can see, makes it very difficult for such establishments to attain any considerable measure of self-maintenance. There are possibly fifty special industrial establishments in various parts of the United States, some of which include a boarding or living home as well.

An increasing effort is being made by certain agencies to find employment for blind persons in regular workshops or in some business enterprise of their own. Feasible only for a limited number and requiring efficient supervision this is at best a costly enterprise. The plan has some hopeful features. Although the financial rewards cannot be large, work of a simple character can be done by a few of the blind in factories where the management is sympathetic. By a larger number work can be done in their own homes, especially some form of sewing by women. St. Dunstan's in England, the home and school for the blind veterans of the World War, has achieved some success in training and placing blind soldiers in gainful employment. The patriotic appeal of the blind veteran has removed some of the obstacles to the finding of employment.

In America about half the states have within the last few years developed systems of pensions for the blind. The maximum amount allowed is usually about $300 a year. The system has in many cases been rather loosely directed. There is great need for a well devised, carefully administered relief system for the blind, although this alone, however well administered, can never afford the kind of solution for the individual which is always offered by a job.

The one really desirable means of affording financial aid to the blind who cannot support themselves is through some plan of social insurance whereby compensation is granted on the occasion of the loss of sight. In the United States this principle is now embodied only in workmen's compensation acts, which are becoming increasingly comprehensive.

HARRY BEST

See: DEPENDENCY; BEGGING; DEAF; MENTAL DEFECTIVES; COMMUNICABLE DISEASES, CONTROL OF; VENEREAL DISEASES; HEREDITY; IMMIGRATION; ACCIDENTS, INDUSTRIAL; SAFETY MOVEMENT; COMPENSATION AND LIABILITY INSURANCE; VETERANS; REHABILITATION; SOCIAL CASE WORK.

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BLIOKH, IVAN STANISLAVOVICH. *See* BLOCH, JEAN DE.

BLISS, WILLIAM DWIGHT PORTER (1856–1926), American Christian Socialist, clergyman and editor. Bliss came of old New England stock of idealistic traditions. His experience as clergyman brought him into close contact with groups of workers, especially the mill operatives of South Natick, Massachusetts, whose conditions aroused first his sympathy and then his indignation. In order to establish more direct association with working people he joined the Knights of Labor and in 1890 founded

the Church of the Carpenter in Boston. Realizing the limitations of individual effort he tried indefatigably and with considerable resourcefulness to extend the influence of his beliefs. In 1889 he founded the first Christian Socialist society in the United States and edited its organ, the *Dawn*, from 1890 to 1896; for four years he preached and lectured in the United States, Canada and Great Britain on problems of labor and social reform; he edited and published the works of Mill, Ruskin and Thorold Rogers in popularized form. Together with Bellamy, Henry D. Lloyd and others he published the monthly periodical the *American Fabian* (1895–1900) and attempted to found an American society patterned after the English group. His most outstanding achievement, however, was the *Encyclopedia of Social Reform* (New York 1897, revised 1908), in which articles by scholars and leaders of reform presented a survey of projects and theories of social reconstruction. Edited almost entirely by Bliss it was the first important attempt made in the United States to gather primarily social data into an encyclopaedia. It was followed by the yearbook, *Social Progress* (3 vols., New York 1904–06), edited by Bliss with the assistance of Josiah Strong and W. H. Tolman. In these and in previous writings Bliss was more concerned with making social problems vital and intelligible to the lay reader than with preparing a work for specialists.

RUDOLPH M. BINDER

Consult: Faulkner, H. U., "American Christianity and the World of Everyday" in *Essays in Intellectual History*, dedicated to J. H. Robinson (New York 1929) ch. viii.

BLOC, PARLIAMENTARY. A parliamentary bloc results when certain individuals or groups in a legislative assembly are merged into a formation which intends aggressive political action. The process of forming a bloc is frequently called "coalition"; but although bloc and coalition shade off into each other a coalition as a resultant formation is perhaps best conceived as relatively non-aggressive and as due to a truce in normal political activity. French in origin, the term bloc has become well established in a figurative political sense. Different connotations, however, attach to the term as applied to a legislative assembly composed of several political organizations, as in the "group" system current in continental parliaments, and to a bipartisan legislature. In the formation of the former the force at work is essentially centripetal, the tendency integration; in the other case the force is largely centrifugal and the tendency disintegration.

In France, where the bloc has had its longest and most continuous history, bloc formations have represented a marked centripetal tendency to weld the diverse "groups" into larger aggregates and achieve the effect of bipartisan organization. In a sense there have been only two sorts of blocs in the history of the Third Republic—a bloc of the left and a bloc of the right. The term employed and the inspiration for the formation of the first bloc proceeded from a famous dictum of Clemenceau. The performance in 1891 of Sardou's *Thermidor*, hostile to the Terror, had caused Clemenceau to protest against making a distinction between 1789 and 1793 and to declare that "the Revolution forms a bloc" and that it must be "accepted *en bloc*." In 1899, therefore, the coalition of Republicans which formed around Waldeck-Rousseau and later supported Combes was currently called the *Bloc de la défense républicaine* or, more familiarly, simply the *Bloc*. It carried on the affairs of government in definite opposition to the right and with "no enemies on the left." About 1906 the political formation began to be dislocated, the Socialists tending to combine with the right against the Radicals on electoral reform; but the *Bloc* was re-formed for the elections of 1914 on the issues of military service and the income tax. The "Sacred Union" of the war, since the war emergency demanded a lull in political activity, is to be regarded rather as a coalition than a bloc; but it later formed the basis of the *Bloc national*, a coalition of forces of the right, which was victorious in the elections of 1919. In 1924 a left bloc, then currently called the *Cartel des gauches*, was again successful. The *Union nationale*, formed by Poincaré in 1926, was also distinctly a coalition; but it tended to become a bloc for the elections of 1928, and the withdrawal of the Radicals at the end of that year rendered it more definitely so.

The term bloc has by a not unnatural extension been applied to political formations in French history antedating 1899 and also to those in other countries where similar strategy has been employed. In American political history it was first applied to an aggressive organization of the agrarian representatives in Congress. It represents, however, a type of parliamentary bloc quite different from the French blocs mentioned.

In May, 1921, a group of twelve United

States senators, equally representing the two great parties, met in an office of the American Farm Bureau Federation. They were seriously alarmed at the agricultural situation and gave their attention to a plan of legislation for farm relief. Although other senators were added in later meetings the number seems never to have greatly surpassed twenty. These senators, together with about one hundred members of the House of Representatives, came to be known as the "Farm Bloc." Holding the balance of power the bloc was able, against the will of the "regular" Republicans, to force the passage of certain measures and to prevent the passage of others. Although its leaders denied some of the accomplishments attributed to it, its positive record was sufficiently striking to cause President Harding, who had at first opposed it, to claim this record for his administration. The Farm Bloc, however, suffered reverses after its initial successes. In the words of Frank R. Kent, the farmer "lost his club" and the power of the bloc "oozed away." It is clear that for American political history the word and not the thing was new. Cooperation between groups with the same or similar interests occurred from the outset. The "Silver Senators" and the groups of senators representing the protected industries of New England after the Civil War, to take only two examples, were blocs in all but name. The Farm Bloc was followed by the formation of other blocs in considerable profusion. A few of these were the Ex-Service Men's Bloc, the Wet and Dry blocs, the Irrigation Bloc and the Labor Bloc, some of which became definitely organized.

Such formations will doubtless continue to appear and the word bloc seems destined to remain. Of the various attacks made on them in the American system one argument condemns a tendency toward the continental *groupe* system. This objection is evidently based on a confusion between the nature of the bloc as it appears in continental legislative assemblies and its character in the American Congress. In the French Parliament, for example, there are political *groupes* which are officially recognized. Some of these *groupes* articulate with political parties. If the political programs of two or more parties are sufficiently related, the parties themselves, such for example as the Radical-Socialist and Socialist parties or their parliamentary *groupes*, form a bloc. The Farm Bloc, which Senator Capper has said refuses to consider partisan measures, is vastly different from such *groupes* or blocs. Like other congressional blocs it resembles more closely certain *groupes d'études* in the French chambers. These *groupes* are unofficial and numerous, and many of them are of little or no importance. Among the limited number of exceptions it is interesting to note the *Groupe de la défense paysanne* and the *Groupe viticole*. They are the nearest French counterparts to the Farm Bloc.

Political history demonstrates that in practise when the centripetal political forces outweigh the centrifugal a distinct tendency toward a dual organization of parties is manifested even in continental parliaments and leads to the formation of blocs. A struggle over the form of state or over religion has proved sufficient. Upon the disappearance of such circumstances, on the other hand, other forces, such as the lack of tradition and organization in the bloc, cause the reappearance of several political parties and *groupes*. Ostrogorski considers this the ideal condition for legislative assemblies as making for "free union and individual responsibility." It is when the bi-party system becomes so rigid as to be weak in leadership and constructiveness that the American type of bloc appears, and when the bloc in the multi-party system becomes overbearing and narrow that the unofficial type of French *groupe d'étude* appears. It is thus that reality is given to public life and an important kind of decentralization is achieved.

The reason is that these formations are largely functional in character and represent that tendency toward the assertion of class interests, vocational organization, sectionalism and group struggles which is one of the most pronounced characteristics of modern life. The result in America may well be the formation of factions in the two great parties or even a third party movement; but in any event when these forces are projected upwards into legislative assemblies they give rise to more or less vital group representations. The Farm Bloc is a striking illustration of these tendencies. It has drawn upon the same sources of strength as other waves of the "agrarian crusade" such as the Granger, Greenback, Populist and Silver movements. Like the Non-Partisan League its roots have been primarily sectional in character. Its very vitality excited the opposition of the conservative and traditionalist elements, although even they recognized its frank and open methods of procedure. On the charge that it made for selfish class legislation, for log rolling and even for the destruction of seniority rule, the president and

the secretary of war publicly attacked it, and a representative from New York introduced a bill forbidding blocs. Yet its tendency was definitely progressive and the Congress in which it appeared could boast of a progressive record. Its leaders were largely borne out by the facts when they insisted that it presented no danger to the bi-party system but furnished it with the elements needed for growth. In fact, considering parties as manifestations of a broad political philosophy and of moral conviction, there seems no good reason why groups such as blocs representing legitimate special interests should not be valuable complements to parties.

R. K. GOOCH

See: LEGISLATIVE ASSEMBLIES; CONGRESSIONAL GOVERNMENT; CABINET GOVERNMENT; PARTIES, POLITICAL; COALITION; NON-PARTISAN LEAGUE; REPRESENTATION; FUNCTIONAL REPRESENTATION; MINORITY REPRESENTATION; INSURGENCY, POLITICAL; SECTIONALISM; LOBBY; INTERESTS.

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BLOCH, JEAN DE (Bliokh, Ivan Stanislavovich) (1836–1902), Russian pacifist. Bloch, a Polish Jew, rose from poverty to be a wealthy financier, a renowned publicist and a councilor of the czar. He financed and superintended the construction of thousands of miles of railways for the Russian government. Besides two important treatises on Russian railroads Bloch wrote several volumes on the economic conditions of the Russian provinces, on agricultural banks and on the finances of Russia in the nineteenth century. But his great work, arising from his reformist tendencies, is his six-volume contribution to the literature of the peace movement. Unsentimental in tone the work treats both historically and statistically the fundamental causes and the social and economic effects of war, preparations for war, tactics, strategy and morale. Bloch attempted to prove that war is impossible because of its toll in lives and because of the difficulty and expense of maintaining great modern armies and that a prolonged war would result in suicidal stalemate or social revolution. He also tried to show that modern imperialism is economically unprofitable. The book attracted wide attention and is said to have encouraged the czar in his desire to secure a limitation of armaments at the First Hague Conference. Subsequent history has in many respects corroborated Bloch's theses. Although he failed to give due weight to the role of propaganda and the moral element in warfare he may be said to have inaugurated a new and more positive phase of pacifism. In the literature of the peace movement *The Future of War* has been regarded by one critic as exceeded in importance only by the work of Grotius.

MERLE E. CURTI

Works: *Budushchaya voyna v tekhnicheskom, ekonomicheskom i politicheskom otnosheniakh* (The war of the future in its technical, economic and political aspects), 7 vols. (St. Petersburg 1898), translated in part into English by R. C. Long as *The Future of War* (New York 1899), complete translation into French, *La guerre*, 6 vols. (Paris 1898–1900), and into German, *Der Krieg*, 6 vols. (Berlin 1899).

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BLOCK, MAURICE (1816–1901), French writer on economics, politics and administration. Block was born in Berlin but became a naturalized citizen of France. He was a prolific writer on economics and statistics. His statistical works, which are mainly handbooks of information, include: *Statistique de la France comparée avec les autres états de l'Europe* (2 vols., Paris 1860; 2nd ed., enlarged, 1875) and *Traité théorique et pratique de statistique* (Paris 1878, 2nd ed. 1886). His most important economic works are *Les finances de la France depuis 1815* (Paris 1863), *L'impôt et les formes variées qu'il affecte* (Paris 1881) and *Le budget, revenus et dépenses de la France* (Paris 1881). From 1856 until 1879 Block was editor of *L'annuaire de l'économie politique et de statistique*. He was opposed to state intervention and, regarding economics as a pure science, he bitterly attacked the attitude of the German historical school in *Le progrès de la science économique depuis Adam Smith* (Paris 1890; 2nd ed. 2 vols., 1897) and in his articles in the *Journal des économistes*.

In collaboration with a number of jurists Block published in 1856 the very successful *Dictionnaire de l'administration française* (4th

ed. Paris 1898). This purely descriptive exposition of the legislation governing administrative institutions is now valuable only as a reference work on French administrative institutions up to the close of the nineteenth century. In 1862 Block directed the publication of a *Dictionnaire général de la politique* (2 vols., Paris 1863–64; 2nd ed. 1873–74), which enjoyed a temporary success. In 1869 he published *L'europe politique et sociale* (Paris 1869; 2nd ed. 1892). Of his numerous pamphlets on financial, statistical and especially on administrative questions the most popular was a descriptive series on French administrative organization, written for the general public, of which the best known titles are *Le département* (Paris 1880; 6th ed. 1884) and *La commune* (Paris 1880; 7th ed. 1884).

GASTON JÉZE

Consult: Waha, Raymund de, *Die Nationalökonomie in Frankreich* (Stuttgart 1910) p. 59–62; Cheysson, Émile, in Académie des Sciences Morales et Politiques, *Mémoires*, vol. xxvi (1909) 397–426.

BLOCKADE on the sea, like siege on land, partially or entirely cuts off a nation from commercial and other relations with the outside world. Its primary purpose is to prevent the enemy from receiving goods which may be used in warfare and which are designated as contraband. In extreme cases, as during the European war of 1914 to 1918, it constitutes a complete or almost complete embargo enforced by means of sea power. If a nation does not produce all of its necessary raw materials, an effective blockade does the most harm in destroying its import trade. If a nation is self-sufficient in the sense that it can produce all the necessary raw materials, a blockade is not so disastrous. The blockade will, however, destroy its export trade, which is a serious loss especially for an industrial nation. During the nineteenth and twentieth centuries so-called "pacific" blockades have sometimes been resorted to by a powerful nation or group of nations in order to coerce a weak nation. In such cases a blockade is imposed without a declaration of war. The legality of a pacific blockade has been questioned by numerous writers on international law.

The law of blockade has evolved mainly as a result of the struggle of neutral nations to safeguard their rights in time of war. Belligerents, especially when they are powerful nations, have always been prone to ignore neutral rights upon the sea. During the great wars of the eighteenth century the belligerent powers, especially England, often violated neutral rights. The League of Armed Neutrality of 1780 and that of 1800 are examples of efforts made by neutrals to vindicate their rights. During the Napoleonic wars the embargoes imposed by the British Orders in Council and by Napoleon's Berlin and Milan decrees of 1806 and 1807 rendered neutral commerce almost impossible and had as one consequence the War of 1812 between the United States and England.

The Declaration of Paris at the close of the Crimean War in 1856 finally established one of the rules fundamental to the law of blockade, namely, that in order to be binding blockades must be effective. It thus abolished the fictitious or "paper" blockade, that is, a blockade which had been declared but not effectively enforced. During the Civil War the United States government extended to blockade the doctrine of continuous voyage in order to prevent goods from reaching the Confederacy through neutral West Indian and Gulf ports. While the Russo-Japanese War of 1904–05 was being fought the theory of the strategic area was put forward. According to this theory a belligerent could reserve for its naval operations a portion of the high seas from which neutrals were excluded. Neutral prizes were often sunk and mines were sown indiscriminately in the strategic areas, thus endangering merchant vessels even after the war ceased. At the same time contraband lists were extended, as, for example, when Russia declared raw cotton contraband of war.

The Declaration of London of 1909, although unratified, may be said to have furnished an authoritative statement of the law of blockade. Articles 8 to 13 provided that a blockade must be formally declared and adequately notified to neutrals. Article 1 stipulated that "a blockade must not extend beyond the ports and coasts belonging to or occupied by the enemy." Articles 17 and 18 definitely limited the area which may be covered by a blockading fleet. Article 2 stated that "in accordance with the Declaration of Paris of 1856, a blockade, in order to be binding, must be effective—that is to say, it must be maintained by a force sufficient really to prevent access to the enemy coastline."

At the outbreak of the European War in 1914 the United States government proposed to the belligerents that they adopt the Declaration of London as the legal code for naval operations connected with blockade. Germany and Austria assented, but Great Britain demurred. The

British government began immediately to extend its lists of contraband and to apply more broadly the doctrine of continuous voyage. Soon the doctrine of substitute commodities was devised, which held that goods of the same kind or similar commodities which would or might eventually take the place of goods exported to the enemy might be declared contraband. The principle of embargo was also greatly extended. Formerly embargoes had often been levied upon the exportation of commodities to belligerents or upon exports in general from the country imposing the embargo. But it now became necessary to impose embargoes upon the exportation of goods to certain neutral countries. The purpose of these embargoes was to prevent goods from passing through neutral countries to the enemy or from serving as substitutes in neutral countries for goods sent to the enemy. Embargoes of two kinds were imposed upon neutral countries: specific embargoes upon the exportation of a particular commodity to a neutral country, and general embargoes upon the exportation of all commodities to a neutral country.

In order to enforce these measures of blockade an extensive use was made of the right of search by Great Britain and its allies. From the early days of the war the British navy took into its ports and searched all vessels passing through its blockade, although later the world wide regulation of trade often rendered this search possible at the port of departure. The blockade was made still more effective by the prohibition of direct or indirect trade with the enemy. For example, the trading with the enemy acts in England and in the United States stringently prohibited trade with the enemy, with allies of the enemy and with persons or firms having enemy connections. Such prohibitions necessitated the careful investigation of the status of consignors and consignees. Black lists, containing the names of traders with whom commercial relations were prohibited, were compiled in most of the belligerent countries. In addition there were export and import restrictions which had the double purpose of indirectly injuring the enemy and of conserving commodities and shipping. In most of the belligerent countries export and import licenses were required for all commodities and even many of the neutral nations found it necessary to adopt such restrictions in order to conserve their own supplies and shipping. Applications for licenses were examined with regard to the status of the consignors and consignees, and also with regard to these export and import restrictions, before they were granted.

As the war progressed, both belligerent and neutral nations found it expedient to regulate their mutual trade jointly, as far as possible, by means of negotiations and agreements. These agreements usually provided rations of commodities for the neutrals the size of which depended upon their genuine domestic needs. The neutrals usually consented to the export of all, or a considerable part, of their exportable surplus in compensation for the rations they were to receive. Moreover these agreements often regulated the use of the shipping of neutrals by providing that it should not be used by the enemy or that a part of it was to be turned over to the use of the negotiating belligerents. In order to enforce these restrictions and regulations it was necessary to accumulate a vast amount of statistical data. When these figures indicated that certain rations of a neutral nation had been filled or that the amounts permitted for export from or for import into a belligerent country were about to be exceeded, it was customary to issue a preliminary warning as a caution to export and import authorities in all of the countries concerned to refuse applications for export or import licenses for these commodities. When an absolute restriction was imposed or when the ration or the amount permitted for export or import was filled, a specific embargo was levied upon the exportation or importation of the commodity in question. Such embargoes were withdrawn later when circumstances justified their removal.

These measures show the great expansion of the use of blockade during the European War. The methods of blockade had been carried far beyond the activities of the naval vessels enforcing the blockade at sea. The powers of the Entente were hampered because Germany was partly surrounded by neutral nations through which essential commodities could be imported if these neutral nations were able to secure such commodities. Germany, on the other hand, was limited by the kind of naval craft which it could use effectively in attempting to blockade its enemies. The German submarines not only could not take captured vessels into port, as is required by international law save under exceptional circumstances, but could not even safeguard the lives of the individuals on board the vessels which they sank. Each side blamed the other for its extension of measures of blockade,

and each pleaded necessity as a justification. The longer this procedure was continued the more reckless both sides became, so that by the end of the war few vestiges of international law were functioning in the practise and policies of both groups of belligerents. For nearly three years the most powerful neutral, the United States, protested repeatedly but usually without avail against the violations committed by both sides. When in February, 1917, Germany renewed its unrestricted submarine warfare, the United States abandoned its task of championing neutral rights and in April declared war against Germany.

Since the close of the war the law of blockade, like other divisions of international law, has been in a chaotic state. There is a possibility that the shattered fragments of the Declaration of London may be gathered together in an effort to reinstate the law of blockade approximately as it was before the European War. But since the belligerents possessing sea power have discovered that the unrestricted use of blockade is a very effective mode of warfare, it is doubtful whether they will be willing once more to submit themselves to restrictions involving the recognition of the rights of neutrals. For the more distant future there is a possibility that the problems of blockade may be solved by the organization of a world community in which neutral rights as such will not exist. The whole world would then become belligerent in the sense that one nation or a few nations would be blockaded for refusing to obey the international authority, while the remainder of the world would be engaged in enforcing the blockade. The League of Nations has already discussed the possibility of using blockade as an international coercive measure.

MAURICE PARMELEE

See: CONTRABAND; TRADING WITH THE ENEMY; EMBARGO; CONTINUOUS VOYAGE; ARMED NEUTRALITY; BELLIGERENCY; NEUTRALITY; FREEDOM OF THE SEAS; RATIONING; SUBMARINE WARFARE; WARFARE.

Consult: Parmelee, Maurice, *Blockade and Sea Power* (New York 1924); Moore, J. B., *A Digest of International Law*, 8 vols. (Washington 1906) vol. vii; Bowles, T. G., *The Declaration of Paris of 1856* (London 1900); International Naval Conference London 1908–09, *The Declaration of London, February 26, 1909*, ed. by J. B. Scott (New York 1919); "Diplomatic Correspondence between the United States and Belligerent Governments Relating to Neutral Rights and Commerce" in *American Journal of International Law*, supplement official documents, vol. ix (1915) 110–30, vol. x (1916) 121–78, and vol. xi (1917) 165–71; Salter, J. A., *Allied Shipping Control* (Oxford 1921); International Blockade Committee, "Report Submitted to the Council of the League of Nations" in League of Nations, Second Assembly (1921), *Assembly Document*, A. 28, 1921 V. (C. 288, 1921 V.) and A. 32, 1921 (C. B. 4 a); Hogan, A. E., *Pacific Blockade* (Oxford 1908).

BLOK, PETRUS JOHANNES (1855–1929), Dutch historian. He studied under Fruin at the University of Leyden, succeeded him as professor of history in 1894 and continued to teach at the university for nearly thirty-five years as the foremost historian of the Netherlands. He kept in constant touch with foreign scholars and libraries and was editor of the *Bijdragen voor vaderlandsche geschiedenis en oudheidkunde*. Blok's greatest contribution to historical knowledge was his monumental *Geschiedenis van het nederlandsche volk* (8 vols., Groningen 1892–1908; 3rd ed., 4 vols., Leyden 1923–25; tr. by O. A. Bierstadt and R. Putnam, 5 vols., New York 1898–1912) in which he realized his ambition of preparing a national history of the Dutch people. This work contains the first reliable and comprehensive account of the complicated history of the seventeen provinces from the Roman occupation to the close of the sixteenth century, as well as a brilliant presentation of the history of the Dutch Republic and the Kingdom of the Netherlands. Especially noteworthy is his treatment of social and economic problems such as the expansion of commerce, the activities of the great trading companies and the development of literature, art and scholarship. Blok somewhat neglected, however, the religious life of the Dutch people, especially in the fourteenth and fifteenth centuries, when the Low Countries exerted much influence on other peoples. His national patriotism, which in this work occasionally impelled him to give too much credit to Dutch scholars and artists, as for example in connection with the invention of printing, led him to write a series of biographies of the national heroes of Holland—William the Silent, Louis of Nassau, Frederick Henry and Michiel Adriaanszoon de Ruyter. Blok was an authority on the history of Dutch cities. His *Geschiedenis eener hollandsche stad* (4 vols., The Hague 1882–1918; 2nd ed., vols. i–ii, 1910) is a masterful study of the municipal institutions, finances, taxation and industries of the city of Leyden. His work was the result of most painstaking labor, and although not distinguished in style it was characterized by sound scholarship and in most cases by unbiased judgment.

ALBERT HYMA

BLOOD ACCUSATION. The charge of the use of portions of the human body, and especially of the blood, for medical, magical or religious purposes has often been made against religious dissenters. Pagan Romans accused early Christians of practising bloody rites. The charge died as the church came to dominate the Roman Empire, but was revived and used in various forms by Christians against Manichaeans, early Gnostics, Waldensians, Albigensians and other heretics, by Catholics against Huguenots, Puritans and Masons and by Protestants against Catholics. Non-European peoples, particularly the Chinese, have as late as the last decades of the nineteenth century accused Christians of killing Chinese children for ritual purposes.

The charge has most frequently been preferred, however, by Christian Europeans against the Jews. Several minor writers of antiquity made the accusation, but in such form as to make doubtful its connection with the long series of charges which began with that against the Jews of Norwich in 1144. The libel appeared on the continent in 1235 at Fulda, Hesse-Nassau, soon became common in Europe and was even crystallized in literature (e.g. Chaucer's *Prioresses Tale*). Frequent refutations made by monarchs, popes, Christian scholars and converted rabbis failed to obliterate it. The accusation persisted for centuries and from 1880 to 1900 appeared repeatedly in central and eastern Europe. It occasioned celebrated trials at Tisza-Eszlar, Hungary, in 1882; Xanten, Rhenish Prussia, in 1891; Polna, Bohemia, in 1899 (the Hilsner Case); Konitz, West Prussia, in 1900; and Kiev, Russia, in 1911 (the Beilis Case). Its first recorded appearance in America was at Massena, New York, in 1928. In all about two hundred repetitions of the charge have been listed, and belief in blood murder by Jews is by no means extinct today.

Most recorded cases exhibit common elements. Generally on the disappearance of a child it has been charged that the Jews sought his blood for magic or medicine or, most commonly, as an ingredient in unleavened Passover bread (*mazzoth*). A variation of the charge is that Jews steal and "torture" consecrated eucharistic wafers to draw blood from them. Preliminary investigations, sometimes revealing the supposed victim to be unharmed, often easily established innocence. At other times torture was used to obtain "confessions," the testimony of miracles was adduced to support the accusation and violence was employed against defense witnesses. As in the mediaeval witch and sorcery cases, testimony often showed the effects of suggestion, and in modern cases, where documents are available, there may be traced the influence of inflammatory propaganda on both testimony and the attitude of officials, judges and juries. Blood accusations have generally been followed by brutal attacks on local Jews, sometimes precipitating widespread anti-Jewish disturbances, destruction and expropriation of property and expulsions. The supposed victim is often enthroned formally or in popular imagination as a religious martyr, even where the charge was palpably a fraud.

Several modern Christian writers tried to give verisimilitude to the charge by arguing that the Talmud commands the use of Christian blood for ritual purposes. The chief of these, August Rohling of Prague, based his *Talmudjude* (Munster 1871) on Eisenmenger's book *Entdecktes Judenthum* (Frankfort 1700) and on other pseudo-scientific work which involved misunderstanding of the Talmud and patent twisting of source materials. In their struggle to discredit this view the Jews were materially aided by such important Christian theologians and scholars as Hermann Strack of Berlin and Franz Delitzsch of Leipsic.

An examination of the evidence discloses no ground for believing any of the charges and abundant reason for regarding them as gross libels. No single case has been proved. Bible and Talmud not only contain no sanction for the use of human blood, but clearly forbid such practises. No dissenting sect has been found to practise bloody rites. The idea that sanction may be found in "secret" Kabbalistic writings has been thoroughly exploded, and the charge that it exists in a secret oral tradition is fantastic and without factual basis. The criminological theory that some murders are motivated by superstitious belief in blood practises of folk magic or medicine has no bearing here; the fact that a man roughly classified as a Christian or Jew commits such a crime does not suggest ritual murder as part of Christian or Jewish practise in the specific case or in general.

The appearance of such charges in mediaeval or backward modern communities is no more or less mysterious than belief in sorcery and witchcraft. Only its persistence into modern times, when it would seem to conflict with the most basic notions of society, seems to need special explanation. Among modern cultivated sup-

porters of the charge those who did not use it simply to promote political ends, regardless of their own disbelief in it, have almost uniformly restricted its application to hypothetical backward groups of Jews of limited numbers. While this view is erroneous in fact, it does not partake of the essentially nonsensical nature of the more popular charge directed against all Jewry. The bulk of support for the latter has come from persons and regions in central and eastern Europe that may be characterized as backward on many counts. Hence some writers have concluded that the blood accusation is a mediaeval phenomenon continuing because of the persistence among the accusers of underlying mediaeval notions. Strack referred to occasional human sacrifice and widespread belief in blood magic in many modern communities, especially backward ones, as proving the survival of such notions despite their completely anachronistic character. Joseph S. Bloch, Rohling's chief Jewish critic, further contended that even Christians free from most mediaeval superstitions but holding to a superstitiously mediaeval interpretation of Christian rituals and dogmas concerning blood (particularly the Eucharist), might be led to misunderstand the Jewish ritual of the *mazzah*, whose appearance resembles that of the holy wafer. In short, minds which believe in the supernatural and magical properties of blood naturally create images which make possible the blood accusation.

But not until one considers the fact that the only general use of the blood accusation in modern times has been against Jews does one approach the heart of the problem. Toward the religious dissenter, the political nonconformist and the foreigner (i.e. the stranger) there is a constant flow of suspicion arising from general prejudice. Hence it can be said that although the materials out of which the blood accusation is constructed may be a mediaeval inheritance, and although political or economic motives may inspire agitators in specific cases, the passing of the charge from a dormant, ineffective state to a vital state occurs through the medium of general mass resentment. Perhaps here and there and temporarily an accusation increases and so seems to cause such resentment, but in reality the previous presence of the resentment is indispensable to the overt appearance of the accusation. The fact that the rise and growth of modern antisemitism underlay the epidemic of accusations of 1880–1900 makes the relationship especially clear. From this point of view, then, the blood accusation in modern times is an anachronistic particular manifestation of mass resentment against a group not fully assimilated to the main body of the population.

HERBERT SOLOW

See: SACRIFICE; MAGIC; SUPERSTITION; INTOLERANCE; ALIEN; RACE PREJUDICE; ANTISEMITISM.

Consult: Strack, H. L., *Das Blut im Glauben und Aberglauben* (8th ed. Munich 1900), tr. by H. Blanchamp as *The Jew and Human Sacrifice* (New York 1909); Bloch, J. S., *Israel und die Völker* (Berlin 1922), English translation (Berlin 1927) ch. xxiii; Chwolson, D. A., *Die Blutanklage* (Frankfort 1901); Frank, F., *Der Ritualmord* (Regensburg 1901); Hellwig, A., *Ritualmord und Blutaberglaube* (Minden 1914); Nussbaum, A., "Der psychopathische Aberglaube" in *Zeitschrift für die gesamte Strafrechtswissenschaft*, vol. xxvii (1907) 350–75; Waltzing, J. P., "Le crime rituel reproché aux chrétiens du deuxième siècle" in *Le musée belge*, vol. xxix (1925) 209–38. For detailed consideration of typical cases: Lea, H. C., *Chapters from the Religious History of Spain* (Philadelphia 1890) p. 437–68; Nussbaum, A., *Der Polnaer Ritualmordprozess* (Berlin 1906); *American Jewish Yearbook*, vol. xvi (1914–15) 19–64, and vol. xxxi (1929–30) 347–52.

BLOOD VENGEANCE FEUD. In the many small politically independent communities where there is no fixed authority, bloody reprisals follow the infliction or the supposed infliction of injury. Particularly disastrous consequences arise from the belief, widely current among primitive peoples, that death and disease are conditioned not by natural biological processes but by hostile magical activities. Actual offenses such as poaching on alien fields, pastures or hunting preserves are linked with the almost ineradicable dread of "black magic." The guilty person or family is generally discovered by means of oracles if other clues are lacking, and it is hardly necessary to add that such portents are not interpreted without prejudice.

As a rule the nearest relative of a victim is entrusted with the execution of blood vengeance, which is almost always consummated in an insidious attack; occasionally some other person who considers the commission a distinction may undertake to avenge the injured one. The relationship group of the individual who commits an act of violence is held responsible for the deed; blood vengeance therefore is generally a feud between families or sibs. This does not mean, however, that individual relatives may not be selected as privileged avengers or as the principal objects of vengeance. A reprisal may be regarded by the community as a punishment, and not infrequently it is accepted as such by the person upon whom vengeance is

wreaked; but the attitude of both the community and the individual punished is usually determined by the relative social positions of the families involved. Families of prestige and economic power rarely accept acts of vengeance without undertaking counter-vengeance. This may lead to a protracted feud or to a vengeance chain. In the Gazelle Peninsula of New Britain a man of low degree dared not avenge himself directly on an influential family. He proceeded instead to kill a member of an innocent family, which in its turn transmitted the deed of blood to another family until finally someone dared to attack the original distinguished offender. In this manner the vengeance chain served to arouse sentiment against the guilty. Thus an initial insignificant offense may through mutual reprisals lead to a formidable slaughter.

The question of guilt is determined by material connections; the hand that administered the blow, the body to which it belonged—these appear to be responsible. Reprisals also are executed on animals and even on inanimate objects such as tools or weapons. The nature of the deed is not determined by the manner in which it was committed but by purely external circumstances. Thus, for example, according to the old Germanic law a killing might be judged as secret murder (*Mord*) in contrast to open homicide (*slahta* in Old High German) depending upon whether the corpse was hidden in a ditch, was covered with twigs, thrown into the water or left bare and unhidden. Care is exercised not to push vengeance too far. For one victim the death of only one malefactor is required. The Damara mountain hunters of southwest Africa, for example, fear that their adversary may go still further if two persons are killed to avenge a single victim. Moreover, if the original act was unintentional, blood vengeance is renounced.

Among primitive peoples the obligation of blood vengeance does not seem to be the matter of social distinction that it has become among more advanced tribes of shepherds and husbandmen. The hunter, whose life is still free from the pride of deeply entrenched property and from the tradition of ruling clans successful in war and pillage, does not stimulate such exaggerated self-assertiveness in blood vengeance, nor does he refuse to be propitiated by economic amends. On the contrary he is quite ready to give the evil doer a chance to reform, as may be observed among the fishing and hunting tribes of the polar regions. Even for murder the Eskimos content themselves with reviling the guilty party in a ceremonial dance, humiliating him sometimes to the point where he must leave the group. The most varied forms of humiliation have thus become current as satisfaction for blood vengeance. Indeed even the economic penalties seem to have originated as forms of humiliation.

It is significant that especially among more advanced peoples blood vengeance cannot be satisfied by payments of any kind. Composition runs counter to special inhibitions and is in many instances considered only when blood has already flowed on both sides. It has then only a secondary significance to prevent further deeds of vengeance. Blood vengeance has undergone the most bizarre exaggerations, especially in parts of Europe such as Corsica and the Balkans, where it has persisted longest through lack of political authority. For example a case of protracted blood vengeance which eventually involved seventy-seven deaths is reported from Montenegro. Blood vengeance cannot be eliminated by composition but only by a strong political authority—a fact to which the history of the Middle Ages and the experiences of the early American white settlements in the Alleghany Mountains bear witness. Penalization by public authority, although essentially a process in criminal law, originated in amends to the interested parties and therefore represents a civil claim. It thus removes finally the necessity for private satisfaction.

R. THURNWALD

See: FEUD; REVENGE; PRIMITIVE LAW; MAGIC; CRIME; PUNISHMENT; CRIMINAL LAW; LAW; SOCIAL ORGANIZATION.

Consult: Kohler, Josef, *Zur Lehre von der Blutrache* (Mannheim 1885); Post, A. H., *Grundriss der ethnologischen Jurisprudenz*, 2 vols. (Leipsic 1894–95) vol. i, p. 226–61; Hobhouse, L. T., *Morals in Evolution* (3rd ed. London 1915) pt. i, ch. 3; Vinogradoff, Paul, *Outlines of Historical Jurisprudence*, 2 vols. (London 1920–22) vol. i, p. 309–18; Hartland, E. S., *Primitive Law* (London 1924) p. 53–59; Eichhoff, Karl, *Über die Blutrache bei den Griechen* (Duisburg 1873); Frauenstädt, Paul, *Blutrache und Totschlagssühne im deutschen Mittelalter* (Leipsic 1881); Heusler, Andreas, *Das Strafrecht der Isländersagas* (Munich 1911); Steinmetz, S. R., *Ethnologische Studien zur ersten Entwicklung der Strafe* (Leyden 1894; 2nd ed., 2 vols., Groningen 1928); Durham, M. E., *Some Tribal Origins, Laws and Customs of the Balkans* (London 1928) p. 162–71; Thurnwald, R., "Blutrache" and "Busse" in *Reallexikon der Vorgeschichte*, ed. by Max Ebert, 14 vols. (Berlin 1924–29) vol. ii (1925). See also articles in the *Zeitschrift für vergleichende Rechtswissenschaft* that are to be found cited in the index under "Blutrache."

BLOW, SUSAN E. (1843–1916), pioneer in American kindergarten education. She was closely associated with William T. Harris, superintendent of schools in St. Louis, and it was with his encouragement that she was able to put her theories into practise, although she was breaking with the traditions of her family and her day in deciding upon a professional career. In 1873 she opened the first public school kindergarten and soon afterward instituted training schools for teachers. She followed closely the German views of kindergarten education as expressed in the philosophy and works of Froebel. This rather transcendental approach was the more congenial to her because of her interest in the ideals of Emerson and his Concord group and her ardent devotion to the doctrines of Hegel. It was impossible for her to adapt her methods to the more scientific developments in psychology, philosophy and sociology which were rapidly reshaping education during the last decade of the nineteenth century. The skill with which she defended the older methods in kindergarten education and fought the theories of Hall, Dewey and Thorndike delayed but could not vanquish the progressive movement. Her greatest work was in setting high standards of intelligence and culture in the early history of the kindergarten, when the "nurse maid" type might easily have swamped this new field.

PATTY S. HILL

Important works: *Symbolic Education, A Commentary of Froebel's "Mother Play"* (New York 1894); *Educational Issues in the Kindergarten* (New York 1908); *The Kindergarten*, reports of the Committee of Nineteen on the theory and practise of the kindergarten, authorized by the International Kindergarten Union (Boston 1913).

Consult: Fisher, Laura, "Susan Elizabeth Blow 1843–1916" in *Pioneers of the Kindergarten in America*, compiled by Committee of Nineteen, International Kindergarten Union (New York 1924) p. 184–203; Eby, F., "The Reconstruction of the Kindergarten" in *Pedagogical Seminary*, vol. vii (1900) 229–86; Snider, D. J., *The St. Louis Movement* (St. Louis 1920) p. 315–26.

BLUE LAWS. The term "blue laws" has been popularly applied particularly to the Puritan legislative enactments, often of a sumptuary character and especially centering around strict Sabbath observance. But a more comprehensive analysis would make the term apply to any legislation of a closely restrictive character passed in a theocratic society or inherited from it and dictated by considerations of a narrow morality.

Blue laws were neither originated by Puritans nor peculiar to that sect. Long before the rise of Puritanism varieties of blue laws were embodied in the legal codes of parts of western Europe. From the early fourteenth century there were sumptuary laws regulating the expenditures, apparel and even diet of various classes and groups. A little later in the same century were enacted strict Sunday observance laws, which, however, were more than Sabbath restrictions, forbidding on penalty of forfeiture of goods the display of merchandise and the holding of markets or fairs on the principal holy days. The purpose of the sumptuary laws, as expressed in the preambles, was to restrict expenditure for clothing to the means or "estate" of the various social groups so that clothing might be an indication of the pecuniary status of each. Besides prescribing the apparel of members of each social group, the laws made specific prohibitions. The preambles to the laws restricting Sunday activity did not openly declare that their object was to compel attendance at church. They pointed out that trading on Sundays and on festival days aggravated the striving for gain, placed an extra burden upon labor, promoted deceit and brawls and incited drunkenness. After calling attention to these evils the preambles denounced Sunday merchandising because it kept people from church.

Following the Reformation the Church of England adopted the policy of compulsory attendance and Parliament enacted a law requiring frequent communion and hearing of Gospel preaching. The law was widely ignored, however, and in 1552 Parliament passed another act to reenforce it. There followed a succession of blue laws, of which a group enacted in 1627 in the reign of Charles I imposed a penalty for the offenses of partaking in sports, transporting provisions or traveling on Sunday. During the reign of Charles II a law was promulgated prohibiting travel by boat on Sunday except "upon extraordinary occasion"; it specified that in case of inability to pay the five shillings fine the offender was to be placed in the stocks for two hours.

These and other blue laws were either transplanted direct to America or their adoption was ordered by the British authorities. Nor was it the Puritans who first introduced blue laws in the American colonies. The first compulsory church attendance law in America was passed in 1624 in Virginia, where the established church was the Church of England under jurisdiction of the

Bishop of London. This law seems to have been ineffective, for in 1629 another law was passed repeating the penalties of the act of 1624. The substance of these laws, however, was neutralized by the provisions of another act which exempted "persons of quality" from corporal punishment for any infraction. Consequently the church attendance and other laws were invoked only against so-called "menials." Apparently the menials could not be successfully coerced, for the Virginia General Assembly found it necessary in 1632 to pass again a compulsory church attendance law. In the same year another law was passed directing military commanders to see to it that people went to church.

It was not until 1634 that the General Court of the Massachusetts Bay colony enacted its first law compelling church attendance and making non-attendance a misdemeanor punishable by fine or imprisonment. This measure proved ineffectual, however, and the Puritans found it necessary to put through a series of similar laws. The preamble of the law of August 1, 1665, protested against neglect of public worship, and according to the act itself offenders were subject to corporal punishment in all cases of non-payment of fines. Beating and lashing were no more effective than were previous methods. The Massachusetts law of November 3, 1675, admitted that the practise of leaving church before the end of the service was so prevalent that there was only one recourse left to legislative device; it therefore ordered that church doors should be shut and kept locked during services and it authorized church officers or town selectmen to act as guards and to allow no one to depart until the conclusion of the entire service. Faced by the prospect of virtual imprisonment in church, an increasing number of people contrived ingenious excuses for absence.

The code of blue laws in one form or another was common in nearly all of the colonies. The Pilgrims of Plymouth colony had similar laws. The Pennsylvania legislature in 1700 passed a law forbidding work on Sunday under penalty of twenty shillings for each violation, so that all persons might attend church or stay at home and read the Bible. If they went to church, however, they were permitted to select the church most agreeable to their opinions. As late as 1762 the legislature of Georgia, then classed as a liberal colony, enacted a compulsory church attendance law.

Laws forbidding sports, travel and work on Sunday were common among the colonies. According to the Virginia law of 1658 anyone who traveled on Sunday was to be fined one hundred pounds of tobacco or condemned to the stocks. The South Carolina law of 1691, supplemented by that of 1712, forbade sports, pastimes, public entertainment, work or travel on Sunday and provided heavy penalties for offenders. The Duke of York's laws for the colony of New York (1665–75) declared that Sundays were "not to be prophaned by Travellers, Labourers or vicious Persons." The Georgia act of 1762 was as sweeping an interdiction as any law ever passed by Puritans; it prohibited games, sports, merchandising, travel, work and almost every other activity on Sunday except church going.

Anti-tobacco legislation in the colonies took several forms. Beginning in 1629 the General Court of Massachusetts passed a series of acts prohibiting the cultivation and use of tobacco both for reasons of morality and in order to prevent fires in barns, fields and forests. After vainly trying for half a century to enforce these measures the Puritan government in Massachusetts abandoned efforts at prosecution. The attempts of the Plymouth colony to legislate effectively against tobacco also met with failure. Somewhat paradoxically Connecticut, and even Massachusetts, enacted legislation aimed at the importation of tobacco from other colonies. Connecticut's law, enacted in 1640, was designed to protect the native grown product and was repealed six years later when local tobacco cultivation had become so well established that there was no longer a fear of competition from Virginia.

The Puritan sumptuary laws, modeled on those of the Old World, were designed primarily to preserve class distinctions and also to prevent extravagance among the members of a struggling community. The Massachusetts law of 1634, forbidding the wearing of ornaments, and the law of 1639, making wearing of lace an indictable offense, were presented as economy regulations. But the act of 1651, prescribing apparel for each group and prohibiting anyone not having an estate of more than £200 from wearing certain itemized ornaments or materials, was avowedly a class measure. Selectmen of every town were instructed to exercise systematic espionage and to determine whether the financial status of persons wearing silks, ribbons, great boots, shawls, gold and silver buttons and other prohibited articles satisfied the requirements of the law.

Blue laws were not the expression of the

people at large but merely the mandates of a church oligarchy having control or power over governmental machinery. This explains the popular disregard of many of those laws and the constant striving for effective enforcement by enactment of increasingly severe measures. In the Massachusetts Bay and Plymouth colonies—later combined into the single colony of Massachusetts—theocracy was in full operation. Here political rights were restricted to actual members of the Congregationalist church; laws were made by ministers and church elders and enforced by magistrates belonging to that church. In other colonies ministers and church elders often sat in legislatures and dominated their activity. It was the remembrance of this regime which led to the insertion of provisions in some of the early American state constitutions excluding ministers from legislative or executive office.

After the American Revolution there was a protracted lull in the activities of blue law advocates. They confined their efforts to preventing repeal of such remnants of old blue laws as remained on the statute books. Such survivals became mostly but not entirely dead letters; zealots sporadically made abortive attempts to secure enforcement. At the beginning of the twentieth century bills forbidding the sale of cigarettes were introduced in various legislatures and were enacted into law in several states. Immediately following the constitutional amendment decreeing abolition of the liquor traffic in 1920, a number of organizations undertook agitation for a series of repressions patterned after the old blue laws. Leaders of the Lord's Day Alliance of the United States, the Women's National Sabbath Alliance, the International Reform Bureau and the National Women's Christian Temperance Union came forward in 1921 with their respective programs, including not only the abolition of the use of tobacco but also prohibition of sports, concerts, entertainments, newspapers, motion pictures, travel or any kind of trade on Sunday. In that and following years, however, blue law advocates encountered legislative setbacks. All the states which at one time or another had enacted anti-cigarette laws—Arkansas, Idaho, Iowa, Kansas, North Dakota, Oklahoma, Tennessee and Utah—eventually repealed them. In Massachusetts a referendum in the election of November, 1928, favored the legalization of professional sports on Sunday.

GUSTAVUS MYERS

See: SUMPTUARY LEGISLATION; HOLIDAYS; AMUSEMENTS, PUBLIC; PURITANISM; INTOLERANCE; PROHIBITION; RELIGIOUS FREEDOM; CHURCH; BLASPHEMY; THEOCRACY; CENSORSHIP.

Consult: Kraemer, Pierre, *Le luxe et les lois sumptuaires au moyen âge* (Paris 1920); Baldwin, F. E., *Sumptuary Legislation and Personal Regulation in England* (Baltimore 1926); Fuller, Thomas, *The Church History of Britain . . . until the year 1648*, ed. by J. S. Brewer, 6 vols. (new ed. Oxford 1845); Pike, L. O., *A History of Crime in England*, 2 vols. (London 1873–76); Myers, G., *Ye Olden Blue Laws* (New York 1921), and *The History of American Idealism* (New York 1925) chs. i, xviii; Prince, W. F., "An Examination of Peters' 'Blue Laws' " in American Historical Association, *Annual Report for the year 1898* (1899) 95–138; Goodman, Leon, "Blue Laws, Old and New" in *Virginia Law Register*, n. s., vol. xii (1927) 663–73; Seagle, W., "The Moral Law" in *American Mercury*, vol. ix (1926) 451–57; Williams, G. W., "Christian Sabbath and the Law" in *American Law Review*, vol. liii (1919) 379–400; Holmested, G. S., *The Sunday Law in Canada, 1911* (Toronto 1912).

BLUE SKY LAWS are an American device for the protection of the inexperienced investor against fraud and misrepresentation in the sale of corporate securities. This problem first attracted public attention early in the nineteenth century at the time of the first extensive corporate industrial promotions in England. Legislation creating corporations was at first so lax that it facilitated the organization of companies for stock jobbing rather than for legitimate business. Eventually the more vicious forms of fraud were effectively destroyed through restrictions and safeguards on corporate organization and operations.

In the United States popular interest in the subject was aroused at a much later date. It seems to have sprung up quite suddenly first in Kansas and then in other western states and was fostered by the resentment of those victimized by unscrupulous dealers and promoters. However, because of the competitive laxity of the state corporation laws the task of eradicating these types of misrepresentation seemed well nigh impossible.

The first American blue sky laws (Kansas 1911, other states 1913) were hopelessly crude and unworkable; their provisions, practically prohibitive, included the whole business of security promotion and sales. The constitutionality of the early blue sky laws was attacked successfully in the lower federal courts. This litigation and the attendant discussion caused the repeal or revision of most of these earlier laws and by 1915 their more obvious crudities had disappeared. However, the basic principle

of executive regulation of the sale of securities was retained and was finally upheld by the United States Supreme Court in cases involving the Ohio, South Dakota and Michigan statutes (242 U. S. 539, 559 and 568). It was decided that the issuance of securities, the business of dealing in securities and the general flotation or sale of a particular issue or block of securities may be made subjects of executive license and control.

There have been two principal kinds of blue sky laws, regulatory acts and fraud acts. The former are the original and recognized type, having been adopted by forty-three states in the United States and by some of the provinces of Canada and states of Australia; the latter have been enacted in New York, Maryland and New Jersey and their injunction feature is found in the acts of several other states. Delaware and Nevada are the only states which have no blue sky laws.

The regulatory acts usually prohibit the offering or sale of securities, with certain exemptions, except under prescribed conditions. Violations of the laws are usually punishable, and the penalty falls not on a person guilty of fraud as such but on those who either fail to submit their offerings or disobey official orders. In many states violations also make sales voidable at the election of the purchaser. The laws generally exempt sales to those who are presumed to have enough knowledge to safeguard themselves, such as licensed dealers and banks. They also exempt securities the safety of which has already been subjected to some test, such as governmental bonds, approved public utility securities, securities listed and dealt in on approved exchanges and securities senior thereto and certain types of local securities about which there is presumed to be sufficient knowledge.

The regulatory acts are intended to regulate the security dealers as well as the securities offered for sale. The earlier laws and most of the later ones stress the regulation of dealers, whether resident or non-resident, who are generally required to secure a license which is both discretionary and revocable. The same rule usually applies to original issuers offering securities within the state. Some of the states depend entirely on a licensing system in the expectation that fraud will be minimized if the security business is confined to dealers of good repute. Most of the laws provide that each offering of non-exempt securities may be sold only upon application to a state official or commission and upon an investigation by the latter at the expense of the applicant. Detailed information is required as to the issuing company, its properties and business. The offering is permitted only upon a finding that the proposed sale would not "constitute a fraud, or work a fraud, on the purchaser," which has been interpreted by at least one active official to mean that the purchaser must have a fair chance to gain and is not apt to lose by the investment. The permit to sell is limited to a stipulated amount of securities and may be conditioned as to price and otherwise. The permit, like the dealer's license, may be revoked for cause, including the failure of the dealer or issuer to furnish additional information or to sanction an expert investigation at his own expense of the business and properties of the company even though the latter are generally located in a different state and frequently in a distant country. An appeal to the courts against a refusal or revocation of a license or permit is usually provided; and the applicant is required to designate a state official for the service of process either in a criminal or civil action.

It must be emphasized that the foregoing discussion is merely a general description of the provisions of regulatory acts. They vary greatly in scope, detail and point of emphasis. Some of the states require merely the filing of a copy of the circular or of such information as is ordinarily contained in the circular, provided that the corporation has been operating for a certain length of time and that the earnings of the offered security meet a prescribed test. A few states allow preliminary approval, pending the filing of detailed information. Several states have special regulations regarding investment trust securities. The extent of discretion afforded to the agencies charged with the enforcement of the acts differs greatly. Although an appeal to the courts is usually provided, this of course is a futile privilege in the ordinary distribution of securities bought for a present market.

The second type of blue sky laws, the equity fraud acts, provide that if fraud in the flotation of a security issue is suspected the attorney general may investigate and if he finds the offering to be fraudulent may secure a criminal injunction against further issues. Criminal actions can be brought where fraud is clearly provable. The Investment Bankers Association of America at one time proposed a penal statute punishing any overt act committed in an effort to defraud by the distribution of securities.

This proposal is found in the 1925 West Virginia Act.

The blue sky laws operate under varying policies and accidents of administration. The publicity involved is a deterrent, probably the really effective deterrent, to the extreme form of wildcat promotion. Ordinary investment offerings are only made in states of sufficient importance to justify the expense and usually pass official scrutiny without much difficulty. Political influence and official graft have been freely charged in many cases. Their opportunities are manifest and are of course more freely accepted in cases of dubious and more profitable flotations. The applicant or licensee has practically no remedy against burdens imposed by the administration of the law.

The net results of the blue sky laws are not clear. Losses occur and fraud exists in many approved offerings and it is claimed that the losses are greater because of the sanction of official approval. Security frauds are admitted to be greater than ever and it is naively stated that "stock swindling is practised only by those thieves whose methods have kept up with the development of modern financing." Many state officials claim that their laws work, and blame the increase of fraud on the mail, telegraph and telephone. Security dealers and state officials have worked together and then against each other in vain efforts to find a satisfactory form of act. The state laws become stricter and those who thrive upon or under them seem satisfied. On the other hand certain financial groups have complained that the laws impede the distribution of high grade securities and by hampering the issue of speculative securities obstruct the promotion of new ventures and impede the flow of capital into new fields. It is said to have been admitted in the argument of one of the Michigan cases that had the law been in force at the time of the promotion of the original Ford company, the Ford automobile would probably never have been produced.

The many loopholes in blue sky laws, particularly in connection with interstate securities, have directed discussion to the possibility of federal legislation. Conservative banking interests have strongly urged active cooperation between federal and state officials and have also advocated the extended and effective use of the federal postal fraud order, which prohibits the use of mails for suspected offerings. Although the Post Office Department succeeded in suppressing a certain amount of security fraud, only a small minority of those who violated the postal law have been punished. If, however, the mails were closed to general offerings and "tipster sheets" except under federal license, the more notorious crooks would disappear over night, but we would have a centralized political power susceptible of great abuse. The oft repeated proposal of a federal law requiring specific safeguards in the organization of interstate corporations has received little support from the financial interests, while the investors and consumers are largely inarticulate on this subject. This seems to be the only way, short of a constitutional amendment requiring federal incorporation, by which the government can secure such safeguards against corporations as are employed in England and Germany.

In Great Britain fraud and misrepresentation in the sale of corporate securities are guarded against in the laws of incorporation by making available to the prospective purchaser full information about the corporation. Under the British Companies Act of 1908 and subsequent amendments a detailed prospectus in the form prescribed by the government must be filed with the registrar of companies before securities are offered for public sale; in addition each company must file an annual report of its operations. The reports and financial statements must be certified as to accuracy by a chartered accountant, and promoters and directors are held civilly and criminally liable for the accuracy of their prospectuses and reports. In Germany governmental supervision of corporations is said to be even stricter; it rigidly limits the incorporators, particularly in connection with capitalization of a company. A corporation is not allowed to engage in business activities until the government is certain that no fictitious or watered stock is being issued. Effective publicity of corporate operations is insured by making the directors personally liable for the accuracy of the balance sheet, which must be drawn in a prescribed form and submitted to the annual meeting of the stockholders. Other European countries depend upon similar regulation by the central government of the promotion and operation of business corporations.

ROBERT R. REED

See: CORPORATION; CORPORATION FINANCE; CAPITALIZATION; PROMOTION; INVESTMENT; STOCK EXCHANGE; STOCKS; FRAUD.

Consult: Ashby, Forrest B., *The Economic Effect of Blue Sky Laws* (Philadelphia 1926); Reed, R. R., "Blue Sky Laws" in American Academy of Political

and Social Science, *Annals*, vol. lxxxviii (1920) 177–87; Angell, J. W., "The Illinois Blue Sky Law" in *Journal of Political Economy*, vol. xxviii (1920) 307–21; O'Brien, A. H., *Report on Blue Sky Legislation* (Toronto 1922); Mills, Charles H., *Fraudulent Practices in Respect to Securities and Commodities, with Special Reference to the Martin Act* (Albany 1925); Cowan, L. L., *Manual of Securities Laws of the United States* (Chicago 1923) and *Supplement* (Chicago 1925); Ten Eyck, Andrew, "Some Precedents in British Law and Practice for Safeguarding Securities" in *Harvard Business Review*, vol. ii (1924) 385–97. For further references: U. S. Library of Congress, Division of Bibliography, *Select List of References*, no. 667 (1922) and no. 1060 (1928).

BLUMENBACH, JOHANN FRIEDRICH (1752–1840), German naturalist and anthropologist. In pursuing his studies in medicine and physiology at Göttingen, Blumenbach worked under Christian Büttner, who exercised a lasting influence on his intellectual development. After Büttner's death Blumenbach was entrusted with the arrangement of his natural history collection, which the university had purchased. He early acquired a considerable reputation as a naturalist and at twenty-three was called to a professorship at Göttingen, where until 1835 he lectured on natural history, physiology, anatomy and anthropology, writing books which became standard in the field. As a naturalist Blumenbach's chief distinction lies in his having founded the science of comparative anatomy in Germany and contributed considerably to the recognition of zoology as a science. He anticipated Cuvier in taking anatomy into consideration in investigating the varieties of animal life, and he departed from Linnaeus in that he paid more attention to the structure of the inner organs of animal species than to their external characteristics and habits of life. His division of the order of primates into the *bimana* and the *quadrumana* and his insistence on the fundamental dissimilarity of the two caused him to be cited in the days of Darwin by the opponents of the Darwinian theory, although his thought is strikingly evolutionary.

Blumenbach's dissertation *De generis humani varietate nativa* (Göttingen 1775, 3rd ed. 1795) laid the foundation of comparative physical anthropology. It was the first systematic treatment of the subject based on the actual measurement of skulls and skeletons, for Blumenbach went to great trouble to gather his specimens from every available museum and collection. He became thus the father of craniology. His classification, which distinguishes five principal races of men—the Caucasian, Mongolian, Ethiopian, American and Malayan—has proved to be the basis of all subsequent race classifications. He considered the Caucasian race the original one and the American and Malayan as transitional in the degeneration to the two extremes, the Mongolian and Ethiopian. Into this racial development he introduced Herder's idea of evolution, conceiving of contemporary civilized man as the product of an evolution conditioned by climate, soil, heredity and social environment.

HEINRICH CUNOW

Consult: *The Anthropological Treatises of Johann Friedrich Blumenbach*, ed. by Thomas Bendyshe (London 1865), which also contains translations of biographical articles by K. F. H. Marx and M. Flourens; Scheidt, Walter, *Allgemeine Rassenkunde* (Munich 1925) p. 14–19; Haddon, A. C., *History of Anthropology* (London 1910) p. 25–30; Nordenskiöld, Erik, *Biologins historia*, 3 vols. (Stockholm 1920–24), tr. by L. B. Eyre as *The History of Biology* (New York 1928) p. 306–09.

BLUNT, WILFRID SCAWEN (1840–1922), English publicist and poet. In his eighteenth year he entered the diplomatic service and was stationed successively at the embassies of Athens, Frankfort, Madrid, Paris and Lisbon. He retired from the service in 1869 and married Lady Anne Isabella Noel, only daughter of the Earl of Lovelace and granddaughter of Lord Byron. Together they traveled extensively, making many dangerous voyages of discovery in unexplored regions of the East. In *The Future of Islam* Blunt set forth his political conclusions, the result of these journeys, and predicted the misfortunes later to be realized in the Soudan. In 1882 he allied himself with the National party in Egypt and helped the Egyptian leaders to draw up the National program. He was almost the sole Englishman to hold out against the resulting war, and as a consequence of his liberal views and of his persistent opposition to the Foreign Office he was exiled from Egypt for several years. He remained throughout his life a resolute "little Englander." In 1885 and 1886 he stood unsuccessfully for Parliament as a home ruler and was arrested while presiding over a political meeting in Ireland and condemned to imprisonment. *In vinculis* (London 1889), a poem of his prison days, was inspired by his confinement. His *Diaries* are perhaps the best known of his published works. They are valuable as source material for the study of the imperialistic tendencies of the times and contain significant information on the origins of the

World War. Blunt was a poet of considerable merit and as a translator was largely instrumental in developing in England an interest in the poetry of Persia and the East. He was almost Elizabethan in his passion for adventure and romance and in his love of poetic expression.

ALYSE GREGORY

Important works: *My Diaries, 1888–1914*, 2 vols. (London 1919–20, reprinted with preface by Lady Gregory 1921); *The Future of Islam* (London 1882); *Ideas about India* (London 1885); *India under Ripon* (London 1909); *Atrocities of Justice under British Rule in Egypt* (London 1907); *Secret History of the English Occupation of Egypt* (London 1907); *Gordon at Khartoum* (London 1911); *The Land War in Ireland* (London 1912). Blunt wrote also two significant political poems, *Wind and the Whirlwind* (London 1883), and *Satan Absolved* (London 1899).

Consult: "Further Correspondence respecting the Affairs of Egypt" in Great Britain, House of Commons, *Parliamentary Sessional Papers*, vol. lxxxii (1882) no. 13; "Correspondence respecting Mr. Wilfrid Blunt" in Great Britain, House of Commons, *Parliamentary Sessional Papers*, vol. lxxxix (1884) no. 27; Lovett, Robert Morss, review of Blunt's *Diaries* in *The Dial*, vol. lxix (1920) 519–27; Chew, S. C., "Wilfrid Blunt: Self-Determinist" in *The New Republic*, vol. xxiii (1920) 248–50.

BLUNTSCHLI, JOHANN KASPAR (1808–81), Swiss-German jurist and political theorist. Bluntschli was trained and profoundly influenced by Savigny at the University of Berlin. He began his scholarly career with a *Staats- und Rechtsgeschichte* of his native Zurich (2 vols., Zurich 1838–39; 2nd ed. 1856), which was the first attempt to apply the methods of the historical school to the study of a Swiss canton and served as a model for subsequent similar investigations. When the appointment of David Strauss to a chair in the Zurich Polytechnicum drove even the more liberal elements into opposition to radical democracy, Bluntschli left Switzerland. Being deeply attached to the mystical psychologist Friedrich Rohmer, Bluntschli followed him to the University of Munich shortly before the revolutionary year of 1848. Here he wrote the *Allgemeines Staatsrecht* (2 vols., Munich 1851–52; 5th ed. in 3 vols. as *Lehre vom modernen Staat*, Stuttgart 1875–76; 6th ed. by E. Loening 1885–86; Eng. tr. of vol. i of 6th ed. as *Theory of the State*, Oxford 1892) in which he treated the state as a "moral-spiritual personality" comparable to a human organism. The body of the state, its constitutional organization, is subject to the law of growth, decay and death; its soul, the national spirit, is embodied in the common language, customs and outlook of the people. This work on public law was followed by a treatise on *Deutsches Privatrecht* (2 vols., Munich 1853–54; 3rd ed. by Felix Dahn, Munich 1864) in which Bluntschli attempted to contrast the indigenous elements in German law with those received from Roman law. In collaboration with his friend Karl Brater he began the publication of the *Deutsches Staatswörterbuch* (11 vols., Stuttgart 1857–70), which for the second generation of German liberals had much the same importance as the *Staats-lexicon* of Rotteck and Welcker had had for the first. In 1861 Bluntschli was called to Heidelberg, where he joined that remarkable group of liberal Protestant politicians and scholars which helped to make Baden under its young Grand Duke Frederick I the protagonist in southern Germany of national union under Prussian leadership. Here he assumed the guidance of the reform party in the second chamber and as one of the founders of the Protestantenverein played an important part in the synod of the Protestant church in Baden. At the same time, favored by the conditions of a transitional period, he extended the range of his writing and teaching to embrace virtually the entire field of the social sciences. During the Austro-Prussian War he wrote two manuals, *Das moderne Kriegsrecht der civilisirten Staaten* (Nördlingen 1866, 2nd ed. 1874) and *Das moderne Völkerrecht der civilisirten Staaten* (Nördlingen 1868, 3rd ed. 1878), in which he systematized the existing rules and practises of international law in a series of annotated propositions. He was a zealous advocate of the establishment, and eventually served as one of the founders, of the Institut du Droit International at Ghent (1873). Together with Karl Knies he displayed the liveliest interest in economic disciplines, which had flourished at Heidelberg since the time of K. H. Rau; and in the economic evolution of Baden along modern lines after 1870. Bluntschli was a fine representative of the German bourgeoisie, which without ceasing opposition to many of Bismarck's policies cooperated with him to pave the way for the foundation of the empire in 1870.

CARL BRINKMANN

Consult: Bluntschli, J. K., *Denkwürdiges aus meinem Leben*, ed. by R. Seyerlen, 3 vols. (Nördlingen 1884); Knonau, Meyer G. von, in *Allgemeine deutsche Biographie*, vol. xlvii (1903) 29–39; Meili, F., *J. C. Bluntschli und seine Bedeutung für die moderne Rechtswissenschaft* (Zurich 1908); Coker, F. W., *Organismic Theories of the State* (New York 1910) p. 104–14.

BOARDING OUT. *See* PLACING OUT.

BOARDS, ADMINISTRATIVE. In the administration of public affairs extensive use has been made of boards, and although in recent times there has been a distinct tendency toward unitary control of administrative services there are still many examples of the board system. Boards are sometimes called commissions, but the latter name may more properly be reserved for bodies whose chief function is regulative, that is, quasi-legislative and quasi-judicial.

Since the end of the Middle Ages boards have been used to some extent by most European governments. Spanish colonial administration was for a long time largely in the hands of boards: the Council of Indies in Madrid and the *audiencias* in the colonies. After the sixteenth century boards developed about the person of the monarch in Germany (*Hofrat*, *Kanzlei*, *Kammer*). Sweden, Denmark, France and some of the Italian states employed administrative boards, and Peter the Great of Russia as part of his program of westernization copied the Swedish board system. In England the Committee of the Privy Council on trade and foreign plantations developed into an administrative board which in 1786 was given its own president and developed into the supreme colonial executive authority. The Admiralty and Treasury were also administered by boards.

In the American colonies in the eighteenth century there were councils to the governors, but little other use of boards or committees. During the revolution the Continental Congress and the state assemblies set up committees and boards to administer the navy, the army, the treasury and foreign affairs, but in 1781 the Congress established a system of single headed departments. Although this system has in general prevailed in the national government, administrative boards have been established for various purposes, especially since 1913.

In colonial local government there were school committees and in some colonies boards of county commissioners or supervisors. Local boards of health were established in several states before 1800 and other boards for special purposes were set up occasionally after that time. After 1850 boards in municipal government began to supersede standing committees of the city council for the management of police and fire departments, water works, public improvements, public parks, schools, libraries, charitable institutions, the administration of taxes and the making of estimates. In many cases such boards were elected, in some appointed by the state; they were thus largely, and sometimes wholly independent of the city government. After 1870, however, municipal boards (except school boards which continued to be elective) were largely appointed by the mayors, and in later years boards in many places have been generally replaced by single commissioners or directors. At the same time the creation of special districts for particular purposes has added to the number of independent local boards. The commission form of government introduced in numerous American municipalities since 1901 is based to some extent on the principle of board administration. The city commission is the principal executive authority in the municipality, although the individual members of the commission take charge of separate executive departments.

State boards came into use early in the nineteenth century for public works, for the equalization of tax assessments and for the management of penal, and later of charitable and educational, institutions. Following the Civil War new types of boards were established, especially to handle new activities of the state governments. Boards were given general supervision over charities and correctional institutions, public health, libraries, pardons, railroads, labor, agriculture, civil service and other functions. At the end of the century there began a tendency toward the combination of boards having related functions. Beginning with Illinois in 1917, more comprehensive plans of administrative reorganization were carried out in a number of states; these have involved the abolition of many boards and the replacement of others by single officials.

Administrative systems based on unitary executive control sometimes make use of boards for interdepartmental service or to meet emergency situations. The United States Civil Service Commission, established in 1883, the Interdepartmental Social Hygiene Board, established in 1918, and the California State Board of Control are examples of the former type, as is the German *Rechnungshof*, or court of accounts, which examines accounts of all administrative departments to determine whether budgetary provisions have been carried out, and which is independent of the president and the national administration. Emergency boards for special purposes are typified by those established in most belligerent countries from 1914 to 1919. In the United States the War Industries Board, the War Trade Board and the Shipping Board, in England the Food and Cattle commissions and the Cotton and Canal controls, in France the

regional committees attached to the Ministry of War and charged with the coordination of supplies, were devised to meet what were in essence military needs. They were designed to compel cooperation of all elements of the population in the war enterprise in the most efficient manner possible; the board form facilitated that end by enlisting the direct interest and service of representatives of such diverse groups as labor, industrialists and farmers.

The board form has been common in international administration since early in the last century as a result of the necessity of giving representation to all independent states, and a few such boards, the Danube Commission for example, have had some success. But, whether these boards were charged with carrying out treaty terms or with administering regulations concerning hygiene, slave trade or navigation, their efficacy has been limited by the doctrine of equal sovereignty which usually makes necessary unanimous agreement in executive decisions often of quite minute character. The collegiate form of organization was extended in the international field during the war, but such boards as the Allied Maritime Transport Council were essentially advisory or regulative and not administrative because of the difficulty of compelling obedience from independent states. Joint agencies somewhat resembling international boards have also been established in the United States for dealing with interstate problems. An important illustration is the Port of New York Authority, set up in 1922, consisting of six members, the governors of New York and New Jersey appointing three each, which is constituted as a public corporation with autonomous powers, although the governor of New Jersey has been given a veto power over the decisions of the New Jersey commissioners. Similar joint boards have been established for intercity problems in the United States, England and other countries.

Few European governments make much use of boards today. In Russia the Soviets have considerable administrative power and some executive work is done entirely by boards. The French system is organized on the principle of single officials for executive work. The many French councils (Conseil d'État, Conseils Départementaux, Conseil Supérieur des Travaux Publics) are essentially advisory in character. Such a board as the Conseil d'Administration in the army is an exception. Since 1921 there have been managing boards for tax and customs administration which are subject to some control by the minister of finance. Austria replaced boards as heads of ministries by individuals in 1848 and has used them since only for some local administrative purposes. While there are a considerable number of boards in England today many of them (e.g. the Treasury Board, Board of Trade and Board of Education) are purely formal and do not function. The Local Government Board has become the Ministry of Health. The Admiralty Board and Army War Council are active agencies, and there are advisory committees and councils in other fields. In the nineteenth century the trend in Germany was also away from boards, especially in the main government departments where the principle of responsibility was developing. But although German practise today is against giving full independence to boards (any more than to individual executives), many collegiate bodies, such as the commissions on coal, iron, potash, electricity and war debts, make executive decisions in conjunction with ministers. In provincial and local government the administrative board is common; the chief municipal executive is in many cases a magistracy elected by the city council and headed by the burgomaster, who is generally merely the first among equals. The German board system is combined with the principle of responsibility to the legislature. As a result legislation is simplified and administration rendered flexible. The legislature lays down general principles and the executive makes the detailed rules, its collegiate character enabling it to refer constantly to varying shades of opinion and interest in making even minute decisions. Furthermore the great weakness of administrative boards, lack of fixed responsibility, is avoided through the fact that while executive decisions are made by the board the actual work of carrying them out depends on individual officials.

In the United States the number and variety of boards has, it seems clear, been carried to excess. The looseness of the administrative system has often led to the creation of boards for purposes which should be within the province of a government department. The desire to escape the pervasive influence of party politics in administration has had the same effect. There is consequently room for reduction, combination and simplification of administrative agencies in national, state and local governments.

There has been much discussion in all countries of the relative merits of boards and single

officials for administrative purposes. The general question was debated at length as early as 1781 in the Continental Congress and in the year VIII of the French Revolution, when was coined the phrase, "agir c'est le fait d'un, délibérer c'est le fait de plusieurs." Boards are held to be useful to secure the consideration of different points of view on questions of policy and in connection with overlapping terms to ensure continuity of policy. Sometimes they have been advocated as means of removing from central and political control work (especially education and social welfare) in which political considerations should carry no weight. They have also been favored as means of eliminating partisan and spoils politics through the division of membership, either by law or by custom, among the contending political groups.

On the other hand, it is argued that the board system involves expense, delay and diffusion of responsibility and makes more difficult cooperation and correlation between different public agencies. Corrupt politics has held sway under unpaid boards as well as under single salaried officials, and bipartisan boards have sometimes led to division of spoils and on other occasions to serious deadlocks. Boards with overlapping terms have proved serious obstacles to reform administrations.

For the conduct of administrative services there should be a responsible single executive. There will remain, however, a place for boards in conducting inquiries and in planning new undertakings, as well as in the management of emergency or temporary tasks. Furthermore they will find a function as advisory agencies and as regulators of general policy even in cases where a responsible single executive will carry out the actual administrative work. This division of function has already developed to a considerable extent in the control and management of educational affairs; it promises the possibility of deriving from the use of boards the greatest possible benefit with the least possible disadvantage. There will, of course, exist danger of conflict between the supervising board and the administrative official.

JOHN A. FAIRLIE

See: ADMINISTRATION, PUBLIC; ORGANIZATION, ADMINISTRATIVE; COMMISSIONS; BOARDS, ADVISORY; INTERNATIONAL ORGANIZATION; GOVERNMENT; STATE GOVERNMENT, UNITED STATES; LOCAL GOVERNMENT; MUNICIPAL GOVERNMENT; COLONIAL ADMINISTRATION; AUDIENCIA; FINANCIAL ADMINISTRATION.

Consult: Willoughby, W. F., *Principles of Public Administration* (Baltimore 1927) ch. vii; Short, L. M., *The Development of National Administrative Organization in the United States* (Baltimore 1923) ch. ii; Mathews, J. M., *Principles of American State Administration* (New York 1917); Munro, W. B., *Municipal Government and Administration*, 2 vols. (New York 1923) ch. xxiii, and *The Government of American Cities* (4th ed. New York 1926) ch. xviii; Fairlie, John A., *Local Government in Counties, Towns and Villages* (2nd ed. New York 1914) ch. v; Clarke, John J., *Outlines of Central Government* (3rd ed. London 1928); Block, Maurice, *Dictionnaire de l'administration française*, 2 vols. (5th ed. Paris 1905) vol. i, p. 901–49; Hauser, Henri, *Le problème du régionalisme* (Paris 1924); Stengel, K. M. J. L., *Die Organisation der preussischen Verwaltung* (Leipsic 1884) p. 21–27; Meyer, G., and Anschütz, G., "Behörden" in *Wörterbuch des deutschen Staats- und Verwaltungsrechts*, ed. by M. Fleischmann, 3 vols. (2nd ed. Tübingen 1911–14) vol. i, p. 388–93; Blachly, F. F., and Oatman, M. E., *The Government and Administration of Germany* (Baltimore 1928) p. 244–54 and 561–76; Thursfield, J. R., "The Board of Admiralty" in *Quarterly Review*, vol. ccxxii (1915) 56–65 and 202–13; Kovalevsky, M. M., *Russian Political Institutions* (Chicago 1902) p. 101–08; Potter, P. B., *An Introduction to the Study of International Organization* (rev. ed New York 1925) ch. xvii.

BOARDS, ADVISORY. Advisory boards have been used in many countries chiefly as a means of corrective expression of opinion by groups of the population representing particular interests. Latterly they have tended increasingly to take on the character of councils of technical experts. They are, indeed, significant notably as a phase of the accommodation of government to the diversity and specialization of a society at once technical and competitive. Legionary, fugitive, inherently particular, their utility lies in just these characteristics which make it impossible to classify them. Critics of the adequacy of representation through assemblies based on geographical constituencies frequently miss the heart of the problem involved when, by concentrating attention on the legislative organ, they propose to replace one form of oversimplification by another. To remedy such oversimplification it is possible to evoke an endless number of representative combinations on the administrative side through the creation of collegiate bodies of various kinds. The field of opportunity for such a congeries of minor, informal and specialized parliaments is being enlarged by the delegation of rule making powers and the widening of other forms of administrative discretion.

Precision in terminology is alien to a development so fluid in essence as the institution of the advisory board. Its basis until lately has been largely non-statutory, although in France the

Conseil Supérieur du Commerce et de l'Industrie and other bodies wholly or partly advisory in character were long ago established by law. Advisory bodies are referred to with increasing frequency in current legislation; *Beiräte* are even mentioned in the constitution of the German Republic. In English speaking countries the term "advisory" has been applied to bodies variously called, without apparent discrimination, boards, commissions, councils and committees. Some recent British enactments provide for "consultative committees." This adjective is more suggestive and perhaps more accurate than "advisory," but it has not acquired a clear connotation. Logically no body can fairly be described as advisory if it is legally capable of conclusive action of any sort. The term, therefore, does not properly belong to boards which, although unable themselves to give their recommendations positive force, can prevent action by taking a negative stand. The so-called "advisory boards" in Indiana townships, authorized by an act of 1899, were obviously misnamed inasmuch as such vital matters as the letting of contracts and borrowing under certain circumstances required their approval. On the other hand, boards that are truly advisory may be given a mandatory role in the sense that the law may specify that they must be consulted before final action is taken. Requirements of this kind are relatively frequent in Great Britain. The Ministry of Transport, for example, enjoys the cooperation of several advisory committees, to one of which, on rates, it must submit certain of its orders (9–10 Geo. 5, c. 50), and the joint committee empowered to regulate the therapeutic substances industry must consult an advisory committee before acting (15–16 Geo. 5, c. 60).

Whether, in given situations, boards should be merely advisory or something more depends in part upon a solution of the inveterate controversy regarding the merits of single headed and collegiate types of administrative organization. Even if the decision be against boards for administrative work, room remains for advisory boards. In practise, too, the vogue of centralizing executive control by means of single headed departments has sometimes tended, by excluding boards from full participation in administration, to encourage their use in an advisory capacity. An outstanding example was the systematic provision of what were called "advisory and non-executive boards" in the Illinois civil administrative code of 1917, although in this case the practise was doubtless strengthened by the successful establishment two years before of advisory boards for the purpose of bringing representatives of capital and labor into contact with the free employment exchanges.

Whether, when boards exist at all, they should be authoritative or advisory depends upon the extent to which it seems proper to allow the interests that government regulates to come to its door or to cross its threshold. One view—the natural view of an earlier, crusading phase in the development of the police power—would hold them at a distance. In its extreme form it fears that the integrity and punitive force of law may be impaired by the existence of consultative bodies of any kind. Another view treats as inevitable and essentially wholesome the rise of collaborative technique in law enforcement, especially in economic matters. Already collaboration has progressed so far that it is difficult to draw a line between governmental functions of restraint and of service. The widespread use of advisory boards has accompanied the change. To say this, however, is merely to restate the problem, for the existing boards are of many types; some are safer than others.

More than a word of qualification must be added in reference to the role of advisory bodies in effecting a kind of vocational representation in administration. The range of overlapping types is wide. Many advisory boards consist wholly of governmental officers or employees. An example is the federal Plant Quarantine Board, which brings representatives of the bureaus of Entomology and Plant Industry and of the Forest Service into consultation with the chief of the Plant Quarantine and Control Administration. Such groups are chiefly important as a means of coordination. An extremely significant variation of the type draws together officials from different levels of government. Few tendencies in federalism in the United States seem more fruitful than those neatly illustrated in the Joint Committee on Definitions and Standards connected with the Food, Drug and Insecticide Administration, consisting of three persons from the national Department of Agriculture, three from the Association of Dairy, Food and Drug Officials of the United States and three from the Association of Official Agricultural Chemists. Also of interest has been the growth from the bottom upward of a National Plant Board, formed on the basis of regional associations of state quarantine authorities. Many advisory boards mix official and non-governmental elements in their membership. The London and

Home Counties Traffic Advisory Committee, for example, consists in part of "ordinary members," who represent the various local governments and who on certain matters deliberate alone, and a lesser number of additional members, who speak from the standpoint of labor and capital engaged in transport, "appointed by the Minister . . . after consultation with such bodies representative of those interests as he may think desirable" (14–15 Geo. 5, c. 34).

Other boards are composed entirely of persons not regularly in government service. Not a few of these aim to be solely vehicles of lay opinion, especially the innumerable boards of visitors connected with hospitals, prisons and other public institutions. Even here, however, there has been a growing tendency to select as members professionals in related fields who can offer technical information as well as, or instead of, representative opinions. Some boards, essaying the difficult operation of separating technique from interest, seek to recruit untrammeled experts. The Census Advisory Committees in the United States are of this kind. A vast array of boards frankly proclaim their connection with outside occupations and industries. They vary in crucial respects, however, especially in regard to the extent to which the mode of their selection and other conditioning facts incline their members to consider themselves not merely representatives but rather delegates of interests. Boards of the latter sort merge into transient assemblages like the trade practise conferences conducted by the Federal Trade Commission or the even less formal groups which in most fields of administration are convened in hearings before important new rules or orders such as quarantines are issued.

The activities of government variously described as developmental and promotional have been a prolific source of advisory bodies. Examples numbering nearly a hundred abound in the United States Department of Commerce, notably the commodity committees associated with the Bureau of Foreign and Domestic Commerce. They are distantly analogous to the councils of consumers frequently constituted in connection with publicly owned and operated utilities. Whatever their ostensible purpose, they had their inception largely as sales devices on the part of government bureaus eager to extend their services. Their cumulative reaction on public policy has been, however, a more serious matter. They impinge on fields in which investigation and advice are merging into regulation, influencing the direction of purchasing power and involving conflicting groups. Careful insulation between the administration and the advisory bodies and internal safeguards through a proper balance in the latter are proving as necessary here as in the domain of directly coercive power.

The avowed presence of organized interests in the membership of advisory boards is doubtless a frequent aid to their vitality. Reiterating a plea for advisory councils in state departments of labor, John R. Commons remarks: "In order to have real representation with representatives whose word will carry weight, it is necessary that the representative be backed up by an organized group. In practise, a representative must represent somebody. If he is merely a sort of statistical sample of his class, he will find himself in the weak position of having to pit his personal opinion against the demands of an organized opposition." He espouses the plan of vocationally balanced advisory groups as a means of securing the good will of employers. This reason is an important one. Not only in the spirit but also in the forms of administration appear at a thousand points evidences of a new reading of the doctrine of the consent of the governed so as to include not simply a blanket approval through the franchise but more or less regular sounding of interested opinion through representative advisory bodies. The doctrine is not without perils. It daily sharpens the need for administrative authorities who are skilful in consultation, vigilant in arranging representation that is reasonably comprehensive, sympathetic but wary, and above all independent. Only by careful use of advisory boards will the danger of compromising administration at its core be avoided.

ARTHUR W. MACMAHON

See: ORGANIZATION, ADMINISTRATIVE; BOARDS, ADMINISTRATIVE; ECONOMIC COUNCILS; EXPERT; FUNCTIONAL REPRESENTATION; REPRESENTATION.

Consult: Carr, C. T., *Delegated Legislation* (Cambridge, Eng. 1921); Dawson, R. M., *The Principle of Official Independence* (London 1922) p. 21–25; Willoughby, W. F., *Principles of Public Administration* (Baltimore 1927) ch. xii; Hauser, Henri, *Le problème du régionalisme* (Paris 1924); Fairlie, J. A., "Advisory Committees in British Administration" in *American Political Science Review*, vol. xx (1926) 812–22; Comer, J. P., *Legislative Functions of National Administrative Authorities*, Columbia University Studies in History, Economics and Public Law, no. 289 (New York 1927); Chamberlain, J. P., "Democratic Control of Administration" in *American Bar Association Journal*, vol. xiii (1927) 186–88; Turner, J. M., "Democracy in Administration" in *American Political Science Review*, vol. xvii (1923)

216–30; Commons, J. R., and Harriman, Florence J., in U. S., Commission on Industrial Relations, *Final Report* (Washington 1915) p. 307–404; Commons, J. R., "Representative Advisory Committees in Labor Law Administration" in *American Labor Legislation Review*, vol. xix (1929) 331–35; Wiley, H. W., *The History of a Crime against the Food Law* (Washington 1929).

BOCCALINI, TRAIANO (1556–1613), Italian political writer and satirist. Boccalini was born at Loreto but lived most of his life in Rome. In literary satires and in more serious works he developed with great logical strength and with considerable bitterness the theory of the *raison d'état*. The best form of government is the republican, which is, however, rendered impossible by the bestiality of mankind; hence the necessity for monarchs. Princes are guided by self-interest and the nature of their political power is such that unhappiness results both for them and for the people over whom they rule. Although Boccalini did not lack courage to denounce the hypocrisy and greed of princes, he lacked faith in the possibility of improvement and displayed a fatalistic resignation to the inherent evils of monarchy. Machiavelli's tyrant was heroic, but Boccalini's was gloomy and suspicious; and in this contrast there is a hint of the transition from the Renaissance to the Counter-Reformation.

Boccalini's chief work was the *De'agguagli di parnaso* (2 vols., Venice 1612–13; new ed. by G. Rua, 2 vols., Bari 1910–12), an amusing literary fantasy in which poets, writers and politicians are judged by Apollo in the kingdom of Parnassus. In his *La pietra del paragone politico* (Venice 1615; new ed. by G. Rua, 2 vols., Bari 1910–12), a work which was published only after his death because it was considered too dangerous, he revealed his admiration for the old Venetian aristocratic government and his violent hostility toward Spanish domination in Italy. He also left unpublished *La bilancia politica* (3 vols., Castellana 1678), a commentary on Tacitus which is devoted chiefly to an attack on political absolutism.

GIUSEPPE PREZZOLINI

Works: Collected in an English translation, 5 vols. (London 1714).

Consult: Mestica, G., *Trajano Boccalini e la letteratura critica e politica del seicento* (Florence 1878); Toffanin, G., *Machiavelli e il "Tacitismo"* (Padua 1921) p. 192–207; Meinecke, F., *Die Idee der Staatsräson* (3rd ed. Munich 1929); Gardner, E. G., "Traiano Boccalini" in *Dublin Review*, vol. clxxix (1926) 236–55.

BOCCARDO, GIROLAMO (1829–1904), Italian economist. At an early age he became absorbed in economic studies, which attracted the attention of Cavour. In 1860 he was appointed professor of economics at the University of Genoa. He became senator in 1877 and eleven years later entered the Council of State, where he exercised a strong influence in social policy.

In a number of important works, including *Trattato teorico-pratico di economia politica* (3 vols., Turin 1853; 7th ed. 1873) and *Dizionario della economia politica e del commercio* (4 vols., Turin 1857–63; 3rd ed. in 2 vols., Milan 1881), Boccardo develops with some modifications the economic doctrines of the liberal school. He treats value as an exchange ratio, and market price as fixed by relations of demand and supply, but with cost of production exercising a determining influence. Refuting Sismondi's notion as to inelasticity of demand he demonstrates that the reduction of price uncovers lower levels of demand. He maintains that personal consumption, which he distinguishes from consumption in industry, is in some measure productive. He argues for the encouragement of large scale industries; they enjoy a lower overhead cost per unit, permit the standardization of products and the greater utilization of by-products, stabilize the employment of labor, reduce the need for middlemen and favor the initiation and adoption of new processes. He opposes poor relief on the ground that it is morally injurious to the recipients and contributes to the increase of pauperism.

Later Boccardo came under the influence of Spencer, whose sociological concepts he applied to economics in a number of prefaces written for the third series of *Biblioteca dell' economista*, of which he was the editor (collected in *L'economia politica moderna e la sociologia*, Turin 1883).

RENÉ HUBERT

Consult: Giorgi, G., in R. Accademia dei Lincei, Classe di scienze morali, storiche e filologiche, *Rendiconti*, 5th ser., vol. xiii (1904) 161–76.

BOCCHI, ROMEO, seventeenth century Italian monetary theorist. Bocchi is known as the author of *Della giusta universale misura et suo typo* (2 vols., Venice 1621). He advocates the stabilization of the currency and points out the evil effects arising from changes in its value "with respect to time and previous transactions." Like Scaruffi and others he favors the establishment of an international currency system which would automatically put an end to the exporta-

tion of coin for speculative purposes. In the most original portion of his work he discusses the problem of reducing the shipments of bullion in settlement of international balances. Drawing upon personal observation he lists the various devices used in different countries for effecting payments without the use of money. After considering the use of both a single transfer bank and a system of banks, as well as the method of circulating bills of exchange by endorsement, he states his preference for the clearing method employed at the Besançon fair where on a specified day all bills fell due and were balanced.

ULISSE GOBBI

Consult: Gobbi, U., *L'economia politica negli scrittori italiani del secolo XVI–XVII* (Milan 1889) p. 164–76.

BÖCKH, AUGUST (1785–1867), German historian of classical antiquity. Böckh was deeply influenced by the great Homeric scholar, Friedrich August Wolf, and in turn exerted a profound influence on successive generations of students at the University of Berlin (1811–67). Inspired by the humanism of the German poets and thinkers and by the new critical research, he undertook to reconstruct accurately and with minutest detail the life of the ancient Greeks in its unadorned power. Böckh recognized the incalculable value of the many hitherto unexploited stone inscriptions and with the aid of the Berlin Academy of Sciences began the publication of the *Corpus inscriptionum graecarum* (4 vols., Berlin 1825–77). This project, carried on by Böckh's pupils after him, presented for scientific study thousands of Greek inscriptions transcribed and edited by reliable scholars and laid the foundations of classical epigraphy. In his epoch making work, *Die Staatshaushaltung der Athener* (2 vols., Berlin 1817, 3rd ed. enlarged 1886; tr. by A. Lamb from 2nd German ed. as *The Public Economy of the Athenians*, Boston 1857), he made use of these materials to describe the Greek state and Greek society. This work deals with the Athenian population—their numbers, social structure and professional activity, the conditions of their daily life, the interplay between the natural potentialities of the soil and the activity of man—and above all with the state. The financial administration of the state, its expenditures and income, its currency, its activity during peace and war, are all investigated both for their material background and for their importance for the intellectual development of Athens. This book became the model for all subsequent research into classical antiquity. It placed its author among the outstanding historians and sociologists of the first half of the nineteenth century and to this date has not been superseded.

WILHELM WEBER

Consult: Hoffmann, Max, *August Böckh* (Leipsic 1901); Wilamowitz-Moellendorf, U. von, *Geschichte der Philologie* (Leipsic 1921); Sandys, J. E., *A History of Classical Scholarship*, 3 vols. (Cambridge, Eng. 1908) vol. iii, p. 95–101; Gooch, G. P., *History and Historians in the Nineteenth Century* (London 1913) p. 30–35.

BÖCKH, RICHARD (1824–1907), German statistician. He was the son of the historian, August Böckh, and began his career in the Prussian administration. From 1861 to 1875 he worked in the Prussian statistical office and from 1875 to 1903 was director of the municipal statistical office of Berlin. Böckh is best known for the invention of new, and the improvement of old, methods of computing frequency rates in vital statistics. He enhanced the value of mortality tables by taking into account the migration of population and the differential influence of causes of death. He was the first to devise tables for the duration of marriage, in which he considered the annual decrease of married couples through death and divorce. Böckh also measured the rate of marriage of females and of death of unmarried females, thus furnishing for the first time a fairly accurate basis for dowry insurance. By computing fertility rates for each age group and by discounting the result for the mortality of women of child bearing age he attempted to set up reproduction tables; as early as the seventies this work led to the conclusion that the natural increase would not be sufficient to keep the population of Berlin constant. In connection with the 1885 census he studied the influence of the methods of feeding on infant mortality. Böckh also made important contributions to the statistical study of unemployment and of the frequency of crime.

PH. SCHWARTZ

Consult: *Zur Erinnerung an Richard Böckh* (Halensee 1908); Silbergleit, Heinrich, in Institut International de Statistique, *Bulletin*, vol. xviii, pt. i (1909) 659–67; Ballod, Carl, "Richard Böckh und das statistische Jahrbuch der Stadt Berlin 1876–1900" in *Schmollers Jahrbuch*, vol. xxvi (1902) 341–56.

BODICHON, BARBARA LEIGH SMITH (1827–91), English pioneer in the movement for educational, economic and political emancipation of women. She received an education which developed her abilities, her public spirit and

her enterprise to an extent unusual for her time. In 1854 Mme. Bodichon published a widely read pamphlet (*Brief Summary in Plain Language of the Most Important Laws concerning Women*, 2nd ed. London 1856) and organized agitation in support of a bill respecting the property rights of married women, which she had persuaded the Law Amendment Society to introduce. She advocated the removal of educational and other restrictions which debarred women from earning their living and from doing public work (*Women and Work*, London 1857). With some friends she founded the Association for Promoting the Employment of Women and established the *Englishwoman's Journal*, thus bringing the woman's movement into existence as an organized force. She supported J. S. Mill's candidature for Westminster (1865), promoted the first women's suffrage petition to Parliament and helped to form the first women's suffrage committee. In 1869 she cooperated with Emily Davies in founding Girton College, an important step toward higher education. A practical worker of great originality and initiative, a woman of wide artistic, literary and political sympathies, Mme. Bodichon was an invaluable supporter of the women's movement in its early days of unpopularity and ridicule.

BARBARA STEPHEN

Consult: Strachey, R. C. C., *The Cause* (London 1928); Stephen, Barbara, *Emily Davies and Girton College* (London 1927).

BÖDIKER, TONIO (1843–1907), German administrative official and writer in the field of social insurance. After occupying various important offices in the state service Bödiker was chosen in 1881 as Bismarck's adviser and active collaborator in carrying out the program of industrial insurance foreshadowed in the historic Imperial Message of that year. The third Accident Insurance Bill, which became law in 1884, was almost entirely Bödiker's work and he served as the first president of the Imperial Insurance Board, holding office until 1897. The principal functions of the board were to organize the trade associations which administered the accident insurance laws and to supervise their operations as well as those of the invalidity insurance offices. It had also to serve as a supreme court of appeal for the entire domain of insurance legislation. Bödiker brought to his task a versatile and constructive mind, sound judgment and the firm grasp of the born organizer and administrator, winning confidence and support of both employers' and workers' organizations. He laid the basis of a many sided system of medical and surgical service for the victims of industrial accidents, including the provision of special hospitals and sanitaria, and organized on scientific lines the technique of accident prevention. Under his skilful direction the board put into smooth operation a vast official mechanism; it developed complementary insurance legislation and administrative procedure, establishing its own precedents and creating a fairway for a great and novel social experiment. Bödiker was also active in the international movement for industrial insurance and was honorary president of the International Workmen's Insurance Congresses.

W. H. DAWSON

Important works: *Die Unfall-Gesetzgebung der europäischen Staaten*, Staats- und socialwissenschaftliche Forschungen, vol. v, pt. ii (Leipsic 1884); *Die Arbeiterversicherung in den europäischen Staaten* (Leipsic 1895); *Die Reichs-Versicherungsgesetzgebung*, Staats- und socialwissenschaftliche Forschungen, vol. xvi, pt. iv (Leipsic 1898).

Consult: *Zeitschrift für die gesamte Versicherungswissenschaft*, vol. vii (1907) 335–36; *Soziale Kultur*, vol. xxvii (1907) 161–65.

BODIN, JEAN (1530–96), social and political philosopher of the Renaissance. He was born at Angers, went to study law at Toulouse, became a lecturer on jurisprudence at that seat of learning and afterwards took up the practise of law in Paris. He was received into favor by Henry III and by Henry's brother, the Duc d'Alençon, and rose to be king's attorney at Laon in 1576. This year saw the production of his *chef d'oeuvre*, the *Six livres de la république* (Paris 1576, 5th ed. Frankfort 1609; tr. by R. Knolles, London 1606), and in it he was chosen to represent the third estate of Vermandois in the Estates General of Blois. In this latter capacity Bodin displayed political tolerance and personal courage in opposing the efforts of the nobility and the clergy to enforce conformity to the Catholic faith. His lack of religious bigotry drew on him the displeasure of the zealots and he had a narrow escape from the Massacre of St. Bartholomew. He joined the Catholic League in 1588 but was expelled for his Laodicean views. His later days he spent in retirement at Laon, where he died of the plague in 1596. The accusations of the zealots followed him beyond the grave, for it was said that he died "like a dog," being "neither Jew nor Christian nor Turk."

Aristotelian in the breadth of his intellectual interests, Bodin was one of the path breakers of the Renaissance. The extent of the breach which separated him from mediaeval thought was revealed in his first work, *Methodus ad facilem historiarum cognitionem* (Paris 1566, reprinted Amsterdam 1650), which may be said to have marked the beginnings of a philosophy of history. Bodin substituted a theory of progress for the then prevalent assumption of a primitive golden age and divided history into periods determined by the dominance of races rather than of religions. He attacked the decaying universalism of the later Middle Ages, with its false assumption of an all embracing political and religious *imperium*. In his curiously named *Colloquium heptaplomeres* written in 1588 (Schwerin 1857) he used to this end the characteristic device, already employed for a similar purpose by Nicholas of Cusa, of having the representatives of different religions present their respective points of view in order to bring out the relativity of faith. But while the philosopher of the fifteenth century regards the differences as still to be settled on the abstract grounds of the logic of faith, Bodin strongly suggests that the environmental factor is itself a determinant in every case. The importance which he attributed to environment is again brought out in the fifth book of the *Republic*, where he clearly anticipates the teaching of Montesquieu regarding the responsiveness of intellectual and moral characteristics to climatic differences. Thus the idea of relativity is introduced to temper the competing universalisms of the times.

Bodin faced the profound dilemma which confronted his age, the reconciliation of unity with tolerance. Unity was the first necessity, not only because of the unsolved problem of the relation of church and state in an age of schism but also because of the sovereign pretensions of local communes and of feudal powers of every degree. He found the solution to which the age was leading, the centralized sovereignty of the state. He felt that a clear conception of sovereignty was the first requisite and in the *Republic* that conception, which dominated the political thought of many generations, was for the first time explicitly and consistently stated. The *Republic* is a diffuse and rambling work, ornately set with classical lore and Biblical example, but on this theme it is clear cut and inexorable. From the first sentence to the last Bodin strikes the note of the necessity of a "puissant sovereignty." To this "most high and perpetual power" he assigns an unlimited authority to make laws, with all the rights consequent thereto, such as the right to make war and peace and to impose taxes. The sovereign is not bound by past laws, and is unimpaired by his relation to council or "parliament," needing no consent of his subjects. Bodin admits that there are fundamental or constitutional laws to which the sovereign must conform: he is subject to the rules of princely succession and he cannot alienate the public domain. But these are laws constitutive of his sovereignty; they do not limit the exercise of his will over the territory within which he is sovereign. The danger of an arbitrary or tyrannical exercise Bodin can meet only by repeating that the sovereign is obligated to observe the law of God and the law of nature. He does not face the problem which so much agitated some of his contemporaries, for example, the author of the *Vindiciae contra tyrannos*: what if the sovereign violates this higher law and what if the subject must choose between the command of the sovereign and the law of God?

It is not sufficiently recognized that Bodin was a pioneer in economic as well as in political science. While in certain respects, as in his condemnation of interest, he was bound by current economic prejudices, in others he rose far superior to them. The "high cost of living" was disturbing the western Europe of the sixteenth century. The rise in prices was generally interpreted in mercantilistic terms, and such "remedies" as tariffs, bullion embargoes, sumptuary legislation, price fixing, were in vogue. The monetary consideration generally adduced was the debasement or cheapening of the currency. In fact the comptroller of the mint, Malestroit, put forward as the first of his "paradoxes" the claim that there had been no real enhancement of prices, the apparent rise being merely a reflection of the lower intrinsic content of the coinage. Bodin perceived that this explanation was wholly inadequate, and in his two replies to Malestroit (Paris 1566 and 1578) he claimed that the abundance of money was the primary cause of the phenomenon, vastly more important than the debasement of the currency. This point he developed with a true insight into the essential relationship of money to commodity prices. While earlier writers, from the days of Xenophon, had hinted at this relationship, it was left to Bodin to explore it. He did not, it is true, recognize the factor of the velocity of circulation nor did he fully appreciate the economic changes which themselves demanded a greater

volume of currency. But his reply to the prevailing doctrine is cogent and convincing. Bodin revealed further antimercantilistic insight by pointing out the advantage of free exchange between countries. It is true, however, that in the sixth book of the *Republic*, where he treats the subject of public finance, Bodin lost sight of these advantages and advocated high import duties on manufactured articles as well as prohibitions on the export of raw materials—a policy by which he hoped that the state might both enhance its revenue and protect its home industries.

In constructing a system of public finance, Bodin's problem was to classify the chaotic and inequitable methods employed by the sixteenth century state and to formulate certain basic norms of taxation. He believed that two main objects must be pursued: convenience to the sovereign and equitable distribution of the burden in accordance with ability to pay. Both purposes would best be served if the state derived most of its revenue from the public domain and external customs. Taxes might indeed be levied in addition, but the greatest care should be taken to make them equitable and regular. Bodin introduced the idea that taxes must be impersonal and not personal; otherwise the lower classes would contribute more than their share. He further insisted on the necessity of judicious and just administration of taxes, and to this end suggested a general registration of property. While Italian writers were subsequently to elaborate and in certain respects to improve most of Bodin's theories, he was the first to treat the fiscal problems of the emerging modern state in their relations to the broader aspects of political organization.

R. M. MacIver

Consult: Baudrillart, H., *Jean Bodin et son temps* (Paris 1853); Castonnet des Fosses, H., *Jean Bodin: sa vie et ses oeuvres* (Angers 1890); Barthélemy, E. de, *Étude sur Jean Bodin* (Paris 1876); Fournol, E., *Bodin, prédécesseur de Montesquieu* (Paris 1896); Hancke, E., *Bodin, eine Studie über den Begriff der Souveränität* (Breslau 1894); Hearnshaw, F. J. C., "Bodin and the Genesis of the Doctrine of Sovereignty" in *Tudor Studies*, ed. by R. W. Seton-Watson (London 1924) p. 109–32; Bodin de Saint-Laurent, Jean de, *Les idées monétaires et commerciales de Jean Bodin* (Bordeaux 1907).

BODIO, LUIGI (1840–1920), Italian statistician. Throughout his long career Bodio was concerned with the standardization of statistical technique and the application of the statistical method to the study of the social problems of his time. In 1872 he was appointed secretary of the Central Commission (Giunta) of statistics, and during the following twenty-seven years he was the director of Italian official statistics. He used the autonomy of his office and his personal authority to build up an organization which was a model for its time and a truly scientific laboratory. Even after resigning this position on account of administrative difficulties, he kept in touch with Italian official statistics as president of the Consiglio Superiore di Statistica from 1898 until his death. As secretary (1885–1909) and as president (1909–20) of the International Statistical Institute he endeavored to advance and standardize the statistical study of criminals and recidivists, emphasizing its importance with regard to proper penal legislation and administration. While he was Commissioner General of Emigration (1901–04) he considered his administrative problem to be one of public protection of labor. Besides editing the official statistical publications Bodio wrote a number of monographs on economic and social questions. Perhaps the most important of these is *Di alcuni indici misuratori del movimento economico in Italia* (2nd ed. Rome 1891), which by virtue of its exhaustive treatment of Italian conditions from 1860 to 1890 has the value of a statistical encyclopaedia. He was also one of the founders of the *Archivio di statistica* and the founder of *Annali di statistica*, which served as digests of official material in Italy and as records of important statistical work abroad.

Edwin Mims, Jr.

Consult: Gini, Corrado, in *Journal de statistique et revue économique suisse*, vol. lvi (1920) 410–12; Földes, Bela, in *Allgemeines statistisches Archiv*, vol. xviii (1928) 426–36; Colletti, Francesco, "Del carattere e dell' opera di Luigi Bodio" in *Rivista bancaria*, vol. ii (1921) 113–23; Stringher, Bonaldo, "In memoria di Luigi Bodio" in *Riforma sociale*, vol. xxviii (1921) 1–10; Delatour, Albert, in Institut International de Statistique, *Bulletin*, vol. xxi, pt. i (1923) 27–31.

BODLEY, JOHN EDWARD COURTENAY (1853–1925), English writer on French culture. He was appointed secretary to the Royal Commission on the Housing of the Working Classes in 1884 and shortly afterwards published three reports on conditions in England, Scotland and Ireland. The poor health which prevented Bodley from pursuing a political career, however, led him to France and he developed a deep interest and a very real understanding of that country. He was soon regarded by Frenchmen

as the most intelligent critic of themselves and their institutions. A staunch Whig, a Low Churchman and therefore more fearful of change than the French, Bodley yet sympathized with their aims. At the same time his personal distrust of extremes prevented a too enthusiastic acceptance on his part of the radical elements of French political thought. After seven years of careful study his book *France* appeared (2 vols. London 1898, new ed. 1 vol. 1900; French translation *La France: essai sur l'histoire et le fonctionnement des institutions politiques françaises*, Paris 1901). It is an admirable study of the social and political psychology of that country. The French conception of liberty, he believes, is applied to the abolition of hereditary privileges rather than to the eradication of social distinctions and hierarchies. He attributed the political pessimism prevalent in France at the time to "the combination of parliamentary government with administrative centralization" and to the fact that in his time the majority were indifferent to politics. His discussion of party politics in France displays a profound and precise understanding of those nuances of political opinion that have proved so perplexing to most foreign students of the French mind. Two other works of Bodley are related to this first volume: his lectures on *The Church in France* (London 1906), relating to the quarrel of church and state in the republic, and his significant essay entitled "The Decay of Idealism in France" (in *Cardinal Manning—The Decay of Idealism in France—The Institute of France*; three essays, London 1912) which discussed contemporary philosophic and literary tendencies. Bodley thus produced three of the finest analyses of modern French political, literary and philosophical effort as yet written by foreign observers.

JOHN M. S. ALLISON

Consult: For further biographical details, the Institut de France, Académie des Sciences Morales et Politiques, *Séances et travaux*, vol. cciii (1925) 321–24.

BOÉTIE, ÉTIENNE DE LA. *See* LA BOÉTIE, ÉTIENNE DE.

BOGDANOV, A., the pseudonym of Alexander Alexandrovich Malinovsky (1873–1928), Russian social philosopher and economist. Until 1912 he was an active revolutionist, serving from 1903 to 1909 as one of the leaders of the Bolshevist wing of the Russian Social Democratic party. After the establishment of the Soviet government he worked in the field of higher education, led for a time the "proletarian culture" movement and later devoted himself wholeheartedly to the Soviet Institute of Blood Transfusion, which he founded. He published in Russian a number of philosophical works which reflect the unusual course of his intellectual evolution, two economic handbooks, the earlier of which was a standard manual for young Russian Marxists (Eng. tr. of an edition supplemented and revised by S. M. Dvolaitsky, London 1923), and two utopian novels written after the revolution.

Bogdanov's philosophy developed under the influence of W. Ostwald's energetics and the empiriocriticism of E. Mach and R. Avenarius. The monism of Bogdanov's "empiriomonism" was achieved by substituting for psycho-physical parallelism the notion that the difference between "psychic" and "physical" is not real but due merely to a different mode of organizing experience; psychic is individually organized, while physical is socially harmonized, experience. His work on "tectology" (science of general organization) marks a final step; it seeks not to represent the world as a unit but to transform the "chaotic elements" of experience into an organized whole by intellectual processes. In accordance with these epistemological presuppositions Bogdanov treats "social" as inevitably identified with "conscious," and social progress as the growth and increasing harmonization of the element of "conscious." Ideology is the organizing force in social experience. Society divides into classes because of the unequal distribution of ability and skill in organization and because of the private ownership of organizational experience. Since economic production is the "organizational form of the activity of society" the class organizing production is the ruling class. Class stratification will disappear when organizational experience becomes socialized through education and through the development of proletarian culture. In his economic doctrines he departs from Marx by denying that the economic order is historically conditioned and develops in accordance with certain inherent laws. The "fetishism of capitalist production" is due merely to a lack of understanding of the social relations centering about production and distribution, and value is crystallized labor cost independent of the form of economic organization.

J. F. HECKER

Consult: Solntsev, E., and Karev, N., in *Bolshaia sovietskaia entsiklopedia*, vol. vi (1927) 574–82.

BOGIŠIĆ, VALTHASAR ANTON (*c.* 1834–1908), Slavic jurist. He was born at Ragusa in Dalmatia and grew up in a community of southern Slavs. After studying law at Vienna, Munich, Berlin and Paris he devoted several years to personal observation of legal customs in the various south Slavic countries and later published under the auspices of the Jugoslav Academy of Sciences (Zagreb 1874) a collection of them, of which Sir Henry Maine said, "Nothing in my opinion can exceed their instructiveness." Meanwhile Bogišić had become professor of historical and comparative jurisprudence at the University of Odessa (Russia) and in 1879 published his "Aperçu des travaux sur le droit coutumier en Russie" (*Revue historique de droit français et étranger*, 3rd ser., vol. iii, p. 257–74). When the principality of Montenegro sought a way out of its chaotic legal situation, Bogišić was chosen to undertake the task as codifier. In 1873 his services were loaned by the Russian government and by 1882 he had completed the "General Code of Property" (translated into French by R. Dareste and A. Rivière, Paris 1892) which was put into force in 1888. It contains more pure Slavic law than any other code and treats private law from the standpoint of property, both family and succession being considered in relation thereto. Since the work was done on the ground and among the people, the code not only was practical but contained elements of permanency. The principles and methods applied in its preparation were explained by Bogišić in his *À propos du code civil du Monténégro; quelques mots sur les principes et la méthode adoptés pour sa confection* (Paris 1886). After serving as the Montenegrin minister of justice (1893–99) Bogišić resumed his purely scientific labors and edited in collaboration with C. Jireček the *Liber statutorum civitatis Ragusii* (Zagreb 1904), the famous law book of his native city, composed originally in 1272.

CHARLES S. LOBINGIER

Consult: Jagić, V., in *Archiv für slavische Philologie*, vol. xxx (1909) 314–15; Kidric, F., in *Archiv für slavische Philologie*, vol. xxxi (1910) 305–12; Maine, H. S., *Dissertations on Early Law and Custom* (new ed. London 1891) p. 241–43; Phillips, H. A. D., "The Code of Property of Montenegro" in *Law Quarterly Review*, vol. xiii (1897) 70–84.

BÖHM-BAWERK, EUGEN VON (1851–1914), Austrian economist and statesman. He was the son of a high official, and entered government service after graduation from the school of law of the University of Vienna. In 1881 he was appointed professor of economics at the University of Innsbruck, whence he was recalled to the ministry of finance in 1889 to be entrusted with the preparation of those legislative measures concerning direct taxation which were carried into effect by the great reform of 1896. Rising step by step with the increasing success of his work he finally took responsible office as minister of finance first in 1895, then again in 1897 and for the third time in 1900. His name is associated with the best period of Austrian financial history, characterized by conscientious and far sighted management of current affairs, masterly budgets, constructive legislation, growing surpluses and a successful conversion of the public debt. All this was achieved under the most difficult circumstances and despite the fact that Böhm-Bawerk was not personally associated with any political party. After resigning in 1904 because of a disagreement on army estimates he declined several important positions to devote the last decade of his life to the teaching of economics at the University of Vienna.

Böhm-Bawerk's work in economic theory resembles that of Ricardo in both aim and method. In his case, however, the gifts of the originator were supplemented by the gifts of the critic. He was at a very early age one of the first to accept the teaching of Karl Menger, giving all his powers to the development and the defense of the "subjective" theory of value; it is to him that both the success and the formulation of the theory are largely due. That part of his work which was wholly his own is but imperfectly described as a theory of interest, since it is in fact not only a complete theory of distribution but also a theory of the whole economic process. The central feature of it is the treatment of the element of time in relation to two quantities: the stock of existing consumers' goods and the quantity of consumers' goods to be expected from production periods of varying duration. The famous solution of the problem of interest is itself but one of the results of that analysis, the possibilities of which are as yet far from being exhausted. Böhm-Bawerk exerted a profound influence on the thought of both his followers and his opponents.

JOSEPH A. SCHUMPETER

Important works: *Kapital und Kapitalzins* consists of two volumes: *Geschichte und Kritik der Kapitalzinstheorien* (Innsbruck 1884, 3rd ed. 1914), and *Positive Theorie des Kapitales* (Innsbruck 1889, 3rd ed. 1909).

Both volumes were reprinted (3 vols., Jena 1921) with an introduction by Friedrich Wieser. The first edition of vol. i has been translated by W. Smart as *Capital and Interest* (London 1890), and the first edition of vol. ii as *Positive Theory of Capital* (London 1891). The additions to the second edition of vol. i are translated by W. A. Scott and S. Feilbogen as *Recent Literature on Interest (1884–1899)* (New York 1903). The more important minor works of Böhm-Bawerk have been collected by F. X. Weiss in *Gesammelte Schriften*, 2 vols. (Vienna 1924–26).

Consult: Schumpeter, Josef, "Das wissenschaftliche Lebenswerk Eugen von Böhm-Bawerks" in *Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung*, vol. xxiii (1914) 454–528, and in *Neue österreichische Biographie, 1815–1918*, vol. ii (1925) 63–80.

BÖHMERT, KARL VIKTOR (1829–1918), German social reformer and statistician. In 1866 Böhmert was appointed professor of political economy and statistics at Zurich and after 1875 occupied a similar post at the Dresden Polytechnicum, serving at the same time as director of the provincial statistical bureau (1875–95). His interest in social reform antedated the beginning of his academic career; he edited the *Arbeiterfreund* and the *Sozialkorrespondenz* and contributed to the *Volkswohl*, organ of the Zentralverein für das Wohl der arbeitenden Klassen. In Dresden Böhmert was the pioneer of *Sozialpolitik*, having founded associations to combat poverty and mendicancy, to spread temperance and to promote general welfare, particularly through public health measures.

Böhmert's philosophy of social reform is based on an ethically grounded opposition to class conflicts. His thesis was that assistance must be extended to the poorer groups as a step in the preparation for a more perfect social order in which class differences will be attenuated through more equally distributed opportunities for education and a rise in the standard of living of the masses. In his *Gewinnbetheiligung* (2 vols., Leipsic 1878), the first standard work on the subject, he treated employers and employees as collaborators in a common enterprise, animated by a spirit of mutual confidence and good will. He extended the same idea of mutual good feeling to the international field and advocated as early as 1880 international agreements on labor legislation. Believing that public opinion can be roused to action only through a knowledge of the facts, and that this is equally essential in the formulation of concrete proposals for reform, Böhmert carried out a number of important statistical studies. He investigated Swiss labor conditions, German industrial relations, systems of wage payments, prevalence of child labor and methods of poor relief; he also conducted special seminars on statistical methodology.

HANS GEHRIG

Consult: Schmidt, P., in *Deutsches statistisches Zentralblatt*, vol. x (1918) no. 2, p. 42, containing a bibliography of Böhmert's works, and *Am Born der Gemeinnützigkeit* (Dresden 1909).

BOILEAU, ÉTIENNE (*c.* 1200–*c.* 1269), author of *Livre des métiers*. Upon his return from the crusade to Egypt, on which he accompanied Louis IX, he was appointed provost of Paris. In this capacity he had charge of the administration of justice, finances and military power in the capital. During his administration (1258–69) he exercised considerable severity in eliminating the abuses introduced by previous officeholders. The frequency of disputes about guild regulations, which were still for the most part oral, led him to summon the guild wardens and demand from them a statement of their customs. On the basis of these declarations he drew up a body of unified regulations governing the right to practise a trade, the relations between masters, journeymen and apprentices, and the right of association. These regulations, inspired by a remarkable spirit of equity and fairness, remained with some subsequent revisions the charter of Parisian industry and labor until 1791, when their applicability to changed economic conditions was made the subject of a considerable controversy. The *Livre des métiers* (issued originally about 1268, printed by G. B. Depping, Paris 1837, and more recently by R. de Lespinasse and F. Bonnardot, Paris 1879) contains an account of the earlier guild practises and the authoritative version of the new regulations. It furnishes an excellent picture of the industrial and social life of Paris in the thirteenth century.

ET. MARTIN ST.-LÉON

Consult: Martin St.-Léon, Et., *Histoire des corporations de métiers* (3rd ed. Paris 1922) p. 79–227.

BOISGUILLEBERT, PIERRE LE PESANT, SIEUR DE (known also as Boisguilbert) (1646–1714), French economist. He passed most of his life in Normandy in comparative obscurity, serving as lieutenant general of Rouen from 1690 until his death. His primary concern, as expressed through his writings, was the reform of the economic and fiscal system which prevailed under Louis XIV. His two principal works, *Le détail de la France* (Rouen 1695; tr. into

English as *The Desolation of France*, London 1697) and *Le factum de la France* (Paris 1706), both of which were published anonymously, failed to influence the policy of the government, and he was even exiled for the publication of the latter. These works are valuable for their vivid portrayal of the economic misery of France and the abuses of taxation, as well as for the views they present. Boisguillebert preferred direct to indirect taxation; he recommended the reform of the *taille* and the replacement of *aides* and internal customs by a hearth tax or, as he advocated in *Le factum*, by a tax of one tenth of all incomes, which is sharply distinguished from the tithe favored by Vauban. Contending that wealth consists of goods, not of money, he went so far in his reaction as to declare that money is nothing but a pledge for future transfers and that it has done more harm than good, becoming a "criminal thing" and the "moloch of the world." He stressed the solidarity of interests among economic classes and the equilibrium of economic forces and maintained that in order to bring about prosperity "il n'y avait qu'à laisser faire la nature et la liberté." It is, however, a mistake—spread by the French writers of the liberal school—to regard Boisguillebert as a free trader or an apostle of freedom in general. He opposed, indeed, export duties on wheat, but he based his opposition not on low prices to the consumer but on high prices to the producer—a position that procured for him the commendation of Quesnay. It was this solicitude for the farmer that led him to favor bounties on the export as well as prohibitions on the import of wheat, and to commend the Dutch monopolists for destroying a part of their crops in order to raise the price of the rest. He was, in short, an upholder not of commercial or industrial freedom, but of agrarian protection.

EDWIN R. A. SELIGMAN

Works: Boisguillebert's complete works were published under two titles, *Détail de la France sous le règne présent*, 2 vols. (Brussels 1707, 2nd ed. 1712), and *Testament politique du maréchal de Vauban*, 2 vols. (Paris 1707–08, 2nd ed. 1712). His important works were reprinted with a critical note in E. Daire, *Économistes financiers du XVIIIe siècle* (2nd ed. Paris 1851) p. 151–416.

Consult: For the older view of Boisguillebert: Cadet, F., *Pierre de Boisguillebert, précurseur des économistes* (Paris 1870); Skarzynski, W. von, *Pierre de Boisguillebert und seine Beziehungen zur neueren Volkswirthschaftslehre* (Berlin 1873). For the newer view: Talbot, A., *Boisguilbert: ses théories et leur place dans l'histoire des doctrines économiques* (Paris 1903); Breglia, A., "L'opera economica del Boisguillebert" in *Economia*, vol. v (1924) 164–90; Frotier de la Messelière, M., *Boisguilbert et la liberté du commerce des grains* (Paris 1903); Durand, R., *Essai sur les théories monétaires de P. de Boisguilbert* (Poitiers 1922).

BOISSEL, FRANÇOIS (1728–1807), a Jacobin and one of the precursors of communism. The central theme of his doctrine was revealed in the *Discours contre les servitudes publiques* (n. p. 1786), in which, after a Rousseauistic apotheosis of the natural society where supposedly neither property nor money existed, he proceeded to defend the right of the modern state to control all wealth. *Le catéchisme du genre humain* (n. p. 1789, 2nd ed. Paris 1792) established his reputation; but its attacks on "property, marriage and religion"—the principal institutions of the "mercenary, homicidal, anti-social order"—and its proposal of a radical reform of education to restore men to the natural social order led to a denunciation of Boissel by the bishop of Clermont in the National Assembly, November, 1789. Boissel vigorously defended himself in an *Adresse de l'auteur du catéchisme du genre humain aux utiles et vrais représentants de la nation française* (n. p., n. d.). As a member of the Jacobin Club he criticized the "Declaration of the Rights of Man" proposed by Robespierre in 1793, and drew up a substitute "Declaration of the Rights of Sans-Culottes."

A pantheist akin to both Spinoza and Morelly, Boissel regarded nature as a divinity whose laws governed the ideal state of society. But this ideal state was a goal toward which man could progress, not merely a utopia from which he had fallen. Boissel's views on communism, which closely resemble those of Babeuf, distinguish him, according to Jaurès, as the direct ancestor of Saint-Simon.

BORIS SOUVARINE

Consult: Grünberg, K., "Einige Beiträge zur Entwickelungsgeschichte des modernen Sozialismus, François Boissel" in *Zeitschrift für die gesammte Staatswissenschaft*, vol. xlvii (1891) 207–52; Jaurès, J., *Histoire socialiste de la révolution française*, 8 vols. (2nd ed. Paris 1922–24) vol. viii, p. 99–111.

BOISSIER, GASTON (1823–1908), French historian of classical antiquity. As teacher and writer he was an outstanding figure in popularizing the history and literature of ancient Rome. In his *Cicéron et ses amis* (Paris 1865, 14th ed. 1908; tr. by A. Jones, London 1897) and in his *L'opposition sous les Césars* (Paris 1875, 5th ed. 1905) he pictures the social life of the time and analyzes the underlying causes

of the persistent discontent. Boissier, like Fustel de Coulanges, recognized the importance of religion as a factor in the development of civilization. In *La religion romaine d'Auguste aux Antonins* (2 vols., Paris 1874; 6th ed. 1906) he traces the development of religious ideas during the first two centuries of the empire and reveals the influence of the new oriental cults as well as of the stoic philosophy; in *La fin du paganisme* (2 vols., Paris 1891; 7th ed. 1913) he treats of the transition from paganism to Christianity and shows how the latter accommodated itself to the Roman classical traditions. Although originally not trained in archaeology and epigraphy he recognized the enormous value of these auxiliary sciences, as is revealed in his *Promenades archéologiques: Rome et Pompéi* (Paris 1880, new ed. 1913; tr. by D. H. Fisher, New York 1905) and his *Nouvelles promenades archéologiques* (Paris 1886, 6th ed. 1907; tr. by D. H. Fisher as *The Country of Horace and Virgil*, New York 1896). In *L'Afrique romaine* (Paris 1895, 5th ed. 1912; tr. by A. Ward, New York 1899) he extended his researches also to the regions of northern Africa under Roman rule. He was trained in the scientific methods of German scholars and combined careful research with unusual charm and clarity of style.

MAURICE BESNIER

Consult: Besnier, Maurice, "L'oeuvre historique de Gaston Boissier" in *Revue des questions historiques*, vol. lxxxiv (1908) 652–84; Monceaux, P., in *Jahresbericht über die Fortschritte der klassischen Altertumswissenschaft*, vol. cxli B (1908) 177–92; Perrot, G., "Notice sur la vie et les travaux de . . . Boissier," and Dorez, L., "Bibliographie des travaux et ouvrages de M. Gaston Boissier" in Académie des Inscriptions et Belles-Lettres, *Comptes rendus des séances* (1908) 644–75.

BOITEAU, DIEUDONNÉ ALEXANDRE PAUL (1829–86), French writer on public finance, economist and man of letters. Upon graduating from the École Normale Supérieure he found himself debarred from a teaching career because of his opposition to the empire. At first he turned to literature for consolation. After 1861, however, when he became associated with the *Journal des économistes*, he devoted his best efforts to the investigation of financial and economic problems. When Thiers was elected president of the Third Republic, Boiteau assumed a minor administrative office and in 1879 became a member of the council of state. As a political pamphleteer and a contributor to the *Temps* and the *Journal des débats* he was for many years a vigorous champion of liberalism in politics.

Boiteau's social study of the *État de la France en 1789* (Paris 1861, 2nd ed. 1889) was followed by a number of books and pamphlets treating such subjects as the financial situation in Italy and in the city of Paris, commercial treaties, the textile industry and French railroads. Particularly noteworthy was his *Traité de la fortune publique et des finances de la France* (2 vols., Paris 1866), the chief value of which lies in its historical account of French finances. It also contains an analysis of the various constituents of the national domain and sets forth a theory of taxation which is an interesting reflection of the liberal view of his time. Boiteau's best contribution to science appeared as the extended article on the French budget in Say's *Dictionnaire des finances*, vol. i (Paris 1889) 501–729; in this work he revised the historical portion of the *Traité de la fortune publique* and added a systematic exposition of the French budgetary mechanism as compared with the mechanisms of other countries.

GASTON JÉZE

Consult: Roquet, L., in *Journal des économistes*, vol. clxviii (1886) 73–77.

BOK, EDWARD W. (1863–1930), American journalist and philanthropist. He was born in the Netherlands and came to this country at the age of six. At nineteen Bok was editor of the *Brooklyn Magazine*. After conducting a newspaper syndicate for a time, he became in 1889 editor in chief of the *Ladies' Home Journal*. It was in this capacity that he exercised a great influence over the life and thought of the American home. Bok was convinced that woman's place was in the home and that she should have no intellectual or emotional interests outside it; he bitterly opposed woman's suffrage. In his magazine he put a premium upon mediocrity, thus setting the pace for numerous other journals for women. Not only articles but fiction were planned in the office of the *Journal*, which was a leader in the practise, now common, of making a magazine from within rather than selecting its contents from a stream of volunteer offerings. A distinct policy as to economic theories ran through the whole publication, and its fiction was planned to stimulate the consumption of non-essentials as well as luxuries. Its fiction was calculated also to bear out Bok's philosophy of success, as embodied in the dogma: "Success is possible to any young man

of honorable motives." In 1919 Bok retired from editorial work, in which he had amassed a considerable fortune, and devoted his time largely to philanthropic enterprises. In 1923 he initiated the Bok Peace Award, a prize of $100,000 for the best plan to make peace effective and continuous on earth. This was in effect an effort to induce the United States to enter the League of Nations. Bok also instituted a series of prizes for high class advertising.

SILAS BENT

Important works: *The Americanization of Edward Bok* (New York 1920); *Dollars Only* (New York 1926); *How the Y. M. C. A. Made Good* (Philadelphia 1919); *Successward* (New York 1895, 3rd ed. 1896); *Why I Believe in Poverty, as the Richest Experience a Boy Can Have* (New York 1915); *Perhaps I Am* (New York 1928).

BOLINGBROKE, LORD, HENRY ST. JOHN (1678–1751), English statesman and political philosopher. Bolingbroke was an active leader and organizer of the Tory party under Queen Anne. Compromised—to what extent is still debatable—with the cause of the Pretender, he fled to France on the accession of George I. Although he was allowed to return to England in 1723 he was not given full civil rights. Excluded from the House of Lords and active politics, he used his pen, his wit and his social graces to undermine Walpole's rule. Opinions as to the real worth of Bolingbroke, both as one of the founders of the Tory party and as a political thinker, differ greatly with the allegiances of his critics. The traditionally accepted Whiggish view, represented by Leslie Stephen, is perhaps unjustly derogatory.

Bolingbroke must certainly be considered one of the builders of the English party system. He helped to manipulate the scattered groups in opposition to the Orange Whigs into the party that made the peace of Utrecht; he virtually founded in the *Craftsman* (1726–36) the modern party organ. In this pamphlet newspaper he and his collaborators (Swift, Arbuthnot, Amherst, etc.) definitely sought to create a "public opinion" outside Parliament capable in the long run of overthrowing the parliamentary Whig oligarchy; they were, in short, "going to the country."

Bolingbroke's philosophical method is to his detractors a rather barren kind of rationalism, to his admirers an appeal to earthy common sense against theology and metaphysics. At any rate the young Voltaire found in Bolingbroke's work—and conversation—an attack on revealed religion and a defense of a natural order obvious to philosophers if not to the unenlightened. And Pope found in Bolingbroke the entire philosophy of the *Essay on Man*. The political writings of Bolingbroke (chiefly the *Dissertation upon Parties*, 1734; *Letters on History*, 1735; *Idea of a Patriot King*, 1738) were widely read at the time and not without influence. George III was brought up to consider himself a "patriot king." Bolingbroke was at least no standpatter; he would make England over according to a better model. His reading of history, the true teacher of statesmen, in which he found the model for such a reconstruction, may be briefly summarized: the English constitution with its checks and balances, its liberties of the subject, its parliamentary immunities and its royal prerogative has in the past stood for a due adjustment of social structure to human needs; a new monied class, parliamentary corruption, party politics as the Whigs understand them, have upset this harmony; the new—which is really the old—England will be born of an alliance between her patriot king, educated in a true sense of his duties, and her people; this alliance will destroy the un-English Whig oligarchy. To Disraeli and his fellow Tory democrats of the 1840's Bolingbroke seemed, in spite of his failure to notice the misery and the poverty of the masses in eighteenth century England, to have anticipated their doctrine, and they accordingly gave him high place among English political thinkers. To Burke, on the other hand, he was a shallow believer in a natural society as opposed to existing society and therefore a believer in abstract reason instead of in good British prejudices. In true retrospect he is best seen as a good Augustan, a man of common sense and measure, a sound English empiricist, but without an imaginative foresight of the antinomies of the next century.

CRANE BRINTON

Works: Bolingbroke's *Works*, ed. by David Mallet, 5 vols. (London 1753–54).

Consult: Collins, J. C., *Bolingbroke, a Historical Survey; and Voltaire in England* (London 1886); Stephen, L., *History of English Thought in the Eighteenth Century*, 2 vols. (3rd ed. London 1927) vol. ii, p. 168–80; Sichel, W. S., *Bolingbroke and His Times*, 2 vols. (London 1901–02); Robertson, J. M., *Bolingbroke and Walpole* (London 1919); Hearnshaw, F. J. C., "Henry St. John, Viscount Bolingbroke" in *Social and Political Ideas of Some English Thinkers of the Augustan Age, A.D. 1650–1750*, ed. by F. J. C. Hearnshaw (London 1928); Ludwig, Walter, *Lord Bolingbroke und die Aufklärung; eine Untersuchung seiner Geschichtsauffassung und seiner Staatstheorie* (Heidelberg 1928).

BOLÍVAR, SIMÓN (1783–1830), Latin American revolutionary leader and statesman. Bolívar was born at Caracas, Venezuela, of an aristocratic Spanish family. He completed his education in Madrid, traveled extensively in Europe and became acquainted with the writings of Montesquieu, Voltaire and Rousseau. In 1807 he returned to Venezuela and joined the revolutionary movement against Spain. By a long series of military victories over the Spaniards and South American royalists (1810–24) Bolívar, aided by his chief lieutenant, Sucre, brought about the liberation of Venezuela, Colombia, Ecuador, Panama, Peru and Bolivia. As a military commander Bolívar excelled in energy, perseverance, audacity and inspirational power, rather than in strategic ability.

Bolívar believed that the federal system was too advanced for the Latin Americans in their existing stage of political development. In 1819 he maintained that the chief executive and the upper legislative house of Venezuela should be modeled after those of England. The constitution which he framed for Bolivia in 1826 vested the executive power in a president who was to be elected by congress and to hold office for life. He wished to have this centralistic constitution adopted by other South American states and even dreamed of establishing a Latin American federation of all the states below the Isthmus of Panama. When he returned to Colombia in 1826 he became the uncrowned king of northern South America. Villanueva's thesis that at the end of his career Bolívar was a monarchist has been vigorously denied by other Venezuelan writers.

WILLIAM SPENCE ROBERTSON

Consult: Robertson, W. S., *Rise of the Spanish American Republics* (New York 1918) ch. vii; *Simón Bolívar . . . por los más grandes escritores Americanos* (Madrid 1914); Monsalve, J. D., *El ideal político del libertador Simón Bolívar*, 2 vols. (Madrid 1916); Parra-Pérez, C., *Bolívar, contribución al estudio de sus ideas políticas* (Paris 1928); Villanueva, C. A., *La monarquía en América* (Paris 1912); Angell, Hildegarde, *Simon Bolivar* (New York 1930).

BOLLMANN, JUSTUS ERICK (1769–1821), early writer on American banking problems. Bollmann was a German physician whose political adventures carried him in the course of a relatively short life to several European countries and the United States. After having been imprisoned in Austria for attempting to free Lafayette from a similar plight, he came to America in 1796. He was given a consular appointment by Jefferson and in 1806 became implicated in Aaron Burr's conspiracy. After 1816 he resided for some years in London.

In the period of stormy controversy over the rechartering of the First United States Bank, Bollmann appeared as a staunch defender of commercial banking, the principles of which he understood better than did most of his American contemporaries. He was among the first to recognize the fact that bank deposits are created in part by loan and discount operations of the banks, and to appreciate the advantages resulting from the elasticity of bank media of payments. He thought that banknotes issued in the discounting of short time obligations arising out of commercial transactions are the best type of national currency. Although he believed that such banknotes could not be overissued and depreciated, he proposed in his *Plan for an Improved System of the Money Concerns of the Union* (Philadelphia 1816) a curious scheme of redemption; according to this scheme there would be within each state redemption in notes of a single bank designated for that state, these notes in turn to be redeemable in the notes of a national bankers' bank. In his *Paragraphs on Banks* (Philadelphia 1810) he urged the rechartering of the First United States Bank, but he considered the charter for the second an "ill-judged scheme." In *A Letter to Thomas Brand, Esq., . . . on the Practicability and Propriety of a Resumption of Specie Payments* (London 1819) and in *A Second Letter . . . , in which Doubts are Suggested on the Practicability of the New System of Bullion-Payments . . .* (London 1819), Bollmann contributed to a discussion of English banking and currency problems.

HARRY E. MILLER

Consult: Kapp, Friedrich, *Justus Erick Bollmann, ein Lebensbild aus zwei Welttheilen*, 2 vols. (Berlin 1880); Miller, H. E., *Banking Theories in the United States before 1860* (Cambridge, Mass. 1927).

BOLSHEVISM is the name applied to a particular development of Marxian doctrine which was worked out during the first quarter of the twentieth century by a group of Russian revolutionists and more particularly by V. I. Lenin (*q.v.*). There are several important differences between Bolshevism and other schools of Marxism, for instance, German Social Democracy. Bolshevik theorists contend that the seizure of power by the proletariat need not and should not be postponed until the appearance of all the objective conditions necessary for the inaugura-

tion of socialism. The seizure of power is to be accomplished not through the constitutional method of obtaining a majority in parliament, but through an armed insurrection organized at the most propitious moment by strongly disciplined and centrally directed local groups. When the dictatorship of the proletariat, aided by other revolutionary elements, is thus established, it is to be used not merely against the embattled bourgeois classes but also to accelerate the socialization of the economic system. Bolshevik doctrine has two distinct roots, one in the peculiarities of the economic and political situation in pre-revolutionary Russia, the other in the important changes in capitalistic organization of the more advanced countries which were brought to general attention by the World War.

Toward the end of the nineteenth century there could be distinguished among the critics of the existing order in Russia three groups: the liberals, the Marxists and the populists or *narodniki*. The liberal bourgeoisie opposed the unrelieved autocratic regime and demanded constitutional democratic reforms and abolition of the vestiges of the feudal order. Like the liberals, the Marxists foresaw industrialization and modernization of the country under a developing capitalism as the immediate step in Russia's progress; but they counted upon the growth of an industrial proletariat which was to play an important part in the struggle for political freedom and the advance toward a socialist goal. The populists, representing the peasant interests, opposed the government as the bulwark of the landed nobility, championed the old communal life and communal institutions of the village and hoped that Russia could avoid the evils of capitalism by basing its development on a semi-mediaeval peasant communism, which they saw embodied in the village community. The problems which confronted the Marxists under the circumstances were the adoption of the proper tactics with regard to the other groups in the joint struggle for political freedom, and the creation of a type of party organization which would prepare the proletariat to play its part most effectively in the revolutionary movement. It was in relation to these questions that Bolshevism arose as a specific doctrine.

The way in which the Bolsheviks envisaged the strategy of the revolution in Russia is seen most clearly in their interpretation of the theory of the bourgeois-democratic revolution. In Russia where autocratic rule and remnants of feudalism survived, the first stage of the revolution would, according to this theory, be bourgeois-democratic rather than socialist in character; it would be designed like the revolutions of 1848 in western Europe to free society from the shackles, both political and economic, which were hindering the fullest possible development of capitalism. The peasantry and the urban petty bourgeoisie, as well as sections of the capitalist class itself, would combine in the movement against autocracy and mediaevalism. Admitting the validity of this forecast, Lenin argued further that where an industrial working class was already fairly well developed, the mass driving force of the revolution even at this stage would be proletarian in character. Indeed, the only assurance that the second phase of the revolution, the socialist stage, would sooner or later succeed the first, lay in the fact that the working class would take a prominent part in the revolutionary movement from the outset and consolidate itself in important positions. To the extent, however, that the proletariat extended its influence and advanced its own interests, the bourgeoisie would tend to forsake the revolutionary movement and later to oppose it. This would force the proletariat to seize power from the bourgeoisie, even though it was not prepared to proceed to the immediate inauguration of socialism. In an agrarian country like Russia where the urban working class constituted only a small minority of the population, it would manifestly be impossible for the proletariat to retain power for long unless it were aided by a majority of the peasantry. While not socialistic, the revolutionary demands of the peasantry are considerably more radical than those of the other strata of the bourgeoisie. It should be possible, therefore, for the proletariat, perhaps at the cost of certain concessions to peasant individualism, to cement a firm alliance with the revolutionary elements in the village. The resulting alignment of ruling forces, which may be characterized as the "dictatorship of the proletariat," would in effect represent "a form of class alliance between the proletariat and the various strata of the non-proletarian working masses," mainly the peasantry.

To prepare the proletariat for this historical role and to organize the final seizure of power Lenin insisted that a disciplined revolutionary party was essential; proletarian at its core, intimately linked with the workers in their day to day struggles, the party must at the same time be centralized in its execution of policy like a military apparatus. This was necessary because a

successful revolution cannot arise spontaneously; spontaneous risings of the proletariat would degenerate into purposeless riots, arson and personal acts of violence. Only a minority of a depressed and subject class could be expected to be politically conscious or sufficiently enlightened to formulate a goal and pursue it intelligently. To the proletarian revolution, therefore, the masses were to be the limbs and muscles, the party machine the nervous system and the party executive the planning and directing brain.

The differences between the Bolshevik views and those of other Marxists received a definite expression for the first time at the second Congress of the Russian Social Democratic Party held in Brussels and London in 1903. The disagreements at this time centered about what at first sight might appear to be trifling questions of party organization. At this time numerous revolutionary groups—incipient trade unions, strike committees, study groups—were spontaneously springing up all over Russia. The problem before the Social Democrats was to integrate these under the direction of a single political party. L. Martov (*q.v.*) and P. B. Axelrod (*q. v.*) favored a fairly free and decentralized type of party organization and a "wide" basis of membership, which would admit all who sympathized with the party program. Lenin, on the other hand, wished the party to be composed of professional revolutionaries, well disciplined and carrying out orders from the center. Spontaneous ad hoc groups could exist alongside and outside the party; all that was necessary was that a selected few, an élite of those participating in these groups, should belong to the party and follow its lead. "It would be far better," he declared, "that ten men who worked should not call themselves members of the party than that one chatterbox should have the right and the opportunity to become a member." Clearly, the difference was traceable to a deeper divergence in the conception of the revolution and of the role of a proletarian party. At this time Trotsky supported Martov, while G. V. Plekhanov (*q.v.*), the recognized intellectual leader of Russian Marxists, sided with Lenin. Lenin's proposal was defeated at the Congress; but in the vote for the central committee his group secured the majority. It was then that the majority faction became known as "Bolsheviki" (from *bolshinstvo*, meaning majority) and the other group as "Mensheviki" (from *menshinstvo*, or minority).

The period of mass strikes and revolutionary risings in 1905, when workers' Soviets for the first time came to the fore, exposed further the fundamental differences between the Menshevik and Bolshevik interpretations of the bourgeois-democratic revolution and of the proper role of the working class in relation to it. At that time disputes arose which were ultimately to cause the two factions to form separate party organizations. Against Lenin's view that the proletariat must take a lead in the revolution from the outset the Mensheviks held that the bourgeoisie would be the driving force in the first stage and that the socialists must subordinate themselves to the purely liberal movement. Hence they began to advocate a political alliance with the bourgeois parties while Lenin, insisting that the liberal bourgeoisie had already become a weak and vacillating force which would very soon pass over into the camp of reaction, emphasized the need for an alliance with the peasantry. When the general strike came in 1905, the Bolsheviks desired the Soviets to advance from mere strike committees to organizers of armed insurrection; and they raised the slogan of the "democratic dictatorship of the proletariat and peasantry," which would substitute a democratic republic for the tottering absolute monarchy. The Mensheviks now had the support of Plekhanov, whose disagreements with Lenin were becoming increasingly pronounced. Trotsky and his center group leaned toward the Bolshevik policy of extending the strike into an insurrectionary movement, but supported the slogan of "a labor government," being averse to linking the movement with the individualistic demands of the peasantry.

The World War brought with it the extension of Bolshevik doctrine to an interpretation of conditions and a statement of strategy to be pursued in other countries. Lenin was deeply impressed with the failure of the majority socialists in the principal belligerent countries to comply with the resolution of the Stuttgart International Socialist Congress (1907), which called for a general strike and, as a second step, for a revolutionary rising in the case of a European war. In the international socialist conferences at Zimmerwald (1915) and Kienthal (1916) he demanded a complete break with the parties which took the "national defense" point of view, and a separate international organization of those left wings which would take advantage of the existing situation and transform the imperialist war into a civil war. In a series of writings in the

years 1915–18, of which the most important are *Imperialism, the Final Stage of Capitalism* and the *State and the Revolution* (Eng. tr. of both in one volume, New York 1927), he developed a theoretical justification for the call to an immediate proletarian revolution in all industrial countries.

Drawing largely upon J. A. Hobson's *Imperialism* (rev. ed. London 1905) and on R. Hilferding's *Finanzkapital* (Vienna 1910, 3rd ed. 1923) and making use of a wide variety of current economic studies, Lenin attempted to show that the capitalism of the twentieth century was becoming more and more monopolistic and predatory. With its giant trusts and international cartels and its production for a world market, it was inseparably bound up with imperialism, the struggle of big national groups to carve out the hitherto undeveloped agrarian lands for their several benefits in the form of colonial preserves. This imperialist stage was pregnant with new instabilities, crises and wars considerably greater than any which had gone before, leading eventually to economic decline. In the economic invasion of the backward countries by the more advanced industrial nations capitalist exploitation was assuming a new form which had its counterpart in a new form of class struggle, the nationalist revolt of the colonial peoples striving to throw off the imperialist yoke and to develop their countries under their own control. Capitalism was thus becoming increasingly decadent rather than more perfect, and was leading away from rather than toward socialism. Socialism could come only after the proletariat had transferred power to itself and by expropriation abolished class monopoly. This struggle for power could not take a constitutional form or work through the channels of the existing political regime because the latter was fundamentally an instrument for the preservation of the hegemony of the capitalist class. Even under the most favorable circumstances parliamentary democracy in a class society could not be more than a mere form, deceptive window dressing to bemuse the masses. In the monopolist-imperialist state the government became increasingly subordinate to the interests of the ruling class. Control of the press and of electoral funds, the domination of the administrative machinery by a bourgeois personnel and the influence of the enormous aggregations of financial power on both parliament and the executive-administrative arm reduced to insignificance the universality of the franchise. The struggle for power must take a revolutionary form and in its final stages be transformed into an armed insurrection. Having used force in the seizure of power, the proletariat must of necessity erect its own apparatus of governmental coercion and use it not only to repress counter-revolution but also to lay the foundations of a socialist society. This was Lenin's interpretation of the transitional stage to socialism which Marx characterized as "the dictatorship of the proletariat."

With the revolution of March, 1917, in Russia, an exceedingly interesting situation was created. According to Lenin's theory the first stage of the bourgeois-democratic revolution had taken place. A republic was in existence, autocracy had been swept away and power had been transferred to the bourgeois class. At the same time the driving force of the revolution had been the workers and peasants, who had created their own mass organizations, the Soviets. These Soviets continued to exist and to exert a considerable influence. The Mensheviks and the Social-Revolutionaries, the peasant party, formed a coalition government with the bourgeois parties but at the outset were responsible to the Soviets and reported to them. The advent of the second socialist stage of the revolution, however, they regarded as out of the question for the moment. The most radical among them did not believe that Russia could take the initiative in this in advance of the more developed western nations. The democratic revolution must be consolidated. A constituent assembly must be summoned and the Soviets, as the extraordinary organs of a revolutionary period, must be relegated to a subordinate place. For a period capitalism must be given rein to develop, free from the restrictions from which it had suffered under the autocratic government; indeed, it must be definitely encouraged by the bourgeois state. For the immediate present the war with Germany must be fought to a successful conclusion.

As indicated by the attitude of its central committee the Bolshevik party at this time, while favoring the continued existence and influence of the Soviets and through them the maximum proletarian "pressure" on the course of events, did not regard the proletarian seizure of power as an imminent possibility. They thought it sufficient to criticize the coalition government and exercise pressure upon it as a radical opposition; they did not advocate any immediate or open revolution, did not anticipate rallying the masses in order to displace the

coalition by a government based on the Soviets. Kamenev, a member of the Bolshevik old guard, declared that for the present the bourgeoisie must be allowed to complete the bourgeois-democratic revolution. Lenin, however, on his return from Switzerland in April immediately called another tune. For him the existing situation was one of unstable equilibrium in which the workers' Soviets must either advance and place power in the hands of a peasant-worker alliance or else allow themselves to be reduced to a subordinate position as soon as the bourgeoisie had consolidated its power. True, he argued, socialism could not be immediately introduced in Russia; this her economic backwardness prevented. But the transfer of power to the workers could be achieved, given a favorable political situation; moreover the present situation in which the bourgeoisie was weak and the proletariat strong was unique and might not recur for several decades. In his famous "April theses" presented to the All-Russian Party Conference held in Petrograd on May 7–12, 1917, Lenin defined the peculiarity of the situation in Russia as consisting in the transition from the first stage of the revolution, which as a result of the insufficient class consciousness and the defective organization of the proletariat had placed power in the hands of the bourgeoisie, to the second stage, namely, the placing of power in the hands of the proletariat and of the poorest peasantry. He advocated immediate agitation "not for a parliamentary republic, because a return to this from the Soviets would be a step backward, but rather for a republic of Soviets of workers', landworkers' and peasants' deputies, embracing the whole country and all strata of the workers." Lenin finally won over the majority of the party to his point of view. By the autumn the economic crisis had grown much worse, discontent in the army and throughout the countryside had gathered force and the clash between workers and capitalists in industry had become intensified. The Bolsheviks, who now held a majority in the Soviets of Moscow and Petrograd, issued the slogan, "Down with the Bourgeois Government; All Power to the Soviets," and organized the armed seizure of power which constituted the November Revolution.

With power in its hands, the Bolshevik party found itself confronted with a series of difficult problems. The army on the front was completely disorganized and there was danger of German invasion. The economic life of the country was at a standstill; in many districts there was an unorganized seizure of landed estates by the peasants, while the revolutionary initiative of factory committees extended the principle of "workers' control" so as to deprive the management of any substantial power. For the immediate present, therefore, the problem was not to introduce complete socialism, but to preserve the results of victory, to occupy and hold the strategic key positions, to consolidate class power until life in the country could be organized on a normal basis and until the outbreak of a proletarian revolution in the West could give the necessary support for the socialization of backward Russia. Nor was this out of accord with Bolshevik doctrine. Lenin in his April theses had said: "Not the introduction of socialism is our first task but only the taking over of the control of social production and distribution of all produce by the Soviets."

Lenin, who had counseled courage and daring in the actual seizure of power, now advised caution in face of the giant tasks of economic reconstruction. He believed that for a time the "dictatorship of the proletariat" must allow in the economic sphere a "mixed system," in which private enterprises, "mixed companies" (financed by state and private capital), foreign "concessions" and small scale peasant agriculture would coexist with nationalized large scale industry. This would differ essentially from the elements of state capitalism to be found in other countries because the workers' state based on Soviets held the economic "key positions" as well as the mere form of legal authority, and because by the expropriation of large scale industry the economic basis of a propertied bourgeois class had been abolished. The state would use its hold on the reins of power to guide social development in a new direction—that of a classless society. This would be accomplished by the gradual sapping of the remaining differential advantages of a moneyed class and by the extension of the sphere of socialist enterprise in the economic system.

For the first eight months of the Soviet regime, therefore, the state tried to induce private owners to continue the operation of their enterprises, at least until such time as the state could build the machinery necessary for industrial control. At the outset only enterprises of great importance such as banks, electric power stations, transport and the apparatus of the grain trade were nationalized. Not until May, 1918, was a whole industry nationalized, the sugar industry. By the end of May three

hundred separate concerns had been nationalized, but they had been taken over for various specific reasons, in a number of cases because their owners refused to continue to work them. Negotiations were actually carried on with groups of leading capitalists for the creation of a giant metallurgical trust, jointly financed by private and state capital. In the state administration itself the cooperation of scientists, technicians and engineers was eagerly sought and special salaries were offered to them. At the same time the private capitalism which continued to exist was distinctly an "encircled capitalism." Central economic departments were set up by the state, which issued regulations for the control of various industries very similar to the wartime controls which appeared in most belligerent countries. The workers' committees in each enterprise were given fairly extensive legal powers, usually with the alleged object of preventing private owners from closing down their factories.

With regard to agriculture the first act of the new government was one never considered socialistic; designed to break the power of the landlord class and bring social equality to the countryside, it was rather a completion of the bourgeois-democratic revolution. This act was the Land Decree which authorized the division among the peasantry of the old landlords' estates; only the best organized estates, comprising some four percent of the area held by this class, were converted into state model farms. By this act Lenin's principle of the alliance with the peasantry was established; it was politically reflected in the entry of representatives of the largest peasant party, the Left Social Revolutionaries, into the government and in the allotment to them of several ministerial posts.

By the end of June, 1918, the recrudescence of civil war and the invasion of Soviet Russia by the white armies on several fronts introduced a substantially new situation. Already the refusal of private owners to continue their enterprises and the excesses of the factory committees, which in defiance of the central authorities often attempted to take into their own hands the running of factories, had hastened the pace of nationalization. Now the need for mobilization of all resources for war purposes impelled a still higher degree of centralization and led to the general nationalization decree of June 28. In connection with the grain crisis one of the first acts of the Provisional Government in 1917 had been to declare a state grain monopoly. In the spring of 1918, faced by further grain difficulties, the Soviet government introduced the policy of requisitioning the peasant surplus—forcing sales of grain to the state collecting organs at the official prices. And under pressure of civil war this policy of requisitioning came to be enforced with increasing rigor.

This system of "war communism," with its grain requisitioning, its excessive centralization of economic administration and its organization of exchange as a giant system of state barter was, therefore, an improvisation to meet a military emergency, rather than part of the Bolshevik plan. It was simply an extension of the extraordinary measures which most belligerent countries took in wartime, with the difference that the Soviet government was concerned also with the elimination of the class influence of the bourgeoisie. With the end of the civil war in December, 1920, this improvised system was abandoned and a return was made to more normal peacetime lines of development under what was known as the New Economic Policy. Grain requisitioning ceased and free trade in grain was restored. About four thousand of the smaller factories were handed back to private owners and certain enterprises were offered as "concessions" to foreign capitalists. A wholesale decentralization of economic administration was introduced, industry being reorganized into some three or four hundred "trusts," each with its board of directors appointed by and responsible to the higher economic organs, but free to operate on the market at its own discretion as a semi-autonomous financial unit. This New Economic Policy was neither a complete novelty nor a "retreat" from an unrealizable utopia, but rather a partial return to the transitional system which Lenin had tried to put into effect during the first eight months after November, 1917.

Acute discussions had always taken place within the Bolshevik party concerning matters of policy or the appropriate application of Bolshevik principles to a changing situation. The most important early issue after the introduction of the New Economic Policy concerned the relations with the peasantry. During 1923–24 Trotsky, in keeping with his pre-revolution theories, maintained that it was now necessary to commence a direct offensive against peasant individualism, whereas the official policy favored the preservation of the alliance with the middle and poor peasantry by the continuance of concessions to its economic interests. The outcome

of this discussion was a confirmation of the official policy, which disavowed the intention to crush out the individualist peasant and proposed instead that the development of peasant agriculture be encouraged. The peasant was gradually to be drawn into socialism by the extension of the cooperative system, first to the common ownership of machinery and appliances and eventually to actual cultivation on a collective basis. Again in 1926–27 and in 1928–29 disputes arose concerning the rate at which industrial development should be pushed and the measures to be taken to curb the growth of the rich, semi-capitalist peasant (*kulak*), a "Left" opposition element pressing for faster industrialization and a more stringent policy in the village, and a "Right" element pressing in 1928–29 for greater moderation.

The economic policy of the Bolsheviks represents a fairly consistent attempt to carry out three main aspirations: first, to transform Russia as rapidly as possible from an agrarian into a modern industrial community by the electrification of industry, the building of new factories and railways, the development of up to date large scale farms; second, to extend the sphere of socialist enterprise in trade and industry and to narrow that of private enterprise; third, to combat the rise of a new bourgeois class, particularly in the village, by every possible means, including differential credit policy with regard to private traders and heavy progressive taxation. Studied in detail this policy exhibits continuing oscillations because of the necessity for adjustment to a constantly changing situation. It must make allowances for pressing immediate needs and temporary conflicts of interests of various groups, and keep at the same time to the fundamental long time plan of industrialization and socialization. The details of policy are not adhered to as hard and fast principles, so that the temporizing and compromising involved in the process represent not a retreat but a series of adjustments calculated to retain power through the period of transition in order to use it as far as possible to afford preference and prepare ultimate victory for the collectivist elements in the economic structure of the country.

Politically the dictatorship of the proletariat is conceived as implying the existence of only one party, the ruling Communist party. Political parties, according to the Marxist philosophy, are considered as the product of distinct class interests or of groupings within the propertied class. In a classless society the need for separate organized representation of these divergent policies would no longer exist; while in the transition period such alternative parties would inevitably represent antiproletarian tendencies, inconsistent with the proletarian dictatorship. There could be only one policy expressing the highest group interests of the workers, only one policy which in given circumstances was the shortest road to socialism. It was the duty of the ruling party to discover this correct policy. The guaranty of its doing so would be found in intimately linking the party with the masses and in providing for the full expression of the sentiments and interests of the masses through the Soviets on the one hand and the trade unions on the other. The existence of rival parties would not necessarily aid the discovery of this correct policy, while in a critical period, with counter-revolutionary tendencies at work and socialist institutions still undeveloped, party conflict might produce a vacillating policy and result in disaster.

Although no opposition parties are permitted, full discussion of policy and criticism on points of detail are encouraged through the Soviets, provided that such criticism does not become a political criticism aimed at the hegemony of the Communist party. At the same time every encouragement is given to non-party members to participate in the work of the Soviets. Thus in 1927, 90 percent of the members of village Soviets and three fourths of their chairmen did not belong to the party. On the executive committee of the counties (*volosts*) nearly half were non-party persons. In the All-Russian Central Executive Committee 78 out of 300 were non-Communists.

The Communist party in Russia comprised in January, 1929, some 1,500,000 members, of whom more than half were workers at the bench or working peasants. Admission is as strict as that to an "order," and certain standards of knowledge, character and conduct are required. The general lines of state policy are formulated and initiated by the party, in nearly all cases after fairly full discussion inside the party ranks as well as publicly in the party press. The matter is then laid before the Soviet Congress, which discusses, criticizes and makes alternative suggestions, in line with which the official policy is frequently revised and modified. Since the ruling party has the majority, however, the party policy as ultimately decided upon is always carried into force. The party not merely constitutes the dominating majority in the

legislative organs; it also provides the leading personnel of the executive, thus insuring uniformity of executive policy. Failure by party members to carry out the official policy once it has been adopted, the continuance of criticism after discussion has been closed and a policy decided upon, and a fortiori the formation of an organized opposition "faction" within the party are regarded as serious offenses against party discipline.

In addition to dealing with questions of economic policy and political organization, the Bolsheviks as a ruling party entirely responsible for the conduct of the government are forced to concern themselves with a great many other less fundamental problems. Such problems are considerably more numerous than those which confronted any previous ruling group, for the very reason that the Bolsheviks aim to effect a thorough remolding of society and its members. Bolshevik doctrine leaves perhaps its most perceptible impress on foreign policy. Since the advanced industrial countries are considered ripe for a proletarian revolution and the colonial agrarian countries for a new form of class struggle, the nationalist revolt, the Bolsheviks stand ready to encourage the development of revolutionary parties in countries of both types. Their readiness is tempered by the realization that peaceful relations must be maintained with foreign countries lest the socialist development of Russia be endangered. Another instance is the "cultural revolution" which the Bolsheviks are attempting to effect in Russia and which signifies not merely the abolition of illiteracy, the emancipation of women and the democratization of higher education, but also the infusion of the Marxist philosophy into all branches of knowledge and the development of a new art and literature to reflect the emotional values appropriate to a collectivist, classless society.

MAURICE DOBB

See: RUSSIAN REVOLUTION; COMMUNISM: COMMUNIST PARTIES; SOCIALISM; SOCIALIST PARTIES; SOVIET; PEASANTRY; NEW ECONOMIC POLICY; RATIONALIZATION; REVOLUTION; CIVIL WAR; IMPERIALISM; NATIONALISM; PROLETARIANISM.

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BONALD, LOUIS GABRIEL AMBROISE, VICOMTE DE (1754–1840), French social philosopher. As an *émigré* during the French Revolution Bonald composed at Heidelberg his attack on the democratic philosophy of the revolution, *Théorie du pouvoir politique et religieux dans la société civile, démontrée par le raisonnement et l'histoire* (3 vols., Constance 1796). On the return of Louis XVIII he took an active part in politics, serving as deputy and as minister of state, in which last capacity he presided over the censorship commission.

The *Théorie du pouvoir* . . . was the first of a long series of works extending over a period of thirty-five years through which Bonald aimed to destroy the ideals of the revolution and to build

on their ruins a complete philosophy of traditionalism. In his view freedom of thought and inquiry and political liberty, the premises of the revolution, had destroyed the unity of society, and he sought a return to the stable French society of the seventeenth century and the philosophy of Bossuet. Bonald's system is thus essentially an answer to Rousseau and his doctrine of the social contract. Where Rousseau begins with individuals and individual rights, Bonald begins with the fact of society and tradition as giving the individual a reality. He considers individualism socially dangerous and in *Législation primitive* (2 vols., Paris 1802) attacks its very basis—the independent existence of individual thought and reason—by arguing that all thought requires language, and that language cannot be explained without divine revelation. Bonald's fundamental theocratic principle of government is thus derived from a theory of language. The guiding factor in Bonald's state is religion, which has as its object the repression of the individualist passions. As regards the organization of the state Bonald fell back on a theory of a universal triad of cause, effect and means, from which he deduced the necessary division of the state into the sovereign, the ministry or nobility, and the subjects or the people (see his *Essai analytique sur les lois naturelles, de l'ordre social ou du pouvoir, du ministre et du sujet dans la société*, Paris 1800). Desiring the unity of sovereignty in the state, Bonald argued against Montesquieu's theory of the division of powers. In every sphere of social life he desired above all else unity and stability and held that natural laws had been instituted by God for their attainment.

Next to de Maistre, Bonald was the leading theorist of the traditionalist school of thought in France. His philosophy has had a considerable influence on the modern neo-Catholic traditionalist movement in France and Italy. It has also influenced the shaping of Comte's thought, and through Comte something of the doctrine may be said to have passed into modern sociology.

BENJAMIN GINZBURG

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Consult: Moulinié, H., *De Bonald* (Paris 1915); Mauduit, R., *Les conceptions politiques et sociales de Bonald* (Paris 1913); Sainte-Beuve, C. A., *Causeries du lundi*, 15 vols. (Paris 1857–62) vol. iv, p. 324–41; Faguet, E., *Politiques et moralistes du dix-neuvième siècle*, 3 vols. (Paris 1891–99) vol. i, p. 69–121; Laski, H. J., *Authority in the Modern State* (New Haven 1919) ch. ii.

BONAPARTE, NAPOLEON. *See* NAPOLEON BONAPARTE.

BONCERF, PIERRE FRANÇOIS (1745–94), French writer on agrarian subjects. While a clerk in the ministry of finance under Turgot he published under an assumed name a pamphlet, *Les inconvénients des droits féodaux*, in which he attacked the contemporary system of feudal dues as ruinous to those who pay them, of little advantage to its beneficiaries and contrary to the principles of freedom. The solemn condemnation of the pamphlet by the *parlement* of Paris, which the king vetoed, and the ensuing controversy in the press, in which Voltaire took a prominent part, established Boncerf's reputation and resulted in the translation of the work into many European languages. In May, 1776, upon the dismissal of Turgot, Boncerf was compelled to retire. He engaged in land reclamation in Normandy and later became secretary to the Duke of Orléans, continuing meanwhile his literary activity. After 1789 he enthusiastically supported in several works the early revolutionary agrarian reforms, which resembled the proposals of his early pamphlets; he also became a member of the municipal government of Paris and served on certain committees of the National Assembly. In 1794 he barely escaped conviction by the revolutionary tribunal on the charge of having aided the Duc d'Orléans to reestablish the monarchy.

ED. ESMONIN

Works: *Les inconvénients des droits féodaux* (Paris 1776, new ed. 1791); *Mémoire sur cette question: Quelles sont les causes les plus ordinaires de l'émigration des gens de la campagne vers les grandes villes, et quels seraient les moyens d'y remédier?* (Paris 1784); *Mémoire sur les moyens de mettre en culture les terres incultes . . . de la Champagne* (Paris 1784); *De la nécessité et des moyens d'occuper avantageusement tous les gros ouvriers* (Paris 1789, 8th ed. 1791); *Moyens pour éteindre, et méthode pour liquider les droits féodaux* (Paris 1790); *De l'aliénabilité et de l'aliénation du domaine* (Paris 1791).

Consult: Foncin, P. F. C., *Essai sur le ministère de Turgot* (Paris 1877) p. 434–41; Thuriet, Charles, "Boncerf" in *Annales franc-comtoises*, n. s., vol. xiv (1902).

BOND HOUSES. *See* INVESTMENT BANKING.

BONDED WAREHOUSES. *See* WAREHOUSING.

BONDING. The practise of bonding, or suretyship, has existed for many centuries. When a person (principal) agrees to pay a debt or per-

form an obligation for a second person (obligee) at some future date, a third party (surety) guarantees the fulfilment of the first person's obligation by signing a bond in favor of the obligee. If the principal fails to meet the condition of the bond the surety must pay to the obligee a stipulated sum, which he may later collect from the principal. With the growing complexity of modern life, however, this system of personal suretyship became unsatisfactory, and beginning about 1840 in England and in 1879 in the United States it gave way to corporate suretyship. Although to some extent bonds are still executed, particularly in rural regions, by personal sureties, most bonds required in political, court and business practise are now furnished by corporations organized for the express purpose of providing dependable suretyship.

Bonding should be distinguished from insurance, with which it is frequently confused. In the case of insurance the underwriter assumes the entire risk as a matter of course and guarantees against loss by an event. He is primarily concerned with the probability of the occurrence of the contingency insured against and fixes his premium rates to cover the losses which he expects to occur. In the case of suretyship the bonding company guarantees against the default of another person and is particularly concerned with the ability of the principal to fulfil his obligation. Theoretically, pure and simple suretyship involves the bonding company in no risk whatever because the principal, who is presumed to be responsible and who is generally legally liable, stands between it and loss. This is largely true of many classes of bonds, particularly those well covered by collateral or those whose issuance is preceded by a thorough preliminary investigation. The surety rates of bonds having a small loss ratio represent payment for service rather than premiums for the assumption of risks; while the operations of the surety company in examining the financial prospects, ability and character of the applicant for a bond, and in providing him credit, resemble those of a bank in granting a loan.

The theory that the bonding company takes no risk has, however, limited applicability to fidelity bonds and practically none to many kinds of license and similar bonds. In these cases underwriters expect to pay their losses from a fund saved for the purpose from the premiums collected, rather than from either collateral security furnished by principals or from cash secured upon the occurrence of loss from responsible principals or indemnitors.

There are several hundred different kinds of surety bonds but the great bulk of them fall into a small number of easily distinguishable classes. Perhaps the most common type of surety bond is a fidelity bond which guarantees the honesty of persons holding positions of trust. To an ever greater extent it has become the practise of financial institutions and in less degree of mercantile and manufacturing concerns to require certain classes of their employees to furnish fidelity bonds as a prerequisite to being hired. Prior to granting a fidelity bond the company in addition to investigating the applicant usually also examines the reliability and the methods of supervision of his prospective employer. Fidelity bonding was the first branch of corporate suretyship to be developed and constitutes at present in point of premium volume nearly one fifth of the bonding business in the United States. This branch of bonding is of the widest public interest; millions of people have occasion at times to furnish a fidelity bond and applications therefor are frequently rejected by the surety companies, with consequences to the applicants of unhappy and far reaching importance.

Bankers' blanket bonds are sold only to banks and similar institutions. They are issued in round amounts running sometimes to very large figures. They guarantee the honesty of the entire staff of the bank and in addition indemnify the bank against losses due to robbery, larceny, burglary, hold up, forgery and similar causes. They are thus in part pure insurance policies. These bonds were first issued by a group of Lloyd's underwriters in England and were not procurable from American companies until 1915. Since then they have had wide usage, their premiums at present amounting to about one eighth of the entire amount collected by bonding companies.

Public official bonds are required by law from most servants of the state in order to secure the faithful performance of their public duties. Although these are primarily fidelity risks they cover much more, by reason of the fact that a public official is generally absolutely responsible for the safekeeping of the public fund and sometimes must make good its loss even when he has not been guilty of dishonesty. If, for example, he deposits the public money in a bank which fails and this results in a loss to the state the public official or his surety must make good the loss. In

some jurisdictions, however, officials may avert this liability by following rigidly certain legislative provisions adopted for their protection.

Another method by which public officials often protect themselves from their liability for the safety of public funds is to require banks to furnish a bond conditioned for the payment of the money upon due demand. The guaranteeing of bank deposits is an important division of the bonding business. The surety companies suffered severe losses in this branch during the financial crisis of 1907 and during the years 1921 to 1929, when over five thousand banks closed their doors.

Bonds constituting a fifth important class are given by litigants in judicial proceedings and include appeal, attachment, injunction and replevin bonds. Many such bonds are in effect endorsements of the principal's obligation to pay a stated sum of money, and the surety companies are willing as a rule to issue such bonds only upon deposit of full collateral security.

Fiduciary bonds, given in connection with the liquidation and distribution of estates, guarantee that executors, administrators, guardians, testamentary trustees and similar appointees of probate courts will faithfully and fully discharge their trusts. These bonds are a great public convenience and benefit, since they safeguard completely the rights and interests of people who are often in peculiar need of such protection.

It has long been true of the federal government, and it has become increasingly the case with minor political units, that no important contract is awarded unless a bond conditioned for the faithful performance of such contract is first filed by the selected bidder. Enormous benefit has accrued to the public from this practise of holding contractors financially responsible for the performance of their work in accordance with the original plans and specifications. It eliminates irresponsible bidding and partially absolves the government agency from the task of ascertaining the trustworthiness of bidders. Countless highways, schools, courthouses, bridges, breakwaters and numerous other public works have been constructed by surety companies under bonds executed in behalf of defaulting principals.

The great variety of adverse contingencies under which in the complex conditions of modern life loss may arise to public or private obligees engenders a considerable diversification in the types of indemnity bonds issued by surety companies. While the more important types were described above, the classification is in fact incomplete since it does not provide for custom house, internal revenue, license and permit and other less commonly used kinds of bonds. The magnitude of the business may be judged from the fact that there were in 1929 in the United States about seventy surety companies with annual premiums in excess of $100,000,000.

Aside from the fact that the contingencies against which bonds protect have a large element of "moral hazard," the variety of bonds issued and the number of companies engaged in the business leave considerable room for individual variation in the making of rates and in other underwriting details. Prior to 1908 competition in rates and commissions among the bonding companies in the United States was so unrestrained and irresponsible that it threatened the solvency of most of them. In that year the Surety Association of America was organized and received the support of all the prominent companies. Since then it has steadily gained in influence. Its principal objectives have been to get its member companies to adopt the premium rates promulgated by the Towner Rating Bureau, to eliminate rebates and to regulate the payment of commissions and brokerage. The Towner Rating Bureau works out rates on the basis of the aggregate experience and judgment of the various companies which supply it with data. As a result of the work of the Surety Association and of the Bureau, the rates named by most surety companies in the case of almost all classes of bonds have for a number of years been uniform. Competition among the companies, however, has continued to be intense in such matters as liberality of bond forms, information and counsel, and dispatch and convenience in rendering service.

Because many kinds of bonds run in favor of political units (contract, official and depository) or of obligees particularly entitled to state protection (fiduciary and probate), the business of corporate suretyship is regarded as affected with a public interest and is therefore subject to supervision by governmental authorities. The surety companies are required to make elaborate reports of their operations to the insurance departments of the states in which they operate. In addition, surety companies issuing bonds in favor of the federal government have for a number of years been subjected to federal supervision. Some of the states interest themselves actively in the rates charged by the com-

panies, deeming it a duty to make sure that the rates are not too high and are yet not so low as to endanger solvency. It has come to be rather generally agreed that surety companies should not be permitted to compete with one another indiscriminately and recklessly in the matter of rates but should on the contrary be required to maintain uniform and adequate rates approved by the public authorities. State departments have accordingly tolerated the stabilizing activities of the Surety Association and of the Towner Rating Bureau.

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See: SURETYSHIP AND GUARANTY; INSURANCE; BAIL; AUTOMOBILE INSURANCE; BANK DEPOSITS, GUARANTY OF.

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BONDS. A bond is a formal instrument evidencing a debt and promising to pay a specific sum of money. The underlying contract may include additional provisions such as a specific future date of payment or a pledge of security. A bond is issued under a general agreement, the parties to which are on the one hand the borrowers, either a corporation or a government, and on the other the holders of the bonds, with sometimes a trustee (generally a trust company) acting as intermediary. The contract is enforceable by law against a corporate debtor, but it is practically unenforceable against a sovereign public debtor, unless the latter, which normally is subject to no higher power, should divest itself of this immunity. Bonds generally bear a fixed interest rate, the default in the payment of which is equivalent to a default in repaying the principal. Although the maturity of bonds varies considerably it is usually regarded as a long time obligation; among government bonds there are some perpetual issues having no maturity date. A bond issue may be repaid in instalments, a certain part of the issue being redeemed annually, or in one operation at the expiration of the period of full maturity. The latter method is more common because the bond with a fixed maturity is more attractive to investors.

The bonds of a sovereign government rest primarily upon its good faith or its willingness to pay the debt incurred and upon its ability to raise sufficient revenue to meet its debts. In addition a government may reenforce its obligation by security either in the form of a special lien or of a guaranty. The lien may be based on public revenues, which are then specifically pledged to meet the service on the bonds thus secured. A government bond may be secured also by a guaranty of payment on the part of another government. The specific security underlying a government bond is not generally connected with the purpose for which the bond is issued, unless the issue be used to finance a government enterprise conducted on the ordinary profit making basis. More commonly government bonds are issued to cover current deficits, to pay for long time public improvements, such as highways, public buildings or public schools, or to meet special contingencies such as wars. Whether certain expenditures are made for something sufficiently permanent or unusual to justify the issue of bonds is one of the important and delicate questions of government finance.

Government bonds cannot readily be issued at par, because the actual rate of interest at which a public borrower can obtain funds is rarely identical with the nominal rate of interest in the market. They must therefore be put out at either a premium or discount. Since the investing public generally dislikes a premium bond the more common practise is to issue bonds at a conventional rate of interest just below the true rate justified by the credit of the borrower, and then to fix the selling price of the issue at a discount.

The net beneficial income of a government bond is affected by its tax position. In the United States the obligations of the federal government are not subject to state and local taxation, but may be taxed by Congress. In turn, state and municipal obligations are exempt from federal taxation, but are generally subject to taxation by another state if the bonds are located in, or if the owner resides within, the jurisdiction of the taxing state. In some cases government bonds are issued with a specific exemption from certain types of taxes or even from all taxation. This enables the government to borrow at a lower rate of interest and if the bonds are intended for foreign investors serves

as a guaranty of the good faith of the government. The argument is advanced that inasmuch as the interest paying and the tax collecting authorities are identical the taxation of government bonds is merely a bookkeeping operation. Under the present regime of the progressive income tax, however, this reasoning is inconclusive; moreover it is safe to say that the exemption of a considerable quantity of bonds is bound to impair the nature of progressive graduation applying to the entire tax system.

Federal and state bonds differ from municipal bonds in that no effective legal recourse can be taken by the holder in case of default, while in the case of a municipality such action is possible. From the standpoint of investment position federal bonds differ from state obligations in having a broader market. A further point of difference lies in the total volume of bonds outstanding. The amount of federal bonds in the United States has declined since the close of the World War because of the policy of debt reduction, while the total volume of state and municipal bonds has expanded considerably as a result of the increase in local expenditures, particularly for highways and social welfare undertakings. A question of particular importance in the case of municipal bonds is that of validity. Since a municipality is the creation of a state the issuance of its bonds must conform strictly to the provisions of the constitution and the statutes of the state. If great care is not taken a municipal issue may be found to be invalid and may have to be canceled.

Corporate bonds usually have some form of security in the nature of a mortgage pledging certain tangible property of the borrowing corporation. This mortgage may be open or closed. An open mortgage permits under the bond agreement further issues which have the same claim on the pledged property as the issues already outstanding. Closed mortgages permit no such additional issues under the same mortgage; they give the bondholder greater protection since he knows the exact extent of the security underlying his bond. Closed mortgage bonds, however, restrict the borrowing policy of the corporation and often prevent it from obtaining funds for necessary improvements. It has therefore become usual in recent years to issue open mortgages with special covenants protecting the interests of the holders of older bonds.

Another method of protecting corporate bonds is to base them on specific securities owned by the issuing corporation. This type of bond is in general use by holding companies, particularly in the public utility and transportation field, and in some cases by investment trusts. To make such bonds more attractive to investors the securities on which the bonds are based are sometimes deposited as collateral with a trustee; in this case we have what are known as collateral trust bonds. Such bonds commonly enjoy a wider market than the securities underlying them.

Bonds are also frequently secured by nothing more than the general credit of the issuing corporation. There are a number of varieties of these bonds, but perhaps the most important is the debenture, which is in effect an interest paying promissory note of the corporation to pay a certain sum of money at a given time. In the United States debentures are used most frequently by industrial corporations as a result of the general objection against a direct mortgage on a manufacturing plant. In England the only bonds issued by railways are debentures, which differ but little from American preferred stock.

Equipment obligations are another type of corporate security generally classified as bonds. They are based on a direct lien on a specific lot of rolling stock and have priority over first mortgage bonds. The most important type of these obligations is the car trust certificates issued under the Philadelphia plan. When rolling stock which a railroad company wishes to acquire is almost completed, the company gets a trust company (or association or individual) to become the legal owner of the new equipment and to pay for it. The railroad leases the rolling stock from the trust company and agrees to keep it in repair and to meet the interest charges on the car trust certificates issued; it receives title to the equipment only after it has paid its last instalment to the trust company. Equipment bonds, on the other hand, give the road a provisional title to the rolling stock before the last payment has been made.

In developing a financial plan for corporations it is particularly important to choose between bonds or stocks as a method of financing. In general it is not safe to issue bonds unless there is assurance of sufficiently stable earnings over a period of years to meet the fixed charges on the issues. For this reason railroads and public utilities, which have relatively stable incomes, issue a greater proportion of bonds than stocks; while industrial companies usually have less than a quarter of their capitalization in the form of bonds.

As an investment security a bond constitutes the holder a creditor, giving him a legal claim to a fixed return on his investment. The failure of a corporation to meet its obligations to its bond holders results in its becoming insolvent. In contrast the stock holder, who is theoretically a part owner, has no legal claim to a fixed return. He may, however, share in the earnings of the corporation, while the bondholder cannot unless special participating provision is made. Because of these characteristics the downward and upward fluctuations in the market value of corporate bonds are limited and are smaller than those of stocks. Bonds with a privilege of conversion into stock shares are naturally subject to greater fluctuations in value.

The market position of a bond, in addition to these internal factors, is also influenced by the external factor of the going rate of interest. A change in the rate of interest tends to bring about a similar adjustment in the yield on bonds. This responsiveness of bond yields to variations in interest rates is particularly true of most government and high grade bonds whose yields represent largely the return on pure capital and include only a small premium for risk. Fluctuations in bond yields may be regarded as a significant business barometer in that they reflect the changes in the cost of money.

GEORGE W. EDWARDS

See: PUBLIC DEBT; CORPORATION FINANCE; INVESTMENT BANKING; INVESTMENT; FOREIGN INVESTMENT; MORTGAGE; SINKING FUND; TAX EXEMPTION; INTEREST.

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BONIFACE VIII (1235–1303). He was born Benedetto Gaetani, a member of a noble Italian family, and was elected pope in 1294. Actuated by a desire for world power as well as by a most exalted notion of his pontifical office, he attempted to impose the papal supremacy on the rising national states, but succeeded in having them recognized only by Albrecht I of Germany. His struggle with Philip IV of France was the first real conflict between church and state in the modern sense, i.e. a struggle for the autonomy and sovereignty of the individual state against the universal claims of the papacy to both spiritual and temporal supremacy. His series of bulls directed against the French king, notably the *Unam sanctam* (1302), constituted the extreme formulation of this claim and called forth a mass of controversial literature from both sides. He was overcome by brutal treatment at the hands of Nogaret, the French emissary, who attempted to imprison him on the charge of heresy, and died soon after. With the death of Boniface the papacy lost its mediaeval world position.

Boniface VIII was not primarily a religious leader, but a statesman and jurist. A man of boundless energy and indomitable will, he was the object of general hatred because of his rapacity, desire of glory, arrogance and cynicism. At the posthumous heresy trial instituted by Pope Clement V on the instigation of Philip IV innumerable charges of impiety, Averroism, sorcery and immorality were brought against him. These charges were, however, largely slanderous. He was the last of the papal jurists of the thirteenth century and in 1298 issued a new collection of decretals, the *Liber sextus*. His government of the church was strictly absolutistic and during the struggle with France inspired a highly significant movement in church policy which paved the way in theory for the Conciliar Movement of the fifteenth century.

RICHARD SCHOLZ

Consult: Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i–v (Edinburgh 1903–28) vol. v, p. 374–440; Scholz, R., *Die Publizistik zur Zeit Philipps des Schönen und Bonifaz VIII* (Stuttgart 1903); Finke, H., *Aus den Tagen Bonifaz VIII* (Münster 1902); *Acta aragonensia*, ed. by H. Finke, 3 vols. (Berlin 1908–22); Caetani, G., *Domus caietana: storia documentata della famiglia Caetani*, vol. i– (Sancasciano 1927–); Baethgen, F., "Quellen und Untersuchungen zur Geschichte der päpstlichen Hof- und Finanzverwaltung unter Bonifaz VIII" in *Quellen und Forschungen aus italienischen Archiven und Bibliotheken*, vol. xx (1928–29) 114–237.

BONIFACIO DE ANDRADA E SILVA, JOSÉ (1765–1838), Brazilian statesman. He was born in São Paulo and received his education

at Coimbra, Portugal. After extensive travels in Europe he returned to Brazil in 1819. Throwing himself into the midst of the political upheaval which began in 1821 he became the chief organizer of the provisional government and in 1822 was named prime minister. He practically controlled the destinies of Brazil until his exile in 1823, after which his influence, although indirect, remained no less important. Essentially a practical idealist, he directed the movement for independence and imposed a constitutional monarchy on Brazil in order to avoid the chaos which premature republican government might produce. His great concern was to develop a strong homogeneous nation by intelligent organization of all available resources; to this problem he brought a thorough understanding of the peculiar economic and geographical conditions of Brazil and of the psychology of the people. He attacked slavery not only on moral but on economic grounds and advocated its gradual abolition. He maintained that when intelligently assimilated the Indian as well as the Negro would constitute part of the national wealth of Brazil, and proposed a very modern program for the civilization of the Indians, a program which the Brazilian government eventually adopted *in toto* in 1910. He saw clearly that the Portuguese slave owning aristocracy must be prepared for a new role in Brazilian development. For this and other purposes he advocated the creation of new schools and the expansion of the curricula of the existing schools to include courses in practical and social sciences and in physical education.

PAUL VANORDEN SHAW

Consult: Oliveira Lima, Manoel de, *O papel de José Bonifacio no movimento da independencia* (São Paulo 1907); Pinto da Rocha, Arthur, "Segunda conferencia, a 16 de Janeiro de 1922, commemorativa do centenario do ministerio de José Bonifacio . . . Prelecção" in Instituto Historico e Geographico Brazileiro, *Revista. O anno da independencia* (Rio de Janeiro 1922) p. 51–102; Shaw, P. V., "José Bonifacio and Brazilian History" in *Hispanic American Historical Review*, vol. viii (1928) 527–50.

BONITZ, HERMANN (1814–88), German classical scholar and educator. After attending the famous Schulpforta he studied at the universities of Leipsic and Berlin, where he came under the influence of the leading classical scholars of the time, Hermann, August Böckh and Lachmann. In 1849 after having taught in secondary schools for thirteen years he was invited to become professor of classical humanities at the University of Vienna. There he conducted a seminar in philosophy for the preparation of teachers for secondary schools. In the reform of Austrian secondary education Bonitz became associated with the minister of education, Franz Exner, with whom he prepared the *Entwurf der Organisation der Gymnasien und Realschulen in Oesterreich* (Vienna 1849), proposing that the six-year course be extended to an eight-year course, to be divided so that the early years might be accessible to students in small towns and semi-rural localities. The real innovation, however, was the introduction of science as a regular part of the course and the reform in the teaching of the classics, which abolished the requirement of Latin speaking and of the Latin essay. In 1850 he organized the *Zeitschrift für die oesterreichischen Gymnasien*, whose broad scope and excellent contributions made it a periodical of lasting value. Because of the war he returned in 1867 to Berlin and was appointed director of the Gymnasium zum Grauen Kloster. At a conference on the reorganization of Prussian education called by Minister Falk in 1873, Bonitz advocated retaining the monopoly of the *Gymnasium* in preparing for entrance to the universities and recognizing the existing *Realschulen* as preparing students only for technical institutes. He proposed, however, that some of the *Realschulen* be developed into *Realgymnasien*. In 1875 he was put in charge of secondary education in Prussia and in 1882 was made responsible for the preparation of the courses of instruction of the *Realgymnasium*. Although he regarded the classics as important for a liberal education Bonitz contributed in Prussia as in Austria to the introduction of science into the regular curricula of secondary schools.

I. L. KANDEL

Consult: Paulsen, Friedrich, *Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten*, ed. by R. Lehmann, 2 vols. (3rd ed. Leipsic and Berlin 1919–21) vol. ii; Sander, in *Allgemeine deutsche Biographie*, vol. xlvii (1903) 99–105.

BONNEVILLE DE MARSANGY, ARNOULD (1802–94), French jurist and criminologist. His distinguished career as prosecutor, president judge at Versailles and imperial councilor was marked by signal services to the criminological sciences. The criminal codes from the Revolution to 1832 had increased penalties for recidivists, but the failure of the Penal Registry Act of 1808 to make the identification of recidivists effective caused him to examine the whole

problem in *De la récidive, ou des moyens les plus efficaces pour constater, rechercher et réprimer les rechutes dans toute infraction à la loi pénale* (Paris 1844) and to suggest in 1848 a reform of the registration system (*De la localisation au greffe de l'arrondissement natal des renseignements judiciaires concernant chaque condamné . . .*, Versailles 1849) which by reducing impunity would strengthen the repression of crime. By a ministerial decree of 1850 France adopted his suggestion. Other countries, among them Austria, Bavaria and Italy, followed suit. His interest in penological problems led him to the publication of two excellent works, *Traité des diverses institutions complémentaires du régime pénitentiaire* (Paris 1847) and *De l'amélioration de la loi criminelle* (vols. i-ii, Paris 1855–64; vol. iii never published), the main contents of which are well summarized in an article, "De la détention pénale" (*Revue contemporaine*, 2nd ser., vol. lviii, 1867, p. 64–92, 240–79). In these works he sketched the outline of a modern penal system. As far as imprisonment was concerned he suggested a progressive system beginning with a period of cellular confinement and passing through various stages of labor in common, with strict classification of prisoners, to a final period of conditional liberty under supervision. An imperial decree of 1854 applied the principle of "preparatory liberation" to the transportees in Guiana and New Caledonia. Noteworthy also are his ideas on public cooperation in crime repression, police administration and indemnities for false arrests.

THORSTEN SELLIN

BONUS, LABOR. *See* WAGES; LABOR, METHODS OF REMUNERATION FOR.

BONUS, SOLDIERS'. *See* VETERANS.

BOOK CLUBS. *See* PRINTING AND PUBLISHING.

BOOKKEEPING. *See* ACCOUNTING.

BOOM, as the name indicates, is an explosive outpouring of economic activity which occasionally characterizes certain communities. This activity usually centers around the buying and selling of securities and land. The psychological mechanism behind a boom is the possibility of selling at a profit because the next buyer hopes that he in turn can make a profit by selling his holdings at a higher price to someone else, who will repeat the operation until the boom collapses. What differentiates a boom from the ordinary economic process is that the whole activity is greatly speeded up and that during the entire series of transactions the price of the article bears little relation to its income yield.

In the nature of the case a boom can develop only in a society possessing two important characteristics. It must be a restless and dynamic society rather than a settled and stable one, and its members must be animated primarily by pecuniary motives and constantly on the alert for the possibility of making money. It is obvious that a society which is interested in living according to the standards handed down for generations, and in which large monetary incomes are not accompanied by corresponding social prestige, will not be interested in any explosive speeding up of its economic output in order to make money which it does not need. In such a society money is in the main used for hoarding and saving and not for spending or investing. The wants being limited, the bringing in of new natural resources would serve little purpose because there would be no market for them. Restlessness, rapidly expanding wants and a high mobility of population are usually associated with new countries or with countries having newly discovered natural resources. The United States is the perfect example of a country which has all the prerequisites for the recurring appearance of booms.

The focal point of a boom may be found in land speculation, security speculation or, when the expansion phase of the business cycle reaches its peak, in an excessively rapid development of certain industries. In the last case overexpansion and speculation centering about it are caused by cumulation of all those factors which lift the economic system out of a state of depression. It is terminated when the narrowing of the margin between selling prices and costs and the tightening of credit lead to a cancellation of orders, financial strain and a retardation of the general tempo of business, often preceded by a series of business failures and a partial breakdown of the credit structure. Such booms are a part, not always indispensable, of the cyclical ebb and flow of economic activity (*see* BUSINESS CYCLES). The security boom is shorter and more fitful than the land boom and is not accompanied or followed by the extended penumbra of economic activities which constitute the lasting effects of a land boom. The mechanism of a boom is best studied, therefore, in connection with a land boom.

A land boom is set in motion by any situation which will create a market for land for agricultural, mining or development purposes, or by a belief that such a market will sooner or later appear. Petroleum and minerals, raisins and grapefruit, winter vegetables and winter resorts, all of these may at certain times and for various reasons become objects of desire to an increasing number of persons. The adoption of new inventions making possible the economic exploitation of mineral resources; the shift in standards of prestige affecting consumption habits; an increase in the purchasing power of marginal groups raising the standards of living; inauguration of commercial treaties and tariffs leading to the opening of new foreign markets or the reduction of competition in the domestic market—these and similar changes may engender a sudden inflation in the demand for mineral or agricultural products, for the land from which they are derived and for land in general in a locality particularly favorable to the establishment of certain industries. Other occasions for the creation of a boom may be found in developments which affect only a restricted locality, such as the opening of a new railroad or port, the provision of cheap current through utilization of local supplies of water power or the irrigation of land. In the case of irrigation the profits to the original owners are apt to be very large, particularly if the product raised is one having a time differential (lettuce or other vegetables in the winter) or is generally in large demand; low labor costs, due to the utilization of cheap, usually foreign, labor, increase profits further and act as an additional stimulus. The location of a new capital is perhaps the best example of a strictly local boom.

The simplest type of boom is that based on the expectation of the growth of the community around a newly located administrative center; it carries with it the limitations inherent in the size of that administrative unit. An agricultural or mineral land boom, on the other hand, has greater possibilities since it is connected with the existence of a widespread demand and of a price fixed in a national or even a world market. The boom created by the establishment of a new industry is limited to the proportion which the economic activity of the new industry will bear to the total economic activity of the community. A highly industrialized community will not be seriously affected by this new industry, but a small or non-industrial community will show the same boom development as that caused by the irrigation of land or the building of a railroad.

Given a certain amount of capital, a willingness, even readiness, to change abodes, particularly from a cold to a warm winter climate, a confidence in their money-making abilities and a large dose of human gullibility, investors will be readily attracted to these "money-making opportunities." Around this central core of land speculation there is built up a certain amount of land utilization on which a good profit is actually made by skilful owners or by those who purchased the land before the high prices set in. There is also a considerable amount of building activity to take care of the population and the business attracted there, and a great deal of natural or artificial confidence in the future economic possibilities of the locality.

While the fundamental pattern of the boom is the buying in order to sell at a rapid and high profit—a pattern depending upon the presence in the society of considerable fluid capital ready to be invested and upon a very elastic standard of living—the major portion of the success of a boom should be ascribed to the skill and energy of the promoter and manipulator. Working under the rule of *caveat emptor*, the promoter feels no particular moral scruples because he is selling to someone who will in turn act in exactly the same way. Moreover the promoter often feels that he is engaged not in dubious transactions but in opening up new opportunities for those who have vision enough to seize them; therefore the line of demarcation between fair dealing and chicanery becomes almost invisible to him. In general the community stands behind the actions of the promoter for fear that if the veil were lifted and the full extent of the chicanery were seen, legitimate business would suffer along with the promoter. This legitimate business is primarily concerned with taking care of the large influx of population, which is one of the first accompaniments of a boom, by selling to them the objects and instruments of living. Such business transactions are often very profitable because the demand is so much greater than the available facilities that these are paid for at a very high rate. Boom localities are notorious for the unusually high cost of living.

Normal standards of expenditure are strangely distorted during a boom. Immediate necessities may be of the meagerest and living quarters often unspeakably primitive, but at the same time tremendous sums are spent on luxuries of the most extravagant kind. An oil boom town,

with its high wages, is a very good market for diamonds, and there is great demand for gold and silver jewelry, which the more respectable members of the community find to be the safest form of investment as well as the most reasonable indication of prestige.

The problem of consumption is affected also by the abnormally intense amusements of the boom town. The boom population is made up of large numbers of the adventurous and unstable —those looking for fortunes easily and rapidly made. Their presence tends to stimulate the spread of lawlessness throughout the entire community and to render ineffective the local agencies of law and order. The outside promoter, who remains in the boom town only as long as his dubious speculation is profitable and undetected by the law, has his counterpart in the professional gambler who, with the "dancing girl" as his accomplice, is ready to cater to the more naive but highly paid workers by relieving them of a large share of their plenteous earnings. These camp followers are often aided or abetted by the local police, who thus share in the profits of the boom. The general atmosphere of demoralization affects also those who would under ordinary circumstances be repelled by this manner of living; the inhibitions of these individuals, transplanted many miles away from home into an alien and highly competitive environment, are often weakened by the gruelling necessity of being constantly on the alert lest someone get the better of them. The terrific pressure under which the activities of the boom town are carried on must be offset by the intensity and recklessness of the amusements.

Gradually the possibilities of making large and rapid profits vanish and individuals attracted by such an economic incentive begin to leave the boom locality. The price of land settles down to a reasonable relationship between cost and income. In cases where the boom is due to the exploitation of minerals, the fall in the productivity of wells or mines causes a shrinking of the population and the petering out of the boom into a moderate economic activity which continues as long as the mineral is there to be exploited. In communities which have gone through an agricultural land boom overproduction soon sets in; the price structure of the products becomes so thoroughly demoralized that only those who have not been burdened with too heavy an outlay in buying the land are able to survive and keep their holdings. The promoter endeavors to keep these facts hidden from the next purchaser, but even though he may be successful for a time, the prospective purchasers come to realize that the best and most profitable land has been taken up. Where the boom is due to favorable geographic location or the advantages of a new road, port or administrative unit, it is inevitable that after the best sites have been acquired the purchase of less desirable lots should proceed with some reference to an estimate of their marketability in a reasonably near future. The boom is also slackened in tempo by the very high prices which land comes to command and which preclude the participation of large numbers of prospective purchasers. The speculators still flourish because they buy on margin, but even this is, in the nature of the case, self-limiting. The pecuniary mysticism which is the psychological basis of the boom phenomenon is, like all mysticism, apt to tire of feeding on itself, and the reaction sets in sooner or later.

The boom results in the creation of many instruments of production in the shape of buildings, roads, irrigation ditches and public schools which were brought into existence either because there seemed to be a real demand for them or because they served to attract prospective purchasers. These instruments remain a part of the community's equipment. Without the boom they would not have been there; after the boom they are bought at a price which does not cover their replacement cost but which will enable their new owners to make them pay. As a matter of fact they have been paid for by the uses to which they have been put during the period of high prices and high returns or by the money of those who came in the hope of getting rich. To the extent, then, that its economic life has improved by the presence of this equipment the community has been benefited by the boom. Money is also more plentiful than before because many of the local people who profited by the boom leave their earnings in the local banks, whose facilities for handling business have now greatly improved. It also happens that people who come to a certain locality during the boom remain and settle after the boom is over, and since many of them are apt to be of the energetic type the community is benefited both by an increase of population and by the accession of some valuable strains in the population. The less desirable elements tend to drift away because the slower tempo of life does not appeal to them. In general, after its more severe effects are lived down, it is found that some of the momentum

gathered during the boom tends to remain in the community as a source of increased activity and economic benefit; but those who paid for the boom are seldom those who benefit by it.

MAX SYLVIUS HANDMAN

See: SPECULATION; BUSINESS CYCLES; BUBBLES, SPECULATIVE; PROMOTION; LAND SPECULATION; REAL ESTATE; CHAMBERS OF COMMERCE; LAND SETTLEMENT; FRONTIER; IRRIGATION; OIL; METALS; PRECIOUS STONES.

Consult: Ely, R. T., "Land Speculation" in *Journal of Farm Economics*, vol. ii (1920) 121–35; Martineau, Harriet, *Society in America*, 3 vols. (2nd ed. London 1839) vol. i, p. 349–53; McMaster, J. B., *A History of the People of the United States*, 8 vols. (New York 1883–1913) vol. vi, p. 323–26, 335–38, and vol. vii, p. 607–08; Forster, G. W., "Land Prices and Land Speculation in the Bluegrass Region of Kentucky" in Kentucky Agricultural Experiment Station, *Bulletin*, no. 240 (1922) 39–74; Lloyd, O. G., "Studies of Land Values in Iowa" in *Journal of Farm Economics*, vol. ii (1920) 136–40; Vanderblue, H. B., "The Florida Land Boom" in *Journal of Land and Public Utility Economics*, vol. iii (1927) 113–31 and 252–69; Roberts, K. L., *Florida* (New York 1926); Lewis, Oscar, "Getting Off the Bandwagon" in *Harper's Magazine*, vol. cliv (1927) 168–72; Butler, E. P., "Boom! Boom! Boom!" in *Outlook*, vol. cxlii (1926) 258–64.

BOOT AND SHOE INDUSTRY. *See* LEATHER INDUSTRY.

BOOTH, a family of English evangelists and social workers. William Booth (1829–1912) was a preacher of the Methodist New Connection. Having been criticized by his church because of his sensational methods of slum street corner evangelism, which frequently provoked disorder, Booth withdrew and in 1865 established the Christian Mission in Whitechapel, London, where he combined evangelism with rudimentary relief work. In 1878 the mission began to be known as the Salvation Army, a name officially adopted several years later when Booth reorganized his institution on British army lines. He became "general," and his son, William Bramwell Booth, then a youth of twenty-two, "chief of staff." His wife Catherine (1829–90), a woman of charm and good address, also played an important role in the enterprise; in addition to raising funds she advocated and undertook the "female ministry." Despite criticism the army gained enormous popularity in England and gradually spread to America and other countries. Booth's prestige became so great that in 1902 he was invited to the coronation of King Edward.

Booth's theology was conservative; he preached the reality of sin, everlasting punishment for the wicked and redemption. Although conversionism was the foundation of his method Booth neither sponsored periodic revival campaigns nor featured gifted preachers. Instead humble converts, snatched from the gutter, were thrust forward to "testify" to what "salvation" had done for them. In the field of "institutional Protestantism," however, Booth distinctly occupied the "left wing."

Neither William Booth nor his son Bramwell (1856–1929), who succeeded him in 1912, made striking innovations in philanthropy. Their main contribution was the idea of pooling the nation's philanthropic funds for concentration upon the slums, which had heretofore been left too largely to the care of local parish churches. William Booth's efforts to make the rescue work partly self-sustaining drew the fire of the British trade unions on the charge that the army "sweated" labor in its shops.

Even while his father was still alive Bramwell Booth was the organizing genius of the army and he continued to dominate its affairs autocratically until removed from command by the International Staff Council in February, 1929, on the grounds of senility. His removal involved a bitter political fight within the army and upset for the first time its autocratic, self-perpetuating, one-man headship.

Many other members of the Booth family were active in the army. William Booth's son, Ballington, and his wife came to America, where they were placed in full charge of the army, in 1886. Resigning in 1896 because of differences with the founder, they established the Volunteers of America, a rival organization with a national, democratic and antiritualistic emphasis. Later William Booth's son-in-law, Commander Frederic de L. Booth-Tucker, headed the army in America; his successor was William Booth's daughter, Evangeline. Her sister, Katherine (*la Maréchale*), organized the army in France and Switzerland. Other children and grandchildren have also been high officers in the army.

C. T. HALLINAN

Consult: Booth, William, *In Darkest England and the Way Out* (London 1890); Booth, Bramwell, *Social Reparation* (London 1899); Booth-Tucker, F. St. G. de L., *Life of Catherine Booth* (London 1893); Begbie, Harold, *The Life of General William Booth*, 2 vols. (abr. ed. London 1926); Manson, John, *The Salvation Army and the Public* (2nd ed. London 1908); Clasen, P. A., *Der Salutismus* (Jena 1913).

BOOTH, CHARLES (1840–1916), English social investigator and statistician. Booth came of a wealthy shipowning family of Liverpool and was active in business affairs throughout his life. But he had also the mind and temper of the student. The decade 1880–90 in which his first productive writing was done was characterized by a new general interest in the poor of London. A tract by a city missionary, W. C. Preston, *The Bitter Cry of Outcast London* (London 1883), had been widely read and stories of London distress were so sensational that sober men were inclined to disregard them as exaggerations. Booth sought to find the facts and then to state them without partisanship. He began first by a study of the statistics of occupations and later attempted to state statistically the problem of London poverty. The results were published in papers contributed, from 1886 on, to the *Journal* of the Royal Statistical Society, of which organization he was president from 1892 to 1894. Finally he adopted the method of extensive field investigation and assembled a brilliant corps of investigators, including Beatrice Webb, Octavia Hill, Ernest Aves, H. Llewellyn Smith, Graham Balfour and Clara E. Collet. From the books of the school attendance officers and from other sources previously untapped, and with the cooperation of trade union officials and public and philanthropic bodies, this staff secured data which threw light on various aspects of the life and work of the great mass of the London working people. Determined to be as objective as possible, Booth was inclined at first to "paint things too dark rather than too light" in order to avoid a possible class bias on his part, but he found the actual poverty disclosed so great that he became "equally anxious not to overstate." The resulting study, *Labour and Life of the People* (2 vols. and appendix volume, London 1889–91), was a pioneer contribution, not only in its data-gathering technique and device of the regional maps showing the location of the various income classes in London, but also as marking the beginning of the social survey method in the investigation of urban conditions. After the publication of the first edition Booth proceeded to study the religious influences affecting the population. He finally revised the earlier studies and republished the whole series as *Life and Labour of the People in London* (17 vols. and 1 vol. of maps, London 1903). These volumes constitute a memorable record of London life "under the influences of education, religion, and administration" at the close of the century.

One of the early effects of his new knowledge of the poor was a deep concern about the misery of the aged. Booth became a vigorous advocate of universal state-provided old age pensions, was a member of several royal commissions on the aged poor and on poor relief, and published *Pauperism, a Picture; and The Endowment of Old Age, an Argument* (London 1892), *The Aged Poor; Condition* (London 1894) and *Old Age Pensions and the Aged Poor; a Proposal* (London 1899). Although he was a Conservative in politics (he was made a privy councilor in 1904 by Balfour) his attitude to labor and trade-unionism, as expressed in his *Industrial Unrest and Trade Union Policy* (London 1914), was in the main sympathetic.

EDITH ABBOTT

Consult: Booth, Mary Macauley, *Charles Booth: A Memoir* (published anonymously, London 1918); Smith, H. Llewellyn, "The New Survey of London Life and Labour" in Royal Statistical Society, *Journal*, vol. xcii (1929) 530–47; Webb, Beatrice, *My Apprenticeship* (London 1926), especially ch. v.

BOOTLEGGING. *See* LIQUOR TRAFFIC; LIQUOR INDUSTRIES.

BORGES, JOSÉ FERREIRA. *See* FERREIRA BORGES, JOSÉ.

BORN, STEPHAN (1824–98), German labor organizer. When Born was still apprenticed as a typesetter he published anonymously a noteworthy pamphlet, *Der Verein zur Hebung der arbeitenden Klassen und die Volks-Stimme über ihn* (Leipsic 1845). In 1846, in the course of his travels as a journeyman, he visited Paris and became acquainted with Engels and the activities of the Communist League. Born's ability as an organizer was immediately recognized and he was sent by Engels to spread the new doctrines among the workingmen in Lyons and Switzerland. With the outbreak of the German Revolution of 1848 Marx selected Born for the task of organizing the workers of Berlin. A central committee representing twenty-eight actual craft constituencies was established; its charter based on Born's ideas was the first document in which the workers themselves recognized their distinct class interests and dedicated their organization to the strengthening of class consciousness. In August, 1848, a national workers' congress met in Berlin under Born's leadership; it created a national organization with local branches called "Arbeiterverbrüderung." As president of this body and as editor of its publi-

cation, *Die Verbrüderung*, Born secured a large following. In 1849 the failure of the May uprising, in which he participated on the Dresden barricades, compelled Born to flee from Germany. The reaction of the fifties destroyed his organization. He spent the rest of his life in Switzerland, where as editor and professor of literature he advocated the idea of democracy in education, in the belief that society can be reformed only by free and independent individuals. Shortly before his death Born published his memoirs, *Erinnerungen eines Acht-und-vierzigers* (Leipsic 1898).

GERTRUD QUARCK

Consult: Quarck, Max, *Die erste deutsche Arbeiterbewegung* (Leipsic 1924); Friedensburg, W., *Stephan Born und die Organisationsbestrebungen der Berliner Arbeiterschaft* (Leipsic 1923).

BÖRNE, LUDWIG (1786–1837), German author, journalist and precursor of the Young Germany movement. Börne was born in the Frankfort ghetto, studied medicine and later political science and frequented the Jewish literary salons of Berlin, where he came under the influence of Wilhelm von Humboldt, Friedrich Schlegel and Schleiermacher. He was appointed police official in Frankfort (1811) but was compelled to resign two years later because of his Jewish extraction. He embraced Christianity in 1818, changed his name from Löb Baruch to Ludwig Börne and became a free lance writer. His literary and dramatic reviews in *Die Wage, Zeitschrift für Bürgerleben, Wissenschaft und Kunst*, which he founded and edited in Frankfort (1818–21), and in other periodicals were utilized to criticize current political and social conditions. Börne may be considered, with far more justification than Heine, the inventor of the political *feuilleton*. He found in France the inspiration for his ideals of liberty; the success of the Revolution of 1830 drew him to Paris, where he remained until his death. There he established *La balance* (1836) with the aim of reconciling the spiritual life of Germany and France. In his *Briefe aus Paris* (3 vols., Hamburg 1832–34), in which he traced events in France from 1830–33, he endeavored to enlighten German political opinion and to aid it in its struggle against the policy personified by Metternich.

Although he fought for equal rights for the Jews Börne envisaged this cause as only one of the factors in the general struggle for the liberation of humanity. His method of infusing politics into every aspect of life and especially into literature was enthusiastically adopted during his time and became the central idea of the Young Germany movement.

HANS TRAUB

Works: *Gesammelte Schriften*, 12 vols. (Hamburg 1862).

Consult: *Börne der Zeitgenosse*, ed. by Anton Kuh (Vienna 1922); Ras, G., *Börne und Heine als politische Schriftsteller* (Groningen 1927); Brandes, G. M. C., *Hovedströmninger i det 19de aarhundredes litteratur*, 6 vols. (6th ed. Copenhagen 1923–24), tr. by Diana White and Mary Morison as *Main Currents in Nineteenth Century Literature*, 6 vols. (London 1924) vol. vi, p. 39–102.

BORNITZ, JAKOB (dates of birth and death unknown), German writer on political and economic subjects of the late sixteenth and early seventeenth centuries. In his treatise on coins, *De nummis* (Hanover 1608), he is concerned with money merely as a medium of exchange. To insure its universal acceptability he recommends the monopolization by the government of the coinage privilege and warns against debasement. His chief work, *Aerarium, sive tractatus politicus* (Frankfort 1612), reveals Bornitz as one of the first systematizers in fiscal theory. Influenced by the exponents of Roman fiscal law, he stresses the notion of general correspondence between the amount of the tax and the benefit received from the state. In the classification of the varieties of fiscal contributions his viewpoint remains essentially legalistic. His *Tractatus politicus de rerum sufficientia* (Frankfort 1625) is a cameralist encyclopaedia, the first of its type to appear in Germany. The measures Bornitz recommended for increasing the quantity of money in a country link him with the early mercantilists. On the whole, however, his position is essentially mediaeval; he fails to share the mercantilists' fundamental concern with problems of national welfare and their belief in the wisdom of extending the scope of governmental activity.

LOUISE SOMMER

Consult: Roscher, Wilhelm, *Geschichte der Nationalökonomik in Deutschland* (Munich 1874) p. 183–95; Zielenziger, Kurt, *Die alten deutschen Kameralisten* (Jena 1914) p. 115–23.

BOROUGHS. *See* LOCAL GOVERNMENT; MUNICIPAL GOVERNMENT.

BORSTAL INSTITUTIONS. *See* PENAL INSTITUTIONS.

BORTHWICK, ALGERNON, BARON GLENESK (1830–1908), British journalist. Borthwick began his career as Paris correspondent of the London *Morning Post*; at the age of twenty-two he succeeded his father, a high Tory, as editor of the paper and later became its owner. In the course of forty years Borthwick made the *Post* one of the most valuable newspaper properties in England. He was untiring and shrewd as a journalist, but the basis of his success lay also in a peculiar combination of factors. Most important of these at the outset of his career was his continuation of his father's friendship with Palmerston, which caused the *Post* to be closely identified with that statesman at the period of his greatest power. Hardly less useful was Borthwick's life as a member of Tory society and his cultivation of French political friends, particularly Napoleon III, which enabled him to secure early and accurate information on foreign affairs and to express the convictions of his Tory circles. In fact Borthwick's significance lies in his seizure of the power of the modern newspaper to serve the needs of a declining aristocracy in an age when social and political forces were rapidly shifting. In 1881, contrary to all advice, he determined to reduce the price of the *Post* from 3d. to 1d., leaving the *Times* practically alone at the higher price. The increased number of readers among the new Tory Democracy justified the decision and the paper's profits rose rapidly. Borthwick played an important role in the formation of the Primrose League. As a member of Commons he obtained the modification of the libel law in favor of newspaper proprietors. In 1895 the Conservative government made Borthwick a peer, the first of what was to be a new group in the House of Lords.

DONALDSON JORDAN

Consult: Lucas, R. J., *Lord Glenesk and the "Morning Post"* (London 1910); Ferguson, M. T., "The Late Lord Glenesk and the '*Morning Post*'" in *National Review*, vol. liii (1909) 796–814.

BORUCHOV, BER (1881–1917), Jewish economist, philologist and one of the founders of the Jewish socialist labor party, Poale Zion. Boruchov, the son of a Hebrew teacher, was born in the Ukraine. In his student days he joined the Russian Social Democratic movement, later became a Zionist and in 1905–06 took part in the organization of the Poale Zion party. "Our Platform" (reprinted in *Poale Zion Shriften*), in which he presented his views on socialism and on the Jewish national problem, became the theoretical guide for the Poale Zion movement. Between 1907 and 1915 Boruchov was engaged in strengthening the Poale Zion parties of various European countries. He came to the United States in 1915, took an active part in initiating the convening of the American Jewish Congress and returned to Russia during the 1917 revolution.

Boruchov was the exponent of "scientific" Zionism. In a series of studies he investigated the anomalies of Jewish economic life and explained in economic terms Zionism and the rise of European nationalism. He propounded the theory that mass emigration of Jews to an undeveloped territory like Palestine is the inevitable consequence of the operation of certain ineluctable economic laws. National competition is bound to bring about restriction of immigration in highly industrialized countries like America, South Africa and Australia, and Jewish emigration will necessarily gravitate to undeveloped, semi-agrarian regions. The return of the Jewish nation to Palestine is therefore not a matter of romantic national sentiment or of vague mystic yearning. The ultimate success of Zionism depends on the ability of the emigrating Jewish workers to enter into agriculture and into basic industries; and the class conscious Jewish proletariat by fighting in Palestine for its rights will eventually create guaranties for a Jewish autonomy. Zionism thus constitutes an economic as well as a democratic revolution in Jewish life.

HAYIM FINEMAN

Important works: *Poale Zion shriften*, ed. by I. Zar and A. Wohliner (New York 1920), continued as *Geklibene shriften*, ed. by B. Loker (New York 1928); *Die yiddishe arbeiter bewegung in ziffern* (Berlin 1923); they are all in Yiddish.

Consult: *Zum andenken von Boruchov* (in Yiddish) (Kiev 1918); Tartakower, Arjeh, "Zur Geschichte des jüdischen Sozialismus" in *Der Jude*, vol. viii (1924) 26–38.

BOSANQUET, BERNARD (1848–1923), English philosopher, political theorist and sociologist. As a representative of the group which he himself called the "Hegelians of the Left" Bosanquet has been faithfully described as "the central figure in British philosophy for a whole generation." His political ideas, as developed systematically in *The Philosophical Theory of the State* (London 1899, 3rd ed. 1920), place him in the idealistic school of English political philosophy of which T. H. Green is the foremost modern representative. He went farther than Green, however, in the direction of Hegelianism, approaching perilously near to the

apotheosis of the state commonly associated with modern writers like Treitschke and Bernhardi. Like Hegel he was primarily interested in the liberation of the free will of the individual, and although he believed that external force could accomplish nothing enduring he conceived of the state as "the power which, as the organ of the community, has the function of maintaining the external conditions necessary to the best life." This view and the extent to which in his day the activities of the state touched the conscious and subconscious life of every individual led him to consider the state broadly as a working conception of life as a whole. Unlike Green he placed the acts of the state in a wholly different moral sphere from those of the individual because the state is "a supreme power which has ultimate responsibility for protecting the form of life of which it is the guardian." His absolutism, however, was tempered in one direction by his emphasis on the value of the individual, as expressed in *The Value and Destiny of the Individual* (London 1913), which led him to oppose old age pension legislation on the ground that it might lessen the individual's responsibility in providing against the period of his dependence; and in another direction, by his growing awareness of the excesses of patriotism which he expressed in "The Duties of Citizenship" in his *Aspects of the Social Problem* (London 1895, p. 1–27), and *Social and International Ideals, being Studies in Patriotism* (London 1917). True patriotism, according to Bosanquet, is not a hankering for heroics but "a daily sober loyalty"—a constant consciousness of duty and obligation to our fellow citizens and the world at large.

Many of Bosanquet's political dicta are challengingly epigrammatic. He had the capacity, which he displayed in his pioneer university extension work, for presenting abstruse subjects in terms of the experience of the ordinary man. He maintained close contact with practical life, especially in connection with the Charity Organization Society. His work in this field led to the establishment in 1902 of the School of Sociology and Economics in London where social workers and poor law officers were trained. Some of Bosanquet's views on the subject may be found in his pamphlet *The Art of Public Assistance* (Sheffield 1910).

W. H. DAWSON

Consult: For his life, Bosanquet, Mrs. Helen (Dendy), *Bernard Bosanquet* (London 1924). For an exposition of his political philosophy: Barker, Ernest, *Political Thought in England from Spencer to To-Day* (London 1915) ch. iii; Hoernlé, R. F. A., "Bernard Bosanquet's Philosophy of the State" in *Political Science Quarterly*, vol. xxxiv (1919) 609–31; "Bosanquet's Theory of the General Will," a symposium by A. D. Lindsay and H. J. Laski, in Aristotelian Society, *Proceedings*, n. s., supplementary vol. viii (1928) 31–61. The principal attack on Bosanquet's political theory is to be found in Hobhouse, L. T., *The Metaphysical Theory of the State* (London 1918).

BOSCH KEMPER, JERONIMO DE (1808–76), Dutch social scientist. After practising law independently, Bosch Kemper held a government position in the office of public prosecutor at Amsterdam (1834–52). For the following ten years he was professor of constitutional law and political science at the Athenaeum Illustre in Amsterdam. He served in parliament for some time and from 1841 to 1845 edited the magazine *De tijdgenoot*, in which he argued for the liberal revision of the Dutch constitution. In 1849 he organized a small circle of statisticians and with their cooperation founded the *Staatkundig en staathuishoudkundig jaarboekje* (1850–84), of which he was the sole editor during its first year.

Bosch Kemper's activity as an author was equally varied. His earlier works deal with criminal law and procedure; later he shifted his interest to constitutional law and politics on the one hand and to social problems and poor relief on the other. He may be considered the first Dutch sociologist because the first volume of his revised manual of constitutional law is given to the "science of society." It is is imbued with a pietistic-religious spirit and excels in neither clearness nor originality, although it is packed with information gathered from wide reading. As a liberal-individualist in politics and conservative-reformist in social and economic questions, Bosch Kemper was out of harmony with the spirit of his age in Holland; it was therefore difficult for him to find followers who would accept his system of thought in its entirety.

WILLIAM ADRIAN BONGER

Important works: *Het wetboek van strafvordering* (Criminal code), 3 vols. (Amsterdam 1838–40); *Geschiedkundig onderzoek naar de armoede in ons vaderland* (Historical inquiry into poverty in our fatherland) (Haarlem 1851); *Handleiding tot de kennis van de wetenschap der zamenleving en van het nederlandsche staatsregt* (Manual of the science of society and of Dutch constitutional law), 3 vols. (Amsterdam 1860–71).

Consult: Vreede, G. W., *Jeronimo de Bosch Kemper als staatsburger en geleerde herdacht* (Utrecht 1877); Jolles, J. A., in *Themis*, vol. xxxvii (1876) 523–40.

BOSCO, DON GIOVANNI (1815–88), Italian priest and educator. He was the founder of the Salesian Order (Society of St. Francis of Sales) for abandoned children. His pedagogical theories set forth in his numerous writings are based upon the principle of Christian charity and upon his preference for preventive rather than repressive measures in the care of children. Believing that the aim of education is to help the child to improve his condition through his own efforts, he maintained that the role of the educator was not that of a disciplinarian but rather that of a father, adviser and friend. Children must be free from social discrimination, enjoy a large measure of liberty and have opportunity for recreational games. The teacher should be primarily concerned with the formation of the moral will and provide ever present religious inspiration. Hostile to naturalism, Don Bosco insisted that material things be interpreted theologically. Thus neither the object lesson for the young nor instruction in science for the more advanced is sufficient in itself; all teaching must rest on a theological basis and aim at spiritual training. The highest study is that of the philosophy of St. Thomas Aquinas.

His work in Italy was accomplished despite protracted persecution. His influence and institutions spread ultimately to France, Spain, Central and South America. During his lifetime the Salesians cared for 130,000 children and established more than 250 schools, including classical and apprenticeship schools. They also established the first night schools in Italy.

RENÉ HUBERT

Consult: Lemoyne, G. B., *Vita del Ven. Giovanni Bosco*, 2 vols. (new ed. Turin 1920); Villefranche, J. M., *Vie de Dom Bosco* (Paris 1888), tr. by H. S. Martin (3rd ed. London 1898); Boyton, Neil, *The Blessed Friend of Youth; Blessed John Bosco* (New York 1929).

BOSS, POLITICAL. *See* MACHINE, POLITICAL.

BOSSUET, JACQUES BENIGNE (1627–1704), French theologian, social philosopher and historian. After taking orders in 1652 he soon acquired great renown as a preacher. In 1669 he was created bishop and the following year Louis XIV appointed him preceptor to the dauphin. In the Clerical Assembly of 1682 Bossuet, now Bishop of Meaux, formulated the classical statement of the theory of Gallican liberties. The *Cleri gallicani de ecclesiastica potestate declaratio* (Paris 1682), of which he was the author, proclaims that the temporal and spiritual powers must be separate and mutually independent, that the supreme authority of the church is vested in its councils and that the infallibility of the pope is shared by the entire episcopal body. From Bossuet the ancient theory received a new vitality which it did not finally lose until the latter half of the nineteenth century.

The traditional Catholic faith found in Bossuet a staunch protector against its enemies both inside and outside the church. He took an active part in the struggle against the Protestants and in order to reconvert them, as well as to combat the Protestant minister Jurieu, he wrote among other works *Histoire des variations de l'église protestante* (Paris 1688, English translation Antwerp 1742), in which he attempted to expose the logical inconsistency of the Protestant position. Two years later he corresponded with Leibnitz on the subject of the union of Catholic and Lutheran churches. His passion for defending Catholicism against what he regarded as dangerous ideas led him to attack successively Arnaud's Jansenism, Malebranche's revival of Augustinian idealism and the quietism of Fénelon. Thus in the very act of strengthening the orthodox position he perhaps deprived the church of certain means of intellectual enrichment which might have helped to defend it against the rationalism of the following century.

In politics as in religion Bossuet supported tradition. His *Politique tirée des propres paroles de l'écriture sainte* (Paris 1709) proclaimed the perfection of established French institutions and affirmed the divine right of kings. The latter necessarily acted in accordance with the welfare of the people, to whom they were bound, as it were, by an intangible contract.

As a historian Bossuet created the philosophy of history which ultimately became the starting point of what later became known as sociology. In the *Discours sur l'histoire universelle* (Paris 1681, English translation London 1688) he sought to give unity to all historical events by explaining them in terms of the purpose of God to insure the triumph of his church. He was thus the first to conceive the idea of historical continuity underlying superficial confusion. When Montesquieu, Rousseau and especially Voltaire attempted to discover the positive rather than the transcendental causes of the evolution of human society, they were in a sense merely developing the antithesis of Bossuet's thought.

RENÉ HUBERT

Consult: Nourrisson, J. F., *La politique de Bossuet*

(Paris 1867); Rébelliau, A., *Bossuet* (2nd ed. Paris 1905); Stephen, J. F., *Horae sabbaticae*, 3 vols. (London 1892) vol. ii, chs. v–vi; Sykes, N., "Bossuet" in *The Social and Political Ideas of Some Great French Thinkers of the Age of Reason*, ed. by F. J. C. Hearnshaw (London 1930).

BOTERO, GIOVANNI (1543 or 1544–1617), Italian writer, chiefly important for his views on politics and economics. At first a member of the Jesuit order, he later became secretary to Cardinals Carlo and Federico Borromeo and finally entered the service of Charles Emanuel I of Savoy.

Botero, who was a staunch Roman Catholic saturated with the spirit of the Counter-Reformation, strenuously opposed Machiavelli's doctrine that politics was independent of ethics. His *De regia sapientia* (Milan 1583) was followed by the *Della ragion di stato* (Venice 1589), in which he set forth a type of prince who resembled Machiavelli's worldly wise ruler in shrewdness, but who was at the same time upright and disposed kindly toward religious institutions. Attempting to devise a complete system of government, Botero himself ended by laying down genuinely Machiavellian principles, while his failure to make a clear analysis of the distinction between politics and ethics prevented him from solving the problem of their relations.

His economic ideas received most complete expression in the pamphlet, *Delle cause della grandezza delle città* (Rome 1588; republished in 1589 as appendix to *Della ragion di stato*; English translations London 1606 and 1635), in which he attempted to analyze the factors influencing the growth of urban population. By far the most original contribution contained in the work was Botero's discussion of the limitations upon the indefinite growth of population. Two centuries before Malthus he pointed out a number of checks by which population is kept on a level with means of subsistence.

Among Botero's other writings the *Relazioni universali* (4 pts., Rome 1591–96, pt. v published in vol. iii of Gioda's biography; English translations London 1608 and 1630), containing geographical studies of various regions and analyses of their social, political and religious institutions, is especially noteworthy. Botero's employment of the statistical method in these studies contributed to the wide influence they exerted on contemporary thought.

MARIO DE BERNARDI

Consult: Bernardi, Mario de, "Appunti bibliografici intorno a Giovanni Botero" in Reale Accademia delle Scienze di Torino, *Atti*, vol. lxv (1930) 281–300.

BOTHA, LOUIS (1862–1919), South African statesman. Botha was of Boer and Huguenot parentage. In 1897 he became a member of the Transvaal Volksraad. Although he voted against precipitating the Boer War he ultimately became commandant general of the army. At the Peace of Vereeniging he first showed himself as a conciliator of the two white groups in South Africa. Nevertheless he refused to take part in the government while the Transvaal remained a crown colony. On the granting of responsible government in 1906 he became the first premier of the Transvaal. He took a leading part in the establishment of the Union of South Africa (1910) and became its first premier, holding the position until his death. His ministry was marked by many crises: the dispute over the status of Indian residents (1912), adjusted finally by negotiation with Ghandi; the summary deportation of strike leaders after the white miners' strike of July, 1913; and the splitting off from Botha's party (1912–13) of the Hertzog group, which stood for the more particularistic Boer ideals. At the outbreak of the World War he advocated complete cooperation with the imperial authorities, involving the conquest of German Africa, and took the lead in suppressing the short lived Boer rebellion of 1914–15. In essence Botha's policy was firmly to weld the Boer and English elements of the population into a South African nationality by the creation of common interests and the encouragement of patriotism and strict loyalty to the empire. At imperial conferences he supported the Canadian, Sir Wilfrid Laurier, in advocating the development of a decentralized British commonwealth of nations. Always interested in the natives, Botha adopted a policy of segregation of lands for them with provision for the utilization of their labor power under white direction. They were to have partial self-government in their own territories. Botha represented South Africa at the Versailles Peace Conference, where he was particularly interested in the racial problems of Central Europe. As one who had met defeat in the past he took a critical attitude toward the completed treaty.

C. HARTLEY GRATTAN

Consult: Spender, Harold, *General Botha* (2nd ed. London 1919); Buxton, S. C. B., *General Botha* (London 1924); Engelenburg, F. V., *General Louis Botha* (London 1929); Harris, J. H., "General Botha —Statesman" in *Fortnightly Review*, vol. cvii (1917) 652–60; Walker, E. A., *A History of South Africa* (London 1928).

BOUCHER DE CRÉVECOEUR DE PERTHES, JACQUES (1788–1868), French archaeologist and social reformer. In addition to his famous archaeological discoveries Boucher de Perthes wrote numerous books, traveled extensively and showed deep interest in the social problems of his day. Recognition of his archaeological discoveries came only toward the end of his life. Meanwhile as a customs official at Abbeville (Somme), in the industrial districts of northern France, he was able to observe at close range the extreme misery wrought among the working classes by the industrial revolution. In a series of writings from 1831 to 1859 he described the working and living conditions among the poor and proposed as remedies welfare schemes of a paternalistic nature.

His first discovery of flint implements in the sands and gravels of the Somme valley at Abbeville dates from about 1830. Two discoveries of a similar nature had been made in England in 1690 and 1797, but he had certainly never heard of them and their importance had not been appreciated. No one before Boucher de Perthes had explored the gravel deposits of the valley terraces for human implements, the current belief being that these deposits predated man. In *De la création: essai sur l'origine et la progression des êtres* (5 vols., Abbeville 1838–41) Boucher de Perthes expressed a belief in the actuality of the Deluge and stated that sooner or later traces of antediluvian man would be found. In 1846 he made public his discovery of a worked flint implement in association with remains of elephant, rhinoceros, etc., in the gravels of Menchecourt at Abbeville. The next year he published the first volume of his monumental work on *Antiquités celtiques et antédiluviennes* (3 vols., Paris 1847–64). This work was crucial in the history of archaeology in its proof of the existence of man in the Pleistocene epoch. Boucher de Perthes' discoveries were ignored or ridiculed at the time and their significance dawned only very gradually even on himself. In 1855 Rigollot and in 1858 the English palaeontologist Hugh Falconer were won over to his views. Falconer, who was a member of a remarkable group of English geologists, persuaded Sir Joseph Prestwich and Sir John Evans to visit Boucher de Perthes in 1859, and they had the satisfaction of seeing a worked flint still *in situ* at a depth of seventeen feet from the surface. This visit and the publication of Boucher de Perthes' *De l'homme antédiluvien et de ses oeuvres* (Paris 1860) served to establish the authenticity of his discoveries and their significance as human implements of a quaternary period. Their importance was all the more impressive because they came at a time when the scientific world was stirred by the discovery of Neandertal man and the appearance of Darwin's *Origin of Species*. A further discovery of a human jaw by Boucher de Perthes in 1863 excited considerable discussion as to its authenticity, but the final verdict of later research was that he was probably tricked by one of his workmen.

GEORGE GRANT MACCURDY

Consult: Ledien, Alcius, *Boucher de Perthes, sa vie, ses oeuvres, sa correspondance* (Abbeville 1885); MacCurdy, G. G., *Human Origins*, 2 vols. (New York 1924) vol. i, p. 15–18; Keith, Arthur, *The Antiquity of Man*, 2 vols. (2nd ed. London 1925) vol. i, p. 269–75.

BOULAINVILLIERS, HENRI, COMTE DE (1658–1722), French historian. He studied at the Collège de Juilly, where he probably came under the scholarly influence of Richard Simon. After a brief career in the army he retired and devoted the rest of his life to study and to the composition of numerous works, which were posthumously published. His interest in governmental reform led him to write *Etat de la France* (3 vols., London 1727; new ed. 8 vols., 1752), which contains an incomplete account of the great inquest of 1697, and *Mémoires présentés à Monseigneur le duc d'Orleans* (The Hague 1727; new ed. 2 vols., 1754), which proposed the convocation of the Estates General and outlined a plan of fiscal reform inspired by the work of Vauban and Boisguillebert. While investigating the history of his family he drew certain conclusions concerning the ancient French nobility, which he attempted to prove in *Histoire de l'ancien gouvernement de la France* (3 vols., The Hague 1727; tr. by C. Forman, 2 vols., London 1739). The nobles were the descendants of the Franks who had subdued the native population and who as feudal lords had become the traditional guardians of political liberty. The destruction of the feudal system, which had been accomplished through the alliance of the kings with the descendants of the conquered race, the third estate, had led inevitably to despotism. As early as 1734 Dubos proved this thesis historically inaccurate. Nevertheless Montesquieu and other eighteenth century reformers accepted it as an argument for representative government. Boulainvilliers also anticipated the *philosophes* by his fundamental indifference to established

religion; he objected particularly to ritual and mysteries and for this reason preferred Islamism to Christianity, as shown in his *Vie de Mahomet* (London 1730; English translation London 1731), expanded in the second edition under the title *Histoire des arabes* (Amsterdam 1731).

ED. ESMONIN

Consult: Thierry, Augustin, *Considérations sur l'histoire de France*, in *Oeuvres* (new ed. Paris 1885) vol. vii, ch. ii. See also introductory essay by F. Colonna d'Istria to Boulainvilliers' translation of Spinoza's *Éthique* (Paris 1907).

BOULANGER, GEORGES ERNEST (1837–91), French general. He inspired the wave of nationalist agitation termed "Boulangism" which swept over France from 1886 to 1889, endangering the existence of the Third Republic. As Clemenceau's protegé, General Boulanger became minister of war in 1886. His republican utterances, the popularity of his army reforms and above all his heroic appearance made him forthwith the idol of Paris. He came to be looked upon as the embodiment of the desire for *revanche* of defeated France. He was *l'homme national*, the long awaited "man on horseback" who would lead France out of parliamentary disorder and restore her military prestige. His supporters included disillusioned republicans, royalists, Bonapartists, members of Déroulède's Ligue des Patriotes and other disparate elements hostile to the existing regime. Intensified by the Schnaebelé affair on the Franco-German border (April, 1887) the clamor for revenge and a military dictatorship centered about Boulanger and greatly embarrassed the government's peaceable intentions. As a result Boulanger was dropped from the cabinet and assigned to provincial duty, a martyrdom which only increased his following. Constitutional revision and the investing of dictatorial powers in a president elected by universal suffrage were the Boulangist panacea. For strategic effect Boulanger, although ineligible, ran for parliament and, secretly financed by royalist funds, won large majorities in various legislative by-elections during 1888, a procedure which amounted to a virtual plebiscite. When the government dismissed him from active service he was elected to the Chamber but resigned after one speech demanding its dissolution. Challenged to test his strength in a Paris by-election, Boulanger gained an overwhelming victory (January 27, 1889). That night everything favored a coup d'état, but Boulanger hesitated and Boulangism was doomed. Two months later the general fled to Belgium rather than face trial for conspiracy. Under the ridicule heaped on its faint hearted leader and the disclosure of his royalist intrigues the movement speedily collapsed. The adventurer whose ambitions exceeded his daring committed suicide on the grave of his mistress.

VERA MIKOL

Consult: Terrail, G. (Mermeix), *Les coulisses du boulangisme* (rev. ed. Paris 1890); Verly, Albert, *Le Général Boulanger et la conspiration monarchique* (3rd ed. Paris 1893); Zévaès, A. B., *Histoire de la troisième république* (Paris 1926); Recouly, Raymond, *La troisième république* (Paris 1927), tr. by E. F. Buckley (London 1928); Barrès, M., *L'appel au soldat* (Paris 1911), a philosophical treatment in novel form.

BOUNDARIES, in the strictly political sense, are the limits of the exercise of governing authority. Municipalities, townships, counties, provinces and states all have their boundaries within which each enjoys peculiar prerogatives. These in turn compose a larger political organism whose boundaries are the limits of the exercise of sovereignty.

The definite delimitation of territory by boundary lines is a comparatively recent political device, being practically coincident with the rise of the modern nation state. It is based on the conception of a political unit that is primarily territorial. Primitive political organization with its essential basis of kinship needed no concept of strict boundary lines. The early Mediterranean civilizations, with a political unit that represented a transition from the kinship to the territorial basis, were in a similar position: the typical Greek city-state consisted of a walled city with a vague dependent hinterland which was not strictly delimited from the sphere of influence of another city. The Roman Empire, embracing the whole of the civilized world, needed no boundaries except local divisions useful for administrative purposes but in no way demarcating diverse sovereignties. Charlemagne's division of his kingdom among his sons in 806 represented the creation of boundaries in the modern sense, except that its sanction was private right rather than public law. Even this broke down in the complex hierarchy of the feudal system which, although it occasioned no end of bickerings over allegiances, left no room for the boundaries of sovereignties. With the rise of the nation state in early modern times and the consequent emphasis upon unitary sovereignty, boundaries became indispensable in maintaining international stability.

National boundaries are necessarily political in the sense that they serve the political function of delimiting the powers and responsibilities of one sovereign state from those of another. But there may be some more compelling reality with which the political boundaries should correspond and which should give a sanction to them. This reality, conceived of in various ways at various times, has been expressed in the geographic or "natural" boundaries, the ethnic or racial, the linguistic and more vaguely the cultural, and the economic.

In estimating the influence of boundaries upon the lives of peoples and upon the relations between nations, one must distinguish between the conditions in Europe and those obtaining in the rest of the world. In Asia and Africa, where European control is virtually supreme, the determination of boundaries and the readjustments and changes that may occur after a lapse of years have more effect on the European powers who have made them than on the non-European inhabitants of the frontier regions. These natives have simply gone from one European master to another. This is evidenced by the boundary provisions of the Anglo-French agreement of 1904, the delimitation of the boundary between Tripoli and Egypt, the division of the German West African possessions after the World War and the revision of the Somaliland boundary by Great Britain and Italy. The present boundaries of Siam and Southern China were decided not by arrangements between the Chinese and the Siamese governments but by Anglo-French negotiations in which Siam and China had no part. Even the boundary readjustments made directly between Asiatic countries, such as the determination of the Perso-Afghan and Perso-Turkish frontiers, have left in the relations between the countries concerned and in the lives of border peoples little antagonism and few open wounds.

In the western hemisphere the increasingly overwhelming power of the people of the United States has enabled them to fix their own territorial limits. Frontiers were not arbitrarily made; once the territory occupied by the thirteen original colonies was passed, the drawing of boundaries took into account geographical and economic considerations. The republics that shared the Spanish and Portuguese heritage in Latin America existed for many years before they asserted more than an academic claim to frontiers based upon the vague Spanish viceregal divisions. The boundaries were remote and unsurveyed and have become of importance only recently through the rise of economic and transportation questions. One of the few boundary questions in South America that have had a bearing upon the life of the people is the Tacna-Arica dispute involving Chile, Peru and Bolivia.

In Europe, on the other hand, boundaries have had a profound bearing upon the cultural as well as upon the political and economic life of the continent. The states of Europe in their nineteenth century form were the result of centuries of strife during which geographical, ethnic and economic causes had little bearing in the determination of boundaries. Not even in such cases as that of Spain, where a high mountain barrier cut off a peninsula from sea to sea, did geography determine the extension or limitation of the exercise of sovereignty. From religious and dynastic wars nationalist and industrial Europe inherited a legacy of hatred and confused historical claims which made the definition of reasonable boundaries difficult in the extreme. Added to these factors was the mixture of racial stocks and languages in every border region.

The purely political concept of boundaries which was dominant before the Napoleonic period began to give way to geographic considerations in the more advantageously located parts of Europe. The states along the Atlantic from Spain to Sweden achieved political unity, natural frontiers in rough measure and at least a political fusion of ethnic groups. Russia, separated geographically and with a dominant ethnic group, also had more or less natural frontiers. In the countries of Central Europe, however, there were no definite boundaries, either geographic or ethnic. By the 1870's Germany, under the hegemony of Prussia, and Italy, under the hegemony of Piedmont, had achieved political unity and approximately ethnic boundaries. Austria-Hungary, on the other hand, formed and kept alive only because of political compromises and the economic advantages shared by all in belonging in the era of keen industrial competition to a large political organism, was never free from nationalist agitation and ethnic rivalries in her frontier regions.

Before the World War there were in Europe four types of boundary difficulties which, by keeping the continent in unrest and by thwarting the development of a healthy spirit of social and economic cooperation between nations, led inevitably to the war. Each type was impelled by a different psychological drive: the desire to

reestablish an advantageous boundary that had been lost through unsuccessful war—France and the Rhine; the desire to complete the work of unification of the people of one language and culture—Italian irredentism and Austria; the desire to add to the national territory other branches of the race in the formation of a "greater" country which had not existed in the past—Serbia, Rumania, Greece, Bulgaria; the desire of a race formerly independent and now divided among more powerful neighbors to do away with political boundaries and revive national independence—Poland, Czechoslovakia, Lithuania. On the whole these movements were led by intellectuals who had no property or business at stake, and the goal was the establishment of a democratic regime. "Unredeemed brethren" looked across the frontier for social equality and for freedom from economic bondage to an alien overlord.

After the World War the victorious powers at Paris attempted, as far as their own interests allowed, to reconstitute the boundaries of Europe in such a way as to satisfy all four of the drives above mentioned. Historic and ethnic considerations were supposed to be the basis of their decisions as embodied in the treaties of the Paris settlement. Nevertheless certain Allies claimed the right to press forward to their natural geographic boundaries irrespective of alien elements they would incorporate; this was notably true of France and Italy with respect to the Rhine and the Brenner Pass. The smaller countries which were enlarged and the resurrected states all demanded and for the most part received the extreme limit of the new boundaries for which they asked except in cases of mutually conflicting demands. The geographic and ethnic concepts of boundaries were applied to border region peoples not more unfavorably than they had been before. But the economic concept was on the whole disregarded. In order to avoid the difficulties of having large ethnic minorities on the wrong side of boundaries, the League of Nations was entrusted with their protection; many questions have come up for decision since 1921. But the existence of an outside tribunal to which border minorities have the right to appeal against their own government leaves open opportunities for continued agitation. The clearest hope for improvement of a vexed situation as regards border peoples would seem to lie in an increasing emphasis on an ethnic conception of nationality.

The mechanisms of boundary determination vary with the nature of the boundary. Subdivisions of sovereign states fix their boundaries by surveys based upon grants, charters, letters patent, executive decrees or acts of some legislative authority. The boundaries of sovereign states are determined by international acceptance of an existing status quo, decisions of arbiters, compromises between disputants, and physical surveys. International boundaries must have the sanction of special treaties among neighbors, international treaties and agreements made by overlords, or general treaties concluded among states after wars. Land boundaries are fixed by treaties between the states directly interested. Where the common boundary is a river, lake or arm of the sea the median line is almost always followed.

International law puts the ocean boundary line at a point where the beginning of the fourth mile seaward is reached. But a definition of what constitutes the high seas is not easy. Powerful states who have the means to make good their claims contend that the three-mile limit does not apply in bays or estuaries between peninsulas and capes, no matter how far apart the points of land jutting out into the ocean may be. They regard as territorial waters that part of the open sea which is within a line drawn from the tip of one cape or peninsula to another. Limits of territorial waters have frequently been settled by treaties between the powers directly interested. Some very important differences of opinion as to the extent of territorial waters still remain. Great Britain asserts, while Argentina and Uruguay deny, the international status of the estuary of the La Plata. The three-mile limit is also subject to modification for some particular purpose. The United States has recently secured British assent to the search of British vessels found within twelve miles of the American coast and to the confiscation of their cargoes if they prove to be rum runners.

The national boundary is a fundamental concept of international law, since it delimits its primary entities, national states. Boundary disputes and boundary determination have been at least the immediate causes of international conflict in the past and have latterly become the subject for a considerable body of rules of international arbitration. Such arbitration is usually confined to the interpretation of a treaty, but it may also at times lay down the general principle underlying the fixing of boundaries. The personnel of the arbitrating agencies have been in the past mainly the heads of the states

involved or mixed commissions. Disputes over the administration of boundaries as well as over their location occur frequently. The United States and Canada have established a system of boundary administration which in spite of the complex problems involved in immigration, smuggling and rum running works without any considerable friction. The presence of such factors as an essential amity and a similarity of economic conditions on both sides of the border makes this case somewhat unusual. But even on the more troubled frontiers in Europe boundary difficulties would be minimized if stress were laid on the able economic management of border regions and if a boundary administration were developed that would make easier the social and commercial contacts of the contiguous peoples.

HERBERT ADAMS GIBBONS

See: FRONTIER; NATIONALISM; IMPERIALISM; BUFFER STATE; IRREDENTISM; NATIONALITY; MINORITIES, NATIONAL; SOVEREIGNTY; TERRITORIAL WATERS; CUSTOMS DUTIES; TREATIES; ARBITRATION, INTERNATIONAL; WORLD WAR; REGIONALISM.

Consult: Curzon, G. N. C., Lord, *Frontiers* (2nd ed. Oxford 1908); Gibbons, H. A., *The New Map of Europe 1911–1914* (New York 1914), and *Europe since 1918* (New York 1923); Holdich, T. H., *Political Frontiers and Boundary Making* (London 1916); Dominian, Leon, *The Frontiers of Language and Nationality in Europe* (New York 1917); Fawcett, C. B., *Frontiers, a Study in Political Geography* (Oxford 1918); Masaryk, T. G., *The New Europe* (*The Slav Standpoint*) (London 1918); Bowman, Isaiah, *The New World* (4th ed. Yonkers 1928); Brunhes, Jean, and Vallaux, Camille, *La géographie de l'histoire* (Paris 1921) p. 337–63, 435–40; Lapradelle, Paul de, *La frontière* (Paris 1928).

BOUNTIES. A bounty signifies the payment by the state of a specific sum per unit of an article—so much per unit produced or per unit imported or per unit exported. A bounty differs from a subsidy in that a subsidy is paid as a lump sum or upon some other basis than that of commodity unit. The usage of these terms, however, is not always consistent.

Bounties on production were a familiar part of mercantilist policy in the seventeenth and eighteenth centuries; it was often difficult to distinguish them from subsidies. Colbert's direct promotion of domestic industries seems to have been chiefly through subsidies. The grants to the silk industry (both for raw silk and for silk goods) by the Brandenburg and Prussian sovereigns during the eighteenth century began as subsidies, but under Frederick the Great seem to have reached the form of bounties given on the basis of raw silk used in manufacture. In the American colonies bounties were given from time to time during the seventeenth and eighteenth centuries on such articles as hemp and flax, woolen, linen and cotton cloth, raw silk and occasionally wheat and flour. Like the colonial export bounties they probably had no considerable economic effects.

After the beginning of the nineteenth century bounties on production became less common. Sometimes they were given in place of abolished protective duties. A case of this kind was the United States bounty of 2 cents a pound on sugar produced at home which was given in 1890 when sugar from foreign countries was admitted free of duty; the bounty ceased when the duty was reimposed in 1894. In other cases bounties have been given as new measures for promoting a given industry rather than as substitutes for repealed protective duties. Such have been the French bounties on the domestic production of raw silk, linen and hemp given since 1892. Hungary and Italy gave bounties on raw silk in the later years of the nineteenth century. Canada for many years gave bounties on iron and steel products. In France bounties (and subsidies also) on beet sugar were given from the time of Napoleon I. There was a remarkable recrudescence of bounties after the World War. These bounties were still in effect in 1930 in Great Britain and the British Dominions. In Great Britain and Ireland they were on beet sugar; in India, on iron and steel; the most far reaching of all, in Australia, on iron and steel, fence wire, sugar and other articles.

Bounties on the import of a commodity have been rare. They were given by Great Britain in the eighteenth century on certain articles imported from the American colonies, chiefly naval stores, but also raw silk. In recent times they are apparently unknown.

Bounties on exports have been more common. Great Britain granted them on grains first in 1673 and then more systematically by the well known act of 1689, the bounty being given when the prices of the grains were at or below certain stated (low) figures. The bounty remained in effect until 1773 and was not formally repealed until 1814. Bounties were given by Great Britain in the eighteenth century also on the export of other commodities such as silk goods. In the nineteenth century the most notable case was the system of export bounties on sugar given by various continental states between about 1885 and 1902. These bounties developed (unexpectedly and undesignedly) from drawbacks on

the export of sugar which were originally intended to be merely a refund or equivalent of internal taxes, but became excessive and amounted to a concealed bounty. They were acquiesced in and even welcomed, and were finally replaced in some countries by overt bounties on export. The Brussels Sugar Convention brought about their abolition in 1902.

In the American colonies export bounties were granted on hemp, flax, tar, potash, cotton and indigo during the seventeenth and eighteenth centuries and were again given in the period during and immediately after the adoption of the constitution in 1789. Probably none of the American bounties of this kind was of any considerable economic importance. After the adoption of the constitution the United States gave export bounties on salted fish; they lasted for a long time and did not completely disappear until 1866. Although bounties in form, they were in reality drawbacks for duties on imported salt used in curing the fish. An export bounty on certain agricultural staples to serve in place of protective duties which could not be made effective was advocated in the United States for many years after 1920.

Preferential transportation rates on goods for export, preferential shipping rates, lower prices conceded by the producers on such goods (dumping) and similar measures are sometimes spoken of as "concealed" export bounties. These devices should be classed with others which are designed to promote exports, and like them raise the general question of whether such promotion is good public policy. They are scarcely to be considered export bounties in the strict sense, if only for the reason that in practise it is commonly impossible to say whether they are resorted to with the design and effect of direct bounties or are adopted on other and less controversial grounds of business policy.

A bounty on production is obviously the equivalent, in its effect on competitive conditions, of a duty on the importation of a foreign competing commodity. A duty on an imported article causes the price of the article to rise by the full amount of the levy, and to that extent gives the domestic producer an advantage over the foreigner. The domestic producer is given the same advantage if, on the other hand, the foreigner's product is admitted free and a bounty is given. It has been argued, and the argument is essentially sound, particularly when the domestic output is comparatively small, that such a bounty costs the community less than a duty. In either case, bounty or duty, there will presumably be an increase of domestic production and a diminution of importation, thus involving the whole question of protection and free trade. Between the two devices one difference of vital practical importance is that the charge on the community is conspicuous in the case of bounties but is largely concealed in that of duties. Bounties create an overt drain on the public treasury and on the taxpayer. Hence if they are considerable in sum total, or high in proportion to the ruling price, they are likely to become unpopular and to be withdrawn.

Adam Smith, of course, vigorously attacked all bounties. Ricardo in considering them did little more than criticize, from his own point of view, Adam Smith for inconsistency and ill reasoning. Alexander Hamilton in his *Report on Manufactures* weighed the advantages and disadvantages of bounties as compared with import duties. In neoclassical theory some questions other than those of protection have been considered. The effect of a bounty (given on the whole of the supply produced) is analyzed as bringing about a lowering of the supply price or the expenses of production by the amount of the bounty, and so a lowering of the ruling price. If the industry is one carried on under the conditions of increasing returns there is a further effect: the lowering of ruling price leads to an increase in quantity demanded, this to an increase of total output and this to a further decline in supply price and in ruling price. The reverse consequences are supposed to ensue in an industry of decreasing returns. Marshall's suggestion for the use of bounties and taxes in relation to consumer's surplus and maximum satisfaction rests on a similar analysis. Logically impeccable, at least in its formal aspects, Marshall's reasoning is based on the assumption that the bounties (or taxes) are in continuous effect on the same articles for a very long time and that the long time consequences work themselves out to the very last stage. This assumption is probably never realized in practise.

FRANK W. TAUSSIG

See: SUBSIDIES; ECONOMIC POLICY; MERCANTILISM; PROTECTION; CUSTOMS DUTIES; DUMPING; CORN LAWS; SUGAR; SHIPPING.

Consult: Cunningham, William, *The Growth of English Industry and Commerce*, 3 vols. (5th ed. Cambridge, Eng. 1910–12) vol. ii; Lord, Eleanor L., *Industrial Experiments in the British Colonies of North America* (Baltimore 1898) pt. ii, ch. i; Giesecke, A. A., *American Commercial Legislation before 1789* (New York 1910) p. 59–74; Osgood, H. L., *The American*

Colonies in the Eighteenth Century, 4 vols. (New York 1924) vols. i and ii; Beer, G. L., *The British Colonial Policy, 1754–1765* (New York 1907) ch. x; Gras, N. S. B., *The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century* (Cambridge, Mass. 1915); Lexis, W., *Die französischen Ausfuhrprämien . . .* (Bonn 1870); Lavison, A., *La protection par les primes* (Paris 1900); Donges, Reinhard, *Die handelspolitische Bedeutung der Ausfuhrprämien* (Frankfort 1902); "Bounties" in United States Tariff Commission, *Dictionary of Tariff Information* (Washington 1924) p. 75–79.

BOURGEOIS, LÉON VICTOR AUGUSTE (1851–1925), French statesman and social philosopher. He came of middle class parents and at the age of twenty-five began that long political career during which he was to occupy every high office in the gift of the Third Republic except the presidency, which he several times declined. Throughout his life he was a protagonist of social reform and took an active part in the struggle against tuberculosis and unemployment and in the movement for social insurance and labor legislation. The same idealism guided him in international affairs. He represented France at the First and Second Hague Peace Conferences, serving as president of the Arbitration Commission and as member of the Permanent Court of Arbitration. One of the leading proponents of the League of Nations, he sat with the Commission of the Hotel Crillon and became a member both of the Council, over which he presided four times, and of the Assembly, in which he headed the French delegation.

The theoretical foundation of Bourgeois' program was developed in *Solidarité* (Paris 1896, 7th ed. 1912) and *Essai d'une philosophie de solidarité* (Paris 1902, 2nd ed. 1907). The starting point of his doctrine is the increasing importance of solidarity, evidenced in the family, the nation and the community of states. Bourgeois carefully distinguishes between solidarity-as-fact and solidarity-as-norm, the essential characteristic of the latter being an exact equivalence between individual benefit and contribution as prescribed by the terms of the quasi-social contract. To establish such an equivalence is the function of social justice, which can be realized only through the wide intervention of public authority. In both practise and theory Bourgeois was the founder of the French school of solidarism.

GEORGES SCELLE

Consult: Pirou, G., *Les doctrines économiques en France depuis 1870* (Paris 1925) p. 159–66.

BOURGEOISIE. This term, originally denoting the members of a mediaeval borough, derived its specific social connotation from the relation of master and journeyman in the handicrafts and small manufactories of France during the seventeenth, eighteenth and early nineteenth centuries. Bourgeois came to be synonymous with patron or employer. The subsequent history of the term presents an interesting case of the change of "value accent" which frequently occurs in social terminology and is usually connected with a change of social conditions. For the increasing antagonism between employers and employees, conditioned by the transition from a craft to a capitalistic basis of industrial organization, had this natural consequence: it gave to the originally good humored denomination with its patriarchal implications the slighting and vindictive meaning which was popularized by socialist writers of the nineteenth century and which was formed into an all embracing denunciation by the Russian Bolsheviks of the twentieth century.

The opposition of employer and employee contributed only one, although the most important, part of the social content of the word. Molière's famous comedy, *Le bourgeois gentilhomme*, points the way in which the term served also to indicate a line of demarcation between the middle class and the nobility or gentry of feudal society. This second contrast, as well, has been instrumental in shaping the modern sense of the term, to the extent that the word is suggestive of niggardliness and stupidity, the old foils of the supposed generosity and refinement of the feudal aristocracy.

The reality underlying the term then would seem to be the middle class of modern European society functioning as entrepreneur in the new capitalistic system and thereby provoking the opposition of the ruling class of the disappearing order as well as that of the laboring class of the coming industrial order. But it is clear that in this connection middle class does not refer to a group the characteristics of which are fairly constant for different countries or periods. The English gentry and the French *noblesse de robe* although similar in some respects differed fundamentally in the way in which they bridged the gulf between the pure type of feudal nobility or "peers" and the rising commercial and industrial classes. The clearest perspective from which to view this mass of divergent phenomena is the conception of succeeding waves of middle class groups ascending from

the ranks of peasants, artisans and laborers through the position of bourgeois merchants and manufacturers to that of a landowning, political or administrative aristocracy. It is this "circulation" which is referred to in the expressions "upper" and "lower middle classes," or "great" and "petty bourgeoisie" (*Grossbürgertum*, *Kleinbürgertum*). The characteristics of the bourgeoisie are thus different since the traits which are essential or prominent in the first transformation of the lowly peasant or artisan into the small capitalist are not necessarily the same as those found in the second transformation of the small investor into the half aristocratic "captain of industry." Accumulative thrift, negatively seen as avarice, becomes preeminently the characteristic of the first stage; acquisitive and organizing genius, negatively seen as exploiting rapacity, preeminently that of the second.

This is of course only a very rough classification. In reality the accumulative is never successful without the acquisitive spirit; and conversely the rapacity of the bourgeois, since it is directed to peaceful, legal and rational forms of procedure, is distinct in principle from the overwhelmingly violent, frequently extralegal and mostly irrational rapacity of the upper classes in feudal society. Werner Sombart, therefore, seems to be correct in his assumption that the two groups of traits have been regularly blended, if in different proportions, all through the history of the bourgeois. Both aristocratic and labor adversaries of the bourgeoisie are inclined to stress the meaner sides of its character, more in ridicule than in abomination. But it has also its hardier and nobler sides. While the middle period of "Manchester" liberalism corresponded most closely to the vulgar or narrow type of bourgeoisie attacked by conservatives and socialists, both the period of its genesis, illustrated by the Elizabethan "Adventurers," and that of its climax, represented by the business "kings" of the late nineteenth and twentieth centuries, exhibit characteristics that at least go far beyond the more common forms of petty usury or timid good citizenship.

Among the different groups of bourgeoisie in the various European countries today, there is undeniably a certain community of interest manifested in business and personal relations and even in marriage arrangements. This is particularly apparent among such extranational groups as the Jews or Levantines. But there is also a diversity of well marked national characteristics. The individualism of the English and French bourgeois rests on the greater importance in these countries of the trader and banker as compared with the manufacturer. In Germany, where the bourgeois class has a much larger and more dominating admixture of manufacturers and of feudal elements like the aristocracy of the Rhenish or Silesian mining districts, the whole class has a much less individualistic attitude toward mutual cooperation and government interference. The almost complete absence of the term from American economic and social life indicates a marked difference in social structure between America and Europe. The business or middle classes in America have little of this background of a double historical contrast with a feudal and a labor class.

Culturally, as much as economically, the bourgeoisie has been the destroyer of old and the founder of new systems. In a general sense it was the principal agent in dissolving the theocentric society of the Middle Ages and in introducing the modern multiplicity of cultural values. Max Weber's theory of the connection between the development of Protestantism and capitalism is sound in its emphasis on the significance of the rising middle classes as standard bearers of the new "intra-mundane" ideals of personal and business ethics. The role played by the early French bourgeoisie in preparing the way for the French Revolution is equally clear. It involved a slow emancipation from the tutelage of the Catholic church and the substitution of the secular morality still embodied in present day French "laicism." But while the art and literature of France, and to some extent that of England, reached their climax in the period preceding the political victory of their bourgeoisies and therefore seem to bear a lasting non-bourgeois or aristocratic character, the cultural life of modern Germany is quite preponderantly a creation of the middle classes of the eighteenth and nineteenth centuries. Not only did the great German writers and composers belong to these classes but it was also for them that they wrote and composed.

It was therefore not by chance that the full force of Karl Marx's attack on culture as a "superstructure" of the economic order was directed against the German bourgeoisie in which, more than elsewhere, the business element was reenforced by the "academic" professions and a powerful bureaucracy. It was the cultural domination of this compact group that

provoked the distrust and resentment of the socialist labor leaders almost more intensely than the church or the monarchy had provoked that of former revolutionaries. Although the hopes of a new "proletarian" culture entertained in Russia and Germany have as yet hardly been realized, one cannot fail to see that the assertion of the relativity of bourgeois ideals is the revenge history has taken upon the bourgeoisie as the destroyer of so many older values.

Even in capitalistic countries the position of the bourgeois class is changing. The concentration of big business and the events of the war years and of the post-war period of inflation have resulted in the impoverishment of large sections of the employing, bureaucratic and professional classes. The future of these "new middle classes" depends in large part upon the direction of their evolution whether it be toward the higher bourgeoisie or toward a "proletariat" whose standard of life is itself rapidly rising.

CARL BRINKMANN

See: SOCIETY; CIVILIZATION; CLASS; ARISTOCRACY; MIDDLE CLASS; PROLETARIAT; CLASS CONSCIOUSNESS; CLASS STRUGGLE; MOBILITY, SOCIAL; SOCIAL CHANGE; INDIVIDUALISM; PROTESTANTISM; CAPITALISM; ACQUISITION; THRIFT; BUSINESS; CAPTAIN OF INDUSTRY.

Consult: Sombart, Werner, *Der Bourgeois* (Munich 1913), tr. by M. Epstein as *The Quintessence of Capitalism* (New York 1915); Brinkmann, Carl, Pesl, L. D., Lederer, Emil, and Marschak, Jakob, in *Grundriss der Sozialokonomik*, vols. i–ix (Tübingen 1914–30) vol. ix, pt. i (1926) p. 1–34, 70–141; Lukacs, Georg, *Geschichte und Klassenbewusstsein* (Berlin 1923); Groethuysen, Bernard, *Les origines de l'esprit bourgeois en France*, vol. i (Paris 1927–); Beard, Charles and Mary, *The Rise of American Civilization*, 2 vols. (New York 1927) vol. ii, ch. xx and ch. xxv, p. 383–401; Chilly, Lucien de, *La classe moyenne au France après la guerre 1918–1924* (Paris 1924); Corbin, John, *The Return of the Middle Class* (New York 1922).

BOURGUIN, MAURICE (1856–1910), French economist. He was professor of political economy at Lille and later at Paris. In 1895 when there was still a possibility of a general return to bimetallism he published a series of articles in the *Revue d'économie politique* (republished as *La mesure de la valeur et la monnaie*, Paris 1896) in which after demonstrating the theoretical and practical impossibility of a perfect standard of value he studied at length the experience with various monometallic and bimetallic standards. He pointed out the dangers of bimetallism but admitted its feasibility when buttressed by an international agreement. The chief merit of this work for the present lies in its thorough analysis of value theories. Of far greater importance is Bourguin's *Les systèmes socialistes et l'évolution économique* (Paris 1904, 3rd ed. 1907). The first part, devoted to a study of socialist theories, contains an extremely penetrating analysis of Marx's doctrines and of related state socialist systems, while the second part presents in a masterly fashion the economic development of Europe in the latter half of the nineteenth century. Profoundly democratic, in warm sympathy with the working classes, but endowed at the same time with an acute critical spirit, Bourguin compared theories with facts and concluded that it was practically impossible to carry out the ambitious schemes of collectivist doctrinaires. He pleaded, however, for the continuation of the evolution toward more progressive and democratic goals. Combining in a happy balance abstract analysis with concrete observation, Bourguin's work represents the best product of economic thought in France at the close of the nineteenth century.

BERNARD LAVERGNE

Consult: Pirou, G., *Les doctrines économiques en France depuis 1870* (Paris 1925) p. 166; Waha, Raymund de, *Die Nationalökonomie in Frankreich* (Stuttgart 1910) p. 381–92.

BOURINOT, JOHN GEORGE (1837–1902), Canadian political scientist and constitutional historian. Bourinot was the son of a lieutenant colonel who was later a member of the Senate of the Dominion of Canada, and was educated at Trinity University, Toronto. He began his career as a journalist and in 1860 founded the Halifax *Herald*; but in 1868 he joined the staff of Hansard at Ottawa. In 1873 he was appointed an assistant clerk, and seven years later chief clerk, of the Canadian House of Commons, a position which he retained for the rest of his life. His first important publication was the treatise on *Parliamentary Procedure and Practice; with an introductory account of the origin and growth of Parliamentary Institutions in the Dominion of Canada* (Montreal 1884; 4th edition by T. B. Flint, Toronto 1916). This led him into the field of political science, which was just beginning to develop in America. A series of studies of local government in the United States, published in the Johns Hopkins University Studies in Historical and Political Science, inspired him to write *Local Government in Canada: an Historical Study* for that series

(5th ser., nos. v–vi, 1887; first printed in Royal Society of Canada, *Transactions*, vol. iv, 1886, sect. ii, 43–76). *Federal Government in Canada* in the same series (7th ser., nos. x–xii) followed in 1889. In 1888 appeared *A Manual of the Constitutional History of Canada* (Montreal 1888; new ed. Toronto 1901) and in 1895 he published *How Canada is Governed* (Toronto 1895, 5th ed. 1902). Bourinot was thus a pioneer in the study of Canadian government. While his excursions into this subject were too much colored by his legalistic leanings, much of his work is still authoritative. His historical works, notably *The Story of Canada* (New York 1896; 3rd ed. by W. H. Ingram, London 1922) and *Canada under British Rule* (Cambridge, Eng. 1900; rev. ed. 1909), were accurate but superficial. *Lord Elgin* (Toronto 1903), a better work, has been superseded in the Makers of Canada series, yet several of Bourinot's studies, with revisions and enlargements, have long served as textbooks in their various fields. Bourinot also interested himself in the cultural development of Canada. He was one of the most active members of the Royal Society of Canada, with which he was identified from its foundation and of which he was made president in 1892. Many of his papers are to be found in its *Transactions*.

W. S. WALLACE

BOURKE, RICHARD (1777–1855), British colonial administrator. After studying law and serving in the army he became in 1826 governor of Cape Colony, where he promulgated ordinances furthering the civil liberties of free colored persons and protecting native tribes from white aggression. His rare sagacity, impartiality and tact were especially outstanding when as governor of New South Wales (1831–37) he controlled the Australian settlement during a period of rapid expansion and acute political agitation. As a liberal Bourke was out of sympathy with the colonial autocracy, which was tempered only by a nominated Legislative Council with merely advisory powers. Convinced by the increasing attacks of political reformers that a change was inevitable he urged the Colonial Office to foster the gradual development of self-government. He declared that crime was not existent "to that extent which would justify the British Parliament in withholding from the colonists fuller participation in the free institutions of England." Although representative government was not realized until later, Bourke aided in its development. He freed the press from censorship and gave it access to the reports of the Legislative Council, worked toward the establishment of local government and civilian juries, removed several religious disabilities and improved educational facilities. The conflict between the free and emancipist classes he met by picking men for office on their merits, regardless of their class. To solve the problem of land settlement he carried through the transition from land grants to land sales, using part of the income to assist free immigration, and introduced a system of squatting licenses. By paying £10 a squatter could occupy any quantity of unsettled land for a year. Thus the wool industry was established on a legal footing and progress was henceforth rapid.

HERBERT HEATON

Consult: Sweetman, E., *Australian Constitutional Development*, University of Melbourne Publications, no. iv (Melbourne 1925); Mills, R. C., *The Colonization of Australia (1829–42)* (London 1915); Cory, G. E., *The Rise of South Africa*, vols. i–iv (London 1910–26) vol. ii, ch. viii.

BOURNE, EDWARD GAYLORD (1860–1908), American historian. Bourne was graduated from Yale in 1883 and received his doctorate from the same institution in 1891. His primary undergraduate interest had been the classics but under the influence of William Graham Sumner's teaching he turned to economics and history. Sumner suggested Bourne's first book, *The History of the Surplus Revenue of 1837* (New York 1885), still a standard monograph. From 1895 until his death Bourne was professor of history at Yale and rapidly became one of the most influential American historians. From 1901 to 1908 he was chairman of the historical manuscripts commission of the American Historical Association. Bourne's first important contribution was his *Essays in Historical Criticism* (New York 1901), one of which, "The Legend of Marcus Whitman," is a classic. These critical studies and the seminar method of teaching which he pursued played no small part in establishing American historical scholarship on a sound basis. His second important work, *Spain in America* (American Nation series, vol. iii, New York 1904; Spanish translation, Santiago, Chile 1906), is a study of the early discovery and exploration of the New World and a "sketch of the Spanish colonial system and of the first stage of the transmission of European culture to America." One of the significant earlier attempts in Amer-

ica to break away from political history and to trace the history of civilization, this was at the same time a pioneer work in Hispanic-American history. Bourne was the editor of a number of important works, especially narratives of early explorations; he also did considerable pre-publication revision on the first three volumes of James Ford Rhodes' *History of the United States*.

RALPH HENRY GABRIEL

Consult: Rhodes, James Ford, *Historical Essays* (New York 1909) p. 191–200; Hart, A. B., "The Literary Career of Edward G. Bourne" in *Yale Alumni Weekly*, vol. xvii (1908) 641–44.

BOURNE, RANDOLPH SILLIMAN (1886–1918), American publicist. Before entering Columbia University he spent some years at work as a secretary, an assistant in a pianola factory and finally in a vocal studio where he played accompaniments. In 1913 he received from Columbia the Gilder Travelling Fellowship which enabled him to spend a year of study in Europe, and on his return he submitted a report on European cultural conditions entitled *Impressions of Europe*. From 1914 to 1917 he was contributing editor of *The New Republic* and was subsequently an editor of *The Seven Arts* and *The Dial*. He published *Youth and Life* (New York 1913), *The Gary Schools* (New York 1916) and *Education and Living* (New York 1917). Two other collections of his essays were published posthumously, *Untimely Papers* (New York 1919) and *The History of a Literary Radical* (New York 1920). Bourne may be considered the most interesting example of a type of mind that flourished during the decade that preceded the World War and characterized the "younger generation" or the intelligentsia of that period. He sought by his writings and conversation to organize a revolutionary departure in American social and intellectual life, a sort of league of youth based upon a richer development of personal relations and framed with the purpose of creating a new and freer cultural order out of the chaos of American society. A pacifist and socialist, he combined with his genius for personal relations a profound knowledge of international points of view and a deep sympathy with the problems of labor. He was gifted with one of the keenest intellects of his time and a literary style that was equaled by few. His qualities and his defects made him as much the type and leader of the younger generation of the decade that included the war as F. Scott Fitzgerald was of the generation that immediately followed it.

VAN WYCK BROOKS

Consult: Rosenfeld, Paul, "Randolph Bourne" in *The Dial*, vol. lxxv (1923) 545–60; Brooks, Van Wyck, "Randolph Bourne" in *Emerson and Others* (New York 1927) p. 123–45.

BOURNEVILLE, DESIRÉ MAGLOIRE (1840–1909), French physician, sanitarian and educator. He studied medicine in Paris under Claude Bernard and Charcot and subsequently became renowned for his work as chief physician of the children's wards at the Bicêtre asylum for mental and nervous cases. Bourneville concerned himself with the treatment of idiots and the mentally deficient, who were at that time entirely neglected. He had new pavilions erected for the defective children, he patiently trained personnel to educate them and classified the cases according to their degree of mental retardation. Under his training some of the defective children acquired an elementary education and learned a trade. This revolution in method made a deep impression upon physicians and social workers throughout the world. Upon his retirement from Bicêtre, Bourneville continued to develop his medico-physiological methods at his private institution at Vitry-sur-Seine and was instrumental in the establishment of special classes in Paris for retarded children.

Bourneville's interests were not confined to defective children. He worked indefatigably for the improvement of hospital conditions and played an important part in the establishment of maternity wards in Paris hospitals with obstetricians instead of general surgeons. He succeeded in effecting the isolation of contagious cases and the creation of vaccination and hydrotherapy clinics. Bourneville also founded the first training school for nurses which, interpreted as a move of hostility toward the Catholic sisters, drew upon him a volley of bitter criticism. He wrote a textbook of nursing (*Manuel pratique de la garde-malade et de l'infirmière*, Paris 1878; 2nd ed. rev., 1878) which for many years was the only work of its kind in France. Bourneville also contributed to the reform of medical teaching, especially in psychiatry. He founded in 1873 the *Progrès médical*, one of the leading French medical journals, which he edited for many years, the *Archives de neurologie* (1880) and *L'année médicale* (1879). In his *Comptes-rendus du service des enfants de Bicêtre* he published a mass of clinical material on the

mentally retarded and their education. He also wrote several medical books and made many contributions in the field of neurology. As a member of the municipal council of Paris and of the Chamber of Deputies he led the agitation for public health and social work legislation.

RENÉ SAND

Consult: *Bulletins et Mémoires de la Société médicale des hôpitaux de Paris*, 3rd ser., vol. xxviii (1909) 1040–46; Noir, J., in *Progrès Médical*, 3rd ser., vol. xxv (1909) 293–95.

BOURSES DU TRAVAIL. The role of the *bourses du travail* in French labor history has been far greater than was foreseen by the early advocates of their establishment or than is apparent in their present function. As early as March 2, 1790, a report was submitted by de Corcelles to the Constituent Assembly advocating the establishment of a *bourse du travail*. In 1842 the economist G. de Molinari revived the project, first in an article, then in pamphlets and finally in a journal entitled *La bourse du travail*. De Molinari had in view an employment exchange analogous to the stock exchange, where the supply and demand for labor would be formulated daily and the changes in wage rates made public. Although several other schemes for their establishment were proposed after 1848, the functioning of the bourses was virtually impossible until the passage of the law of 1884 which permitted labor unions to form associations enjoying the same rights as the constituent unions enjoyed.

The first *bourse du travail* was established in Paris in 1887. The decree governing its operation, passed December 7, 1895, and revised July 17, 1900, provides that it "must facilitate the business affecting labor by means of free employment bureaus in public rooms provided for that purpose . . . must cooperate in economic and technical education with the labor unions, put offices and meeting halls at their disposal." Most of these services are available to employers as well as to workmen and to non-union as well as to union men. The Paris bourse is directed by a commission of fifteen members elected by representatives of the regularly admitted unions. This commission passes —subject to appeal to the municipal council— on the admission or exclusion of unions, distributes grants and subventions and exercises general supervision. The manager of the bourse is appointed by the prefect, while its budget and the general rules governing its management are determined by the municipal council of Paris. Moreover the minister of labor has authority to dismiss the commission and close the bourse.

Shortly after the establishment of the Paris bourse similar institutions were founded in other cities. By 1892 fourteen of them were in existence and at the outbreak of the World War their number had reached 143. There is no law providing for a general regulation of the bourses. In 1895 the Conseil d'État drafted a bill for this purpose, but it was never enacted and the government is restricted to the regulation of the Paris bourse. Although in general similar to the latter, some of the provincial bourses were established on the initiative of local unions and are supported by them entirely, the municipal subsidies being sacrificed for greater freedom of action and thought. These self-supporting bourses closely resemble municipal or district federations of labor unions.

In 1892, largely in order to counteract the influence of the politically minded leadership of the Fédération Nationale des Syndicats, there was formed the national federation of the *bourses du travail*. Under the influence of Ferdinand Pelloutier, who was secretary of the latter federation from 1894 until his death in 1901, an ideology was outlined for the bourses which made them the center of syndicalist activity. The bourses locally and through their national federation were to serve as the coordinating centers for the voluntary associations of all producers, from which would spring forth the future society; they would thus provide the nucleus of a revolutionary order within the bourgeois state. Their program was to be entirely economic and to depend on direct action; no alliance was to be made with the politicians. Their functions were to be fourfold: welfare services including placement and aid to the unemployed, education, propaganda and, finally and most important, resistance, or aid to unions carrying on the class struggle. The attempt to carry out such a revolutionary program involved for many of the bourses conflict with municipal authorities and temporary or permanent withdrawal of financial subsidies and housing facilities. The federation of the bourses also came into conflict with the Confédération Générale du Travail, formed in 1895, over the provision admitting to membership in the latter only single bourses and single unions rather than federations of either. The greater strength of the federation of the bourses led in 1902 to a

reconstitution and a revivification of the Confédération Générale du Travail, although under this reorganization the federation of the bourses went out of existence as a separate organization. For some time thereafter, however, congresses of the bourses continued to be called for propaganda purposes such as national attempts on a nation wide scale to combat antimilitarism or to prevent the establishment of private employment agencies. Under the new arrangement the bourses were to be local centers of union activity. They were to maintain the vitality of local unions, to see that labor legislation was enforced and to collect statistical and other information on working and living conditions in their districts. During the period 1900–14 there were few strikes in which the bourses were not concerned. They played an active part in the syndicalist movement, and in the congresses of the C. G. T. their delegates sometimes exceeded numerically the delegates of the national trade union.

In the post-war period the name *bourse du travail* is used in some cases to designate a regularly constituted association of the labor unions of a city or district and in others is applied merely to the local headquarters. In recent years, particularly after the establishment of public employment exchanges, the organizations called bourses have been in the main of the second type; that is, they provide offices, meeting halls and other usual accommodations for mutually independent unions. Within the C. G. T. the original function of the bourses is now filled by the provincial or municipal associations of the regularly constituted unions, which are united nationally and have their own secretariat within the C. G. T. on a basis of equality with the national trade unions. These associations as well as their member unions are housed in *bourses du travail*, some of which are municipally supported; others are financed entirely by the unions.

ROGER PICARD

See: EMPLOYMENT EXCHANGES; CONFÉDÉRATION GÉNÉRALE DU TRAVAIL; SYNDICALISM; LABOR MOVEMENT; LABOR, GOVERNMENT SERVICES FOR; TRADE UNIONS.

Consult: Franck, Charles, *Les bourses du travail et la Confédération Générale du Travail* (Paris 1910); Pelloutier, F. L. E., *Histoire des bourses du travail* (new ed. Paris 1921); Jouhaux, Léon, *Le syndicalisme et la Confédération Générale du Travail* (Paris 1920); Martin St.-Léon, Étienne, *Syndicalisme ouvrier et syndicalisme agricole* (Paris 1920); Picard, Roger, *Le movement syndical durant la guerre*, Carnegie Endowment for International Peace, Social and Economic History of the World War, French series (Paris 1927); Confédération Générale du Travail, *Confédération Générale du Travail et le mouvement syndicale . . . historique . . .* (Paris 1925); Lorwin, L. L. (Louis Levine), *Syndicalism in France* (2nd ed. New York 1914) p. 63–90.

BOUTILLIER, JEAN (sometimes Bouthillier) (*c.* 1340–95), French jurist. He was successively lieutenant of the *baillis* of Vermandois and of Tournai. After 1387 he compiled the *Somme rural*, a juristic encyclopaedia for the use of judges and lesser magistrates, dealing with the various departments of law recognized in that period: public law, ecclesiastical law, private law and procedure. It was based on the customs of northern France, on the jurisprudence of the Paris *parlement* and of the tribunals of the *baillis* and on the formulae of procedure. The *Somme rural* is interesting primarily because the lengthy extracts from the *Corpus juris civilis* and the *Corpus juris canonici* show the growing influence of Roman and canon law in fourteenth century France. Boutillier strongly favored the extension of royal authority and the liberty of the Gallican church. His work met with great acclaim and from 1479 down to the seventeenth century it went through many editions, the best known of which is the Charondas le Caron edition (Paris 1603).

GEORGES BOYER

Consult: Meulenaere, O. de, "Jehan Boutillier, esquisse biographique" in *Nouvelle revue historique de droit français et étranger*, vol. xv (1891) 18–35; Esmein, A., "Un passage de la somme rural de Boutillier dans l'édition de Charondas le Caron de Paris 1603" in *Nouvelle revue historique de droit français et étranger*, vol. xix (1895) 49–58.

BOUTMY, ÉMILE GASTON (1835–1906), French educator and political philosopher. He came of a good middle class family and began his career as a contributor of political and literary articles to Girardin's paper, *La presse*. Boutmy's views were crystallized by his contacts with the foremost liberals of the 1860's and especially by his intimate and lasting friendship with Taine. In 1866 he began to lecture at the École Spéciale d'Architecture on the history of civilizations, as well as on comparative architecture. The defeat of France in 1870–71, under circumstances which revealed the inadequacy of her leaders, was the immediate stimulus of Boutmy's greatest achievement. He conceived the idea of founding a free school, which, unhampered by state connections, would create a political élite qualified to hold diplomatic and high adminis-

trative positions. This idea was realized in 1872 when Boutmy founded the École Libre des Sciences Politiques, which he directed until his death. He was the soul of the institution, and his influence extended to professors and students alike. At this school most of the leading administrators of France during the next half century received their training. Boutmy gave lectures on political institutions and compiled them in a series of important works, in which his method was essentially that of Taine, although less rigid. In *Essai d'une psychologie politique du peuple anglais au xixe siècle* (Paris 1901; tr. by E. English, London 1904) and *Éléments d'une psychologie politique du peuple américain* (Paris 1902), both of which have become classics, he attempted to isolate and explain the essential characteristics of the English and American public mind. His *Études politiques* (Paris 1907) sought to clarify the historical and social foundations of such generally accepted political formulae as the sovereignty of the people.

ANDRÉ SIEGFRIED

Consult: Levasseur, Émile, "Boutmy et l'école" in *Annales des sciences politiques*, vol. xxi (1906) 141–79; Foville, A. de, in Académie des Sciences Morales et Politiques, *Mémoires*, 2nd ser., vol. xxviii (1911) 31–60; Pasquet, D., "La psychologie politique du peuple anglais au XIXe siècle, d'après M. Boutmy" in *Revue de synthèse historique*, vol. ii (1901) 141–52; Deslandres, M., "La psychologie politique du peuple américain d'après M. Boutmy" in *Revue de synthèse historique*, vol. v (1902) 283–93; Caudel, M., "Les 'études politiques' de M. E. Boutmy" in *Annales des sciences politiques*, vol. xxii (1907) 381–95.

BOUTROUX, ÉMILE (1845–1921), French philosopher and historian of philosophy. After having taught for many years, chiefly at the École Normale Supérieure and the Sorbonne, Boutroux became director of the Thiers foundation. His work marked a definite turning point in contemporary thought. When he began to write, German Hegelianism and English empiricism were at the height of their influence in France. Using their presuppositions Taine had built up eclectically a philosophy of history and of science which envisaged natural events and human destiny bound in one web of inexorable necessity. Boutroux's genius broke the spell of this prevailing determinism through an insistence on renewed contact with reality.

In 1874 Boutroux enunciated a thesis which anticipated what the French school later called scientific criticism, while avoiding its excesses: "Les systèmes ne considèrent les choses qu'en gros, et les choses ne sont vraies que dans le détail." The deeper one penetrates into the nature of things the more clearly one sees that the apparent continuity between the present and the future, between inorganic and organic matter, between animal and human life, affords scope for the play of qualitative and aesthetic principles, for contingency and for effective creation, through which the reality of freedom is manifested. If he thus attacked the concept of abstract necessity it was in order to give precision to that concept of a concrete determinism, varying with the order of phenomena, which is at the basis of positive science. Despite his close personal intimacy with William James, Boutroux protested repeatedly that a subjective belief, a religious fantasy, could not take the place of a scientifically controlled fact; nor could he accept the principle of utility as the basis of a rational philosophy. He held that it was necessary to abandon the factitious alternative of neo-Hegelianism or pragmatism and scrupulously to ascertain in specific cases the connection between reason and experience in the study of nature and man. In his studies in the history of philosophy and in his essays Boutroux insisted that for the traditional but superficial antitheses such as that of science and religion, or in another field for the sterile national opposition that degenerates into war, must be substituted a liberal conception of the universe and of life, in which individual effort becomes a factor in invention and in beauty, an element of genial and harmonious variation and convergence.

Boutroux exercised a marked influence on all of French thought; his challenge led to a recrudescence of idealism; his concepts influenced the scientific work of such men as Henri Poincaré; and he definitely prepared the way for Bergson.

LÉON BRUNSCHVICG

Important works: *De la contingence des lois de la nature* (Paris 1874, 3rd ed. 1921; tr. by F. Rothwell, Chicago 1916); *De l'idée de la loi naturelle dans la science et la philosophie contemporaines* (Paris 1895, 2nd ed. 1913; tr. by F. Rothwell, London 1914); *Science et religion dans la philosophie contemporaine* (Paris 1908; tr. by J. Nield, London 1909); *Questions de morale et d'éducation* (Paris 1895, 4th ed. 1905; tr. by F. Rothwell, London 1913); *Pascal* (Paris 1900, 2nd ed. 1912; tr. by E. M. Creak, Manchester 1902); *Études d'histoire de la philosophie* (Paris 1897, 3rd ed. 1908); *Morale et religion* (Paris 1925); *La nature et l'esprit* (Paris 1926); *Études d'histoire de la philosophie allemande* (Paris 1926); *La philosophie de Kant* (Paris 1926); *Nouvelles études d'histoire de la philosophie* (Paris 1927); *La philosophie allemande au XVIIe siècle* (Paris 1929).

Consult: Crawford, Lucy S., *The Philosophy of Émile*

Boutroux as Representative of French Idealism in the Nineteenth Century (New York 1924); Gaultier, Paul, *Les maîtres de la pensée française* (Paris 1921) p. 45–95; Lafontaine, Albert, *La philosophie de Boutroux* (Paris 1921); Brunschvicg, Léon, "La philosophie d'Émile Boutroux" in *Revue de métaphysique et de morale*, vol. xxix (1922) 261–83.

BOWLES, a family of American journalists. In 1824 the eldest Samuel Bowles (1797–1851) founded the Springfield, Massachusetts, *Republican* and his son and grandson succeeded him as its editors. He began the tradition of rigorous editorial independence which later characterized the paper, and was responsible also for the policy of giving his readers a full correspondence of local news.

It was under the editorship of the second Samuel Bowles (1826–78), however, that the *Republican* established its position as a powerful journal and achieved a larger circulation than any other New England paper outside of Boston. He was a great personal journalist, ranking in authority and influence with Watterson and Greeley. At all times he was courageous in attacking social and political evils. His belief was, in his own words, that "the press really seems to be the best if not the only instrument with which honest men can fight these enemies of order and integrity in government and security in property." He used this instrument against the financial scandals of his day with such effect that during a visit to New York City in 1868 he was thrown into jail overnight on a libel suit brought by Colonel James Fisk, Jr., the notorious Wall Street speculator and corruptionist. The *Republican*, centrally located in Massachusetts, achieved a reputation as far west as the Mississippi for its independence, its vigorous opposition to political and financial corruption and its wide covering of news. In that day the press achieved circulation rather through its expression of opinion than by the publication of news, but the prestige of the *Republican* drew to it writers of distinction, and its coverage of domestic and international news, considering its facilities, was admirable. Bowles himself considered the *Republican* the "most representative and comprehensive" of provincial journals and his demonstration of the social, political and literary possibilities of provincial journalism was one of his most significant achievements.

The third Samuel Bowles (1851–1915) was politically independent and his paper's utterances were sometimes vituperative, but he was of unquestioned integrity and his opinions aroused wide respect. Many young journalists were trained in his office and they gave the paper a distinctive literary quality. In his day no other newspaper in Massachusetts commanded such a position as the *Republican*. After his death the Bowles family acquired a monopoly of the Springfield papers, Republican, Democratic and Independent, and conducted them as commercial enterprises.

SILAS BENT

Consult: Hooker, Richard, *The Story of an Independent Newspaper* (New York 1924); Merriam, George S., *The Life and Times of Samuel Bowles*, 2 vols. (New York 1885); "An Independent Journalist" (review of Merriam) in *The Nation*, vol. xli (1885) 553–54; Bradford, Gamaliel, *Union Portraits* (Boston 1916) ch. ix; Bleyer, W. G., *Main Currents in the History of American Journalism* (Boston 1927) ch. x; Aikman, Duncan, "The Springfield Republican" in *American Mercury*, vol. viii (1926) 85–92.

BOXER REBELLION. *See* CHINESE PROBLEM.

BOY SCOUTS. *See* BOYS' AND GIRLS' CLUBS.

BOYCOTT. A boycott is a concerted effort to withdraw and to induce others to withdraw from economic or social relations with offending groups or individuals. While the practise of boycott has been resorted to in one form or another for many centuries the term itself is comparatively recent, having been taken in 1880 from the name of Captain Boycott, one of the most hated of the landlords' agents during the agitation against landlords by the Irish Land League. Boycott's tenant farmers had under protest completed the harvesting of his crop on reduced wages. Nevertheless on rent day Boycott sought to evict them, whereupon they held mass meetings and persuaded all of Boycott's employees to desert him and have no further relations with him or his family. This ostracism became widespread and of national significance. The designation of the action as a "boycott" was coined by Father John O'Malley, an Irish priest, and James Redpath, an American journalist. Shortly thereafter the boycott as an important weapon in labor disputes was adopted in the United States by the Knights of Labor. The term is now internationally used. The boycott has been widely employed as a punitive economic and social weapon by various groups—by the members of a national or racial group, by organized groups of consumers, by groups of business men, by labor organizations. When used by employers against

labor it is generally known as a blacklist. When the gesture of non-cooperation is a concerted withdrawal from activities, industrial or political, it is designated as a strike.

The essential element which underlies the various characteristic forms of the boycott is the effectiveness in economic and political struggle of a weapon which through consumers' power and by other methods restricts the market. Under the present economic organization the insistent need of a continuing market for the flow of goods and services presents an aspect of considerable vulnerability; and the diminution of profits through refusal to purchase or patronize may represent a blow considered more serious socially than open conflict. Often, as in the case of consumer boycotts, the boycott is used because no other weapon is available. But the recognition of its effectiveness as an instrument of coercion has often led groups in nationalistic or industrial struggles to use it in preference or as a supplement to other tactics, such as strikes or rebellion. Its initial non-violent character has often recommended it also on ethical grounds. To supplant the use of economic power the social phase of the boycott is often added in the form of ostracism of the offending individuals and their families. The social boycotting of scabs in labor disputes and of resident enemy aliens during wartime may be cited as instances. Since the effectiveness of this phase of the boycott depends on the degree of social interdependence obtaining, its importance has been limited mainly to small communities.

The political importance of the boycott lies chiefly in its employment by aggrieved racial and nationalist groups as a method of protest against the group in power. Boycotts existed in this form long before the invention of the term, as in the case of the Boston Tea Party. The use of this type of boycott against economic or political imperialism or discrimination is most widespread. Oriental countries often boycott western goods, either as a safeguard against their destructive effect on national industries or culture, or as a phase of a more general revolt. In China boycotting has been extensive, especially during the last twenty years. In 1905, in protest against the treatment of their countrymen in the United States, the Chinese boycotted American goods. The Chinese also employed boycotts against the Japanese in 1908, in 1919, in the latter instance because of the award of Tsingtao to Japan, and again in 1927. British goods were bovcotted in the recent Chinese agitation.

Natives of India have likewise employed this weapon a number of times in protest against Great Britain and to further their campaign for self-government. Here the boycott of foreign goods, combined with a demand for the purchase of Indian made products—embodied in the Swadeshi movement—emerged as an effective force in 1905 when, as a result of a resolution at the Indian National Congress, thousands refused not only to handle British goods but also to study in official British schools and colleges. Until the boycott was weakened by military force it played great havoc with the business of merchants handling British goods and stimulated the production of Indian wares. More recently the movement has assumed the proportions of a rebellion. The political use of the boycott in India has been especially significant because it has been based on a philosophy of passive resistance formulated by Mahatma Gandhi. In this connection the boycott goes beyond the importance of its specific occasion and attains a significance as a general form of social adjustment.

Boycotts have been employed by consumers as means of reducing prices, of improving quality, of protesting against the conditions of labor involved in the production or marketing of the goods or services, or of punishing the seller of the goods for past offenses. These boycotts do not have as large or as lasting a psychological appeal as the other types and are difficult to maintain for more than a few days, since they soon cease to be news and their continuance seems to involve a sacrifice in time or effort greater than any possible gain therefrom. The temporary nature and limited appeal of most consumers' organizations and the increasing complexity of our economic structure affect especially this type of boycott. Consumers' leagues have more frequently used the negative and legally sanctioned form, the white list. Although business men avoid the term "boycott," perhaps because of the opprobrium attaching to it in labor disputes, in practise they often make use of the trade boycott against other business men whose practises are adjudged inimical to the interests of the group.

In the United States the boycott is generally associated with labor disputes. It was most widely used by American labor during the years 1880 to 1908. In the earlier part of this period the Knights of Labor emphasized and encouraged its use as one of labor's most effective weapons. Many boycotts were put into effect in

California against Chinese labor; elsewhere boycotts were organized against products of convict, child, female and other forms of labor difficult or impossible to influence by other means. The products most frequently subject to boycott were necessities and inexpensive luxuries purchased by working class consumers, such as bread, newspapers, hats, cigars, beer and shoes. Since the local units of the Knights included workers of various trades and professions, consumers' pressure was especially effective. New York was the center of these efforts and from 1885 to 1892 over 1300 boycotts were recorded by the state Labor Bureau. During the late eighties boycotts were placed more and more frequently under the legal ban. The resultant prosecutions combined with its loss of membership led to a diminution in the use of the boycott by the Knights of Labor during the remaining years of its existence.

During the nineties widespread boycotts were carried on, chiefly by the independent railway unions. In 1890 the Brotherhood of Locomotive Engineers passed a resolution forbidding its members to handle property belonging to any railroad involved in a strike. The enforcement of this ban led three years later to the issuance of a restraining injunction against Grand Chief Arthur and other officers. It was in connection with this case that Circuit Judge William H. Taft issued his decision declaring that the boycott of cars of other roads constituted a violation of the Interstate Commerce Law [Toledo, Ann Arbor & N.M. Ry. Co. *v.* Pennsylvania Co., 54 Fed. 730 (1893)]. Despite this decision, however, in 1894 the American Railway Union headed by Eugene V. Debs ordered its members, as a means of assisting strikers against the Pullman Palace Car Company, to refuse to handle Pullman cars. The result was a restraining injunction and the subsequent imprisonment of Eugene V. Debs for contempt of court [*In re* Debs, 158 U.S. 564 (1895)]. It is significant that while boycotts had often been substituted for strikes by the Knights of Labor, they were issued from the nineties on in connection with pending strikes or as a method of carrying on against a firm when a strike had been unsuccessful.

From the mid-nineties until the Danbury Hatters' decision in 1908, the American Federation of Labor in its official magazine carried on its "We Don't Patronize" list the names of scores of "unfair" firms and assisted in other ways the boycotts waged by the national and international unions. So successful were many of these boycotts that an employers' association under the name of the American Anti-Boycott Association (later called the League for Industrial Rights) was founded to assist individual firms in fighting boycotts. This association carried test cases into court, made sure of their application in subsequent struggles and worked to prevent any legislative enactments which might remove legal obstacles to the boycott. It was especially active in the Danbury Hatters' case, which marked a new era in the legal history of the boycott.

Up to that time the chief weapon for fighting the boycott had been the injunction. In fact, in 1908 (the year of the first Supreme Court decision in the Danbury Hatters' case), Samuel Gompers, Frank Morrison and John Mitchell had been sentenced to imprisonment and fined in a contempt action in connection with such an injunction [Buck's Stove and Range Co. *v.* A. F. of L. *et al*, 35 Wash. Law Rep. 797 (1907)]. The boycott in question was one begun by the International Molders' Union as a protest against the ten-hour day and directed against the Buck's Stove and Range Company of St. Louis; it was eagerly taken up by the American Federation of Labor since the company's president was also president of the anti-union National Association of Manufacturers. In 1913 the case was finally dismissed on appeal on a technical ground [Gompers *v.* U.S., 233 U.S. 604 (1913)].

In the Danbury Hatters' case D. E. Loewe and Company brought suit under the Sherman Anti-Trust Act because of a boycott of the company's product, naming as defendants not only the Danbury local of the Hatters' Union but also the 186 individual members of the local. The Supreme Court in 1908 [Loewe *v.* Lawlor, 208 U.S. 274 (1908)] on the specific question of law upheld the employers. A judgment for costs and treble the damages alleged to have been inflicted was rendered by the lower courts, from which several appeals were taken. In January, 1915, the United States Supreme Court [Loewe *v.* Lawlor, 253 U.S. 522 (1915)] reaffirmed the judgment—amounting to over $250,000—against the union and its individual members. Mr. Justice Holmes in his opinion declared that the circulation of a list of unfair dealers is within the prohibition of the Sherman Act, if it is intended to restrain and does restrain interstate commerce. The liability of the individual members, involving their specific authorization of the boycotting, was especially dealt with, the court

holding that such authorization must be presumed under the circumstances by the very continuance of their membership and the undoubted knowledge by the defendants of what was going on.

This decision led to a campaign by the American Federation of Labor for the amendment of the Sherman Act which resulted in 1914 in the enactment of the Clayton Act. Section 20 of this act included the provision that no injunction should be issued prohibiting a labor organization from ceasing to patronize any party to a labor dispute "or from doing any act which might lawfully be done in the absence of such dispute by any party thereto." Any effects on the boycott, beneficial for labor, that might have been expected from this act were nullified several years later by the decision in the case of the Duplex Printing Press Co. *v.* Deering [254 U.S. 443 (1921)]. This involved a boycott declared by the International Association of Machinists not only against the firm in question but against all firms continuing to use its products. The majority opinion held that while, under the Clayton Act, primary boycotts might be regarded as legal, secondary boycotts were illegal.

The legal classification of boycotts into primary and secondary has proved especially confusing. Primary boycotts in labor disputes have been held to include cases in which the refusal to patronize was directed against the offending employer only. Even prior to the Clayton Act the courts had held for the most part that mere withholding of patronage is not unlawful, and that the announcement or publication of such a purpose is within the rights of those who agree together even though it results in the injury of those against whom the acts are directed. By their very nature, however, such boycotts were rarely used and were unimportant. Practically all boycotts involved not only agreement to refuse to patronize the offending employer but an effort to induce third parties to cease their patronage, and were therefore "secondary" or at times even "tertiary" boycotts. The classification was deliberately omitted from the Clayton Act. Justices Brandeis, Holmes and Clarke in their dissenting opinion in the Duplex case contended that, in the light of the facts of the specific case, the defendants were merely cooperating for their self-interest. The emphasis in the minority opinion was thus shifted from the determination of the primary or secondary character of a boycott by the legal relationship of employer and employee, to an examination of the economic situation in the specific case to determine the unity of economic interests involved. This attitude has recently been followed by some state courts. There remains, however, a wide divergence in opinions as to legality. Some state legislatures have passed specific statutes forbidding "secondary" boycotts. Most boycotts have been pronounced illegal by state courts, however, not because they were in contravention of statutes but on the ground that they violated the common law of conspiracy (*see* CONSPIRACY, CRIMINAL). Other decisions have maintained that the aims of the boycotts are not necessarily illegal and that they become illegal only when accompanied by malice or the use of coercive measures. More recently judges have introduced the doctrine of unjustifiable cause and have condemned those boycotts in which the primary or sole object of the boycotters was injury to another rather than advantage to themselves, or where the injury to one party did not carry with it a corresponding or compensating advantage to the other. The federal courts and the Massachusetts courts have brought under the ban of illegality a much wider number of forms of boycott pressure than the New York courts. The definitions not only of the "secondary" boycott itself but of what constitutes malice and coercion have been especially criticized as vague and illogical.

Boycotters have been sued for damages alleged to have been suffered by the boycotted concerns and have been prosecuted criminally. They have been subjected to equity action and enjoined. Often the injunctions have been of the most sweeping nature and have given rise to bitter controversy and to an increasing demand for the limitation or abolition of their use in labor disputes.

In more recent years the building trades have often employed the boycott, refusing to work with material from non-union mills, and where this has proved ineffective have followed it with an actual withdrawal of their labor. At present the boycott is being used sparingly by labor, largely on account of the legal decisions and the increasing expense involved in carrying on a successful campaign, particularly against firms operating on a national scale.

European labor has not utilized the boycott to any great extent during the last quarter of a century. This has been due partly to the strength of consumers' cooperative societies, which have a membership made up largely of

workers and provide a great many of their necessities. The European labor organizations have relied more on the positive weapon of cooperative purchasing than on the negative weapon of boycotting unfair employers. During the nineties and in the first decade of the twentieth century the courts of Great Britain handed down several decisions relating to labor boycotts. In 1893 [Temperton *v.* Russell (1893) 1 Q.B. 715] they declared illegal the attempt of trade unionists to induce other trade union societies to refuse to work for a builder who bought supplies from the plaintiff, and held the individual unionists liable for damage. In 1898 [Allen *v.* Flood (1898) A.C. 1] the courts adopted a more liberal attitude, which they greatly modified, however, in 1901 [Quinn *v.* Leathem (1901) A.C. 495]. Considerable confusion arose as a result of conflicting judicial opinions and in 1906 a Trades Disputes Act was passed which virtually legalized both the boycott and the blacklist as long as they did not involve certain proscribed acts. Nevertheless some judges continued to regard the boycott as actionable. In Germany a famous boycott occurred in 1904 in which members of trade unions were officially called upon, under threat of a penalty, not to purchase goods from bakers who had been listed as "unfair." Action was taken to restrain future publication of the boycott and to secure damages from the boycotters. The Imperial Court (Urt. VI 497/05 *v.* 12 Juli 1906), however, refused to consider the boycott of tradespeople actionable *per se*. The threat against recalcitrants was not regarded as unlawful, "nor does it offend against the rule of fair conduct to apply for aid to others not immediately concerned in the struggle." In few European countries are there any specific antiboycott statutes, although practically all have legal provisions against intimidation which can be readily interpreted as applying to boycotts.

European labor has used the boycott also on an international scale. In 1909 Spanish goods were boycotted as a protest against the execution of Francisco Ferrer. In 1920 the International Trade Union Federation at Amsterdam called for a boycott of Hungarian goods to protest the repressive measures of the Hungarian government against labor. This boycott, participated in by all continental labor organizations, affected particularly the transportation workers; one of its most important consequences was the publicity given to the previously suppressed activities of the Hungarian government.

The success of the boycott depends upon a large number of factors; perhaps the most important is the force of its appeal, which in turn depends upon the nature of the situation in which the boycott emerges; probably no boycott has greater psychological appeal than that employed in national and racial conflict, and none has a more quickly perceptible effect. The strength, intelligence and vigor of the boycotting organization or group is pitted against the power of the boycotted group. The vulnerability of the latter depends upon such factors as the character of the commodity or service boycotted, the nature and extent of the market, the elasticity of demand, the rate and frequency of the sale or use of the commodity and the readiness with which it may be distinguished from others. Consumers' and labor boycotts become less effective as the originally simple methods of conducting them no longer suffice against firms of national scope whose products are used by vast masses of disinterested groups in an economic system of ever increasing complexity.

HARRY W. LAIDLER

See: BLACKLIST; BLACKLIST, LABOR; STRIKE; LABOR DISPUTES; CONSPIRACY, CRIMINAL; INJUNCTION; UNION LABEL; CONSUMERS' LEAGUE; TRADE ASSOCIATIONS; GENERAL STRIKE; PASSIVE RESISTANCE; INDIAN QUESTION; TRADING WITH THE ENEMY; SOCIAL DISCRIMINATION; COERCION.

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BOYD, WALTER (*c.* 1754–1837), British financier and writer on financial questions. He conducted a banking firm first in Paris, then in

London, but both of them failed because his assets in France were confiscated by the Jacobin government in 1793. He was a well known contractor of British war loans, and served as a member of Parliament for several terms. Boyd was the author of several pamphlets in which he discussed the monetary problems of the period of suspension and later the sinking fund as a device for repaying the national debt.

Boyd is noteworthy as the originator of the currency doctrines subsequently expounded by Ricardo and the Bullion Report. In 1797 he opposed the Restriction Act, and later developed the other side of his theory in *A Letter to the Rt. Hon. William Pitt on the Influence of the Stoppage of Issues in Specie at the Bank of England on the Prices of Provisions and other Commodities* (London 1801, 2nd ed. 1811). He stated that he had been led "to suspect that the increase of prices . . . proceeds chiefly from the addition to the circulating medium," and concluded that the failure of the Bank to limit its inconvertible issues constituted "a notorious dereliction of the principles of public economy." He absolved the country banks from all blame for the rise in prices because their notes were not made legally inconvertible. His views as well as the vigor of his language were probably influenced by his personal grudge against the management of the Bank of England. Boyd was opposed in part by Thornton and Sir Francis Baring, but in 1803 Lord King stated that Boyd's "general principles remain unconfuted." The second edition of his tract played a not inconsiderable role in the settlement of the bullion controversy.

EDWIN R. A. SELIGMAN

Consult: Angell, J. W., *The Theory of International Prices* (Cambridge, Mass. 1926) p. 44–46.

BOYS' AND GIRLS' CLUBS. Voluntary and unguided association of boys, less often of girls, is found early in history and is now in evidence throughout the world. Of much more recent growth is the boys' and girls' club sponsored and organized from the outside. The practical development of the club idea for older boys was stimulated by evangelical forces in an attempt to meet the needs of working boys in changing industrial conditions. As observed in 1833 by Frederick Mallet, a club for unmarried young men established in Basel in 1708 served as the prototype for the first Jünglingsverein organized in Bremen in the next year. These societies, usually affiliated with individual churches, had increased to about ten in number by 1844 when George Williams established the London Young Men's Christian Association. In 1843 Boys' Brigades for drill and instruction were organized in connection with churches and missions at Glasgow. The first American Y. M. C. A. was founded in 1851 in Boston by a converted Baptist sea captain, T. V. Sullivan; a similar organization for women followed in 1866.

After the middle of the nineteenth century, and more especially the beginning of the twentieth century, boys' and girls' clubs multiplied rapidly. The need for them was felt more keenly and their formation was stimulated as the growing mechanization of industry made necessary new interests to fill leisure time. The increasing separation of educational and religious activities from the family endowed such clubs with considerable social importance. In America the first boys' club was established at Hartford, Connecticut, in 1860. The settlement movement, with clubs and classes as an important type of activity, began in London in the seventies. In New York settlement clubs at the Neighborhood Guild were organized in 1878. The American Boys' Club Federation was founded in 1906. Clubs were included in the development of the first School Community Centers by Ward at Rochester, New York, in 1907–09. In 1907, as an aftermath of the Boer War, General Baden-Powell organized the Boy Scouts in England, and these were followed shortly afterwards by the Girl Guides of Great Britain. The American organization of the Boy Scouts was founded in 1910, the Camp Fire Girls and the Girl Scouts in 1912. Both the Scout movement and the Christian Association movement have spread throughout Europe and Asia; in some countries the Scout program is sponsored by the Y.M.C.A.

Since the World War the Young Pioneers in Russia and the Young Fascisti in Italy have been among the most important boys' and girls' club movements. In the United States, Pioneer Youth of America, an organization for workers' children, with liberal educational aims, was established in 1924 by a group of labor leaders and experimental educators. There has been a growing interest in programs and clubs for younger boys and girls from about nine to twelve years of age. Although the impetus to this movement was primarily American, one of the earliest of such clubs having been the Woodcraft League of America founded by Ernest Thompson Seton in 1902, the development of club work for younger children has been carried farthest in such countries as Russia and Italy.

Purposive boys' and girls' clubs sponsored from the outside may be organized either in the interest of attaining more balanced personal or group adjustments in the fields of education, recreation, social or religious work or for the projection of special interests. Of the first type, clubs with primarily educational aims are those in which the major emphasis is on group activity rather than on the attainment of specific behavior patterns. Such clubs often work in close contact with recreational movements. Extra-curricular school activities, while to a great extent purely recreational, are also a means for the furthering of educational interests. Literary and dramatic clubs also serve this purpose. A large grouping of primarily recreational clubs is the Boys' Club Federation. It is of American origin, but in 1928 it was expanded into an international organization and now consists of 264 federations of clubs with over 200,000 members. Many clubs in connection with community centers and playgrounds, as well as the scouting and some of the other national movements, combine recreational and educational purposes. Clubs definitely associated with social agencies and led or supervised by trained social workers or educators are found not only as branches of national organizations but in such local groups as social settlements and health organizations. In the field of religious work are found the Y. M. C. A. and the Y. W. C. A., independent church clubs and nationally organized church movements.

In recent years a great variety of clubs for the projection of special interests have been promoted by governments. Organizations similar to the Four H Clubs with their vocational keynote, originating in America through the Extension Division of the Department of Agriculture, have spread throughout the world wherever governments are endeavoring to promote agricultural, rural or military interests. The Young Pioneers in Russia, an organization for boys and girls from six to sixteen years of age, is one of the largest youth organizations in the world. It claimed more than two million members in 1928. In Italy the Balilla, the Young Fascisti movement, estimates that its membership comprises one million boys and over three hundred thousand girls.

There is also in every country considerable club work of a political and semi-political nature not officially sponsored by the government. Many such clubs are organized among boys and girls for the purpose of direct recruiting to the cause, whether of missions, communism or conservatism, and others use the members of the club group as a means of approach to adults. The line of demarcation between this type of purposive club and that which has as its major aim the substitution of desirable for undesirable behavior patterns is often not clear, because the real purpose of projection of some special interest is disguised in a program of an ostensibly general character. The intangible nature of the results obtained in club work contributes toward making it a strategic field for the propagandist. While some question whether club work really accomplishes its objectives, the propagandists for various causes have with the utmost confidence expended their efforts in organizing boys and girls throughout the world. Under the cloak of objectivity and detachment many subtle influences operate in the implanting of ideas and ideals in the minds of boys and girls through group activity. The proof of the success of the system for propagandist purposes seems to lie in its increasing use.

The appeal of the club is as varied as the natural interests and desires of boys and girls. Club life gives opportunity for satisfaction of the common desire for group approval in terms of the particular group standards of strength, health, virility, popularity, versatility, honesty, bravery or reverence. It provides stimulating ideals of both personal conduct and social relationships; it directs the pleasure of following ideas; it makes possible varieties of group activity, such as camping, which might be otherwise unavailable. World tours, international camps and "jamborees" are in evidence in the programs of the largest clubs.

In starting a club organizers usually rely upon certain very specific interests and hobbies such as the study of nature lore, stamp collection, the making of toys or radios, sewing, cooking and dancing. Many of these interests are transitory, but the solidarity engendered in their pursuit becomes the basis for the projection of other interests and activities tending to develop a permanent club life. Another important basis of forming groups, utilized largely by educational institutions, is that of an appeal to the sense of social responsibility.

Some organizations make their primary appeal through equipment and buildings. Gymnasiums where basket ball, indoor baseball, volley ball, wrestling, hand ball and similar activities are carried on are used extensively. Many organizations, particularly those for certain age groups, derive a large part of their appeal from the use of

uniforms and of various elaborate systems of awards and ranks. The publication of magazines and the use of other devices are directed toward furthering the solidarity of the group.

The interest thus stimulated is used to develop a variety of specific behavior patterns. Different organizations place emphasis upon a wide range of standards and ideals. Some stress the development of loyalty, honor, physical fitness, social and racial consciousness or love of country, class, party or sect; others have as a primary goal intellectual development or increasing appreciations of art, aesthetics and nature. These aims are often expressed in terms of large generalizations and slogans; "character building," "development of personality," "good citizenship" and "control over nature" are among the more popular. The purposes of individual clubs are usually conditioned by factors in the environment that affect the interests and needs of their members. Family, neighborhood, work, school and church contacts have important bearing. Some organizations are also shaped by the fact that they aim to influence adults through boys' and girls' clubs.

Modern boys' and girls' clubs are of two general types from the point of view of administration. First, the mass club is a larger grouping of integral units in which a variety of activities may be undertaken simultaneously by different sections under different leaders. The club as a whole meets frequently on the basis of some common interest which may in fact be nothing more than age grouping, time of meeting or a purpose set by the sponsoring organization. The second type, the small group club, on the contrary, carries on activities in which all the members take part in comparatively close association with one another.

In recent years there has been an awakening of interest among sociologists and social workers in the methods used by leaders in club work. It is recognized that just as there are elements capable of analysis and description in the process of making adjustments between individuals and their environment, a process known as social case work, so there is a definable technique in preventing or eliminating deviations from an accepted norm of group behavior. This method or technique, which is elusive and still undergoing analysis, is known as the method of group work. While it is not yet widely practised as a rational technique it is of increasing importance, as is indicated by the appearance of courses on group work in schools of social work.

The assumptions underlying group work are that the loss of opportunity for satisfying social needs and the loss of social control, resulting in part from the changes in family, neighborhood and village life, may be to a great extent compensated by the conscious organization of groups about some selected interest; and that in the varied activities of group life there exist potentialities for the development of emotionally sound personalities and of satisfactory social relationships and the means for the passing on of social patterns. If group life of itself is an entity with potentialities for education, then methods of group work based on the supposition that things true of the individual apply equally in the group situation are fundamentally defective. It is, then, most essential that group work be built on an analysis of the elements of group life and activity. The systematic study of the technique of group work has resulted in the differentiation of a number of successive steps: the assembling of a potentially homogeneous group, the analysis of the environmental factors surrounding individual members of the group, the use of a particular program in such a way as to realize to the fullest the assets of the group, the observation of individual reactions to group activity as well as the group reaction to individual activity and the tying up of individual and group needs with other community resources. Where the standards, from which deviations and problems are defined, are the standards current in the community, the task of the leader, so far as action is concerned, is largely limited to the club membership and his method to the group work method. Much of the background for his analysis, however, and possibly part of his program lie in the field of community organization. He will certainly be drawn into the field of community organization in the event that community standards themselves represent deviations from norms which are more widely accepted.

Certain well defined trends have been apparent in the recent practise of the group work method; among these are emphasis on the value of autonomous choice of its own membership by the group, the selection of a program by the group on the basis of its own interest rather than on the choice of the leader and the direction and control of activities by the group with only indirect supervision by the leader. These tendencies are all in line with the assumption that group life is an autonomous social process which develops within limits set by its own nature. The

newer method is an attempt to set this process in motion under only such supervision as is necessary to make it most effective. It squares also with the educational theory that there is more value in learning through doing than through the emulation of superimposed patterns. The leaders of boys' and girls' clubs, particularly in America, are increasingly stressing this educational approach as opposed to the older method of directly setting up behavior patterns and stimulating the group to accept them as socially desirable.

W. I. NEWSTETTER

See: CLUBS; SECRET SOCIETIES; INITIATION; GANGS; ADOLESCENCE; CHILD, DELINQUENT; PLAY; RECREATION; ATHLETICS; PHYSICAL EDUCATION; GAMES; SPORTS; CAMPING; PLAYGROUNDS; SOCIAL SETTLEMENTS; COMMUNITY CENTERS; COMMUNITY ORGANIZATION; COUNTY AGENT; COUNTRY LIFE MOVEMENT; SOCIAL WORK; SOCIAL WORK, TRAINING FOR; YOUTH MOVEMENTS.

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BOYVE, ÉDOUARD DE (1840–1923), French cooperator. De Boyve, the son of an English mother and French Protestant father, was sent to England for his education. He returned to France and after his marriage became interested in the social aspects of religion and in institutions for the amelioration of poverty. In 1885 he met Vansittart Neale, then secretary of the British Cooperative Union, and resolved to introduce a similar institution in France. Producers' cooperatives had been established in France since the forties; in 1885 they numbered over three hundred but they lacked the common bond of a definite program. With the aid of Auguste Fabre, a Fourierist, and other friends in Nîmes, de Boyve founded on July 27, 1885, the Union Coopérative, which included about a hundred societies. For twenty-seven years, until its fusion with an alliance of socialist cooperatives to form the existing Fédération Nationale des Coopératives de Consommation, he was the guiding spirit of this organization. During this period he opposed the demands of the more radical wing for the exclusion from the union of profit sharing enterprises and of certain types of producers' cooperatives. De Boyve's interests were not confined to the French cooperative movement. In 1886 at the British cooperative congress in Plymouth he suggested the formation of an international organization. This proposal was realized in the International Cooperative Alliance, of which de Boyve was made honorary secretary for life. He was also one of the founders and president for life of the Association du Christianisme Social. His career remains an admirable example of the accomplishments of a middle class Christian socialist.

CHARLES GIDE

Consult: Gide, Charles, *L'école de Nîmes* (Paris 1927).

BRACE, CHARLES LORING (1826–90), American social worker. After a varied career, including training for the ministry, travels abroad and even a brief imprisonment in Hungary under suspicion of radical ideas against the new empire, he settled in New York City and devoted himself to relieving the depressing condition of slum children. As a result of twenty years of unrestricted immigration slums were rapidly developing and crime and poverty increasing among the children. To combat these harmful influences Brace founded in 1853 the Children's Aid Society of New York, the first organization of this type in the United States. Although other child welfare agencies have

outstripped it in certain specific measures it remains the largest and most comprehensive in program of any in America. The society made a great many innovations in child welfare work which have since become generally accepted. These include the founding of model tenements, crêches, seaside sanitaria for mothers and infants, children's summer homes, clubs for boys, industrial schools for girls and newsboys' lodging houses. Early in its history it instituted a system of placing homeless children in family homes in the country, which was a radical departure from the current practise of caring for them in poorhouses. Although this innovation exposed the society to sharp and widespread criticism it served as the beginning of the modern system of the placing out of children, now recognized as fundamental in child welfare programs. The society also accomplished valuable work in connection with the public schools: it established free kindergartens, schools for crippled children, free classes for mental defectives, school gardens, free dental clinics and mothers' meetings and was responsible for the appointment of school nurses and truant officers. Brace served as the executive secretary of the society from its foundation until his death and achieved an international reputation as a pioneer in philanthropic method.

OWEN R. LOVEJOY

Important works: *The Races of the Old World* (New York 1863); *Short Sermons to Newsboys* (New York 1866); *The Dangerous Classes of New York* (New York 1872, 3rd ed. 1880); *Gesta Christi* (New York 1882, 4th ed. 1888).

Consult: *The Life of Charles Loring Brace*, ed. by Emma Brace (New York 1894).

BRACTON, HENRY DE (d. 1268), English jurist. He had a long career as justice of assize and his great treatise *De legibus et consuetudinibus Angliae* (written before 1256) remained unequaled in breadth of scope and masterly treatment until Blackstone wrote five centuries later. The number of manuscript copies extant attests its popularity, but it is significant that almost all of them are earlier than 1350; after that date English law lost the taste for Bracton's broad outlook and became immersed in its own insular technicalities.

Greatly varying estimates have been made of Bracton's "borrowings" from Roman law and of his competence in that study. It seems that he used Roman law chiefly in subjects where there was little existing English law (e.g. in contract) and took over its arrangement and some of its terminology. Such influences are clearest in the first part of his work, a Romanesque introduction on the lines of the *Institutes*; they are rarer when he discusses the details of the forms of action. Maitland's charge that Bracton mishandled Roman law is subject to Vinogradoff's observation that Bracton used a form of Roman law freely modified by custom, a form common on the continent. A remarkable feature of his work is the inclusion of numerous cases from the plea rolls as illustrations of legal principles—cases selected from the decisions of his favorite judges; for the present bench, he remarks, is not equal to its predecessors.

Bracton's influence has been immense. In his own day he introduced a broad view and cosmopolitan learning which served well in a creative period. Although in the later Middle Ages he suffered an eclipse and his authority was denied, the first edition of *De legibus* (1569, reprinted in 1640) was used by Coke in the Stuart conflict, where Bracton's mediaeval doctrine of the supremacy of law was a powerful weapon against the crown. In the eighteenth century his influence was at its height; Lord Holt was able to draw upon the Roman passages in the treatise and thereby to introduce the Roman principles of bailments. Still later the law of easements was systematized under Roman influence transmitted through the work of Bracton.

Two volumes of the authoritative edition of Bracton, edited by G. E. Woodbine, have appeared (New Haven 1915–22). The edition by Sir Travers Twiss (6 vols., London 1878–83) is unreliable.

THEODORE F. T. PLUCKNETT

Consult: *Bracton's Note Book*, ed. by F. W. Maitland, 3 vols. (London 1887), for his life and methods of work. For his Romanism and influence see Holdsworth, W. S., *History of English Law*, 9 vols. (3rd ed. London 1922–26) vol. ii, p. 230–90, and authorities there reviewed, together with Vinogradoff, Paul, *Collected Papers*, 2 vols. (Oxford 1928) vol. i, p. 237–44. For a keen examination of some of Bracton's terminology, Joüon des Longrais, F., *La conception anglaise de la saisine du XIIe au XIVe siècle* (Paris 1925) p. 178–201.

BRADFORD, WILLIAM (1589/90–1657), American colonial administrator and historian. In 1609 with the Separatist congregation he left Scrooby for Leyden, where he lost his patrimony in speculation and settled down as an artisan. Eleven years later in company with other Separatists he sailed on the *Mayflower* for New

England. On the death of John Carver in the spring of 1621 Bradford was elected governor of Plymouth colony, a position which he held almost continuously until his death in 1657. His career, which is practically identical with the history of early Plymouth, is told in his famous *History of Plimoth Plantation* (written between 1630 and 1651; ed. by W. C. Ford, 2 vols., Boston 1912). Bradford, one of the best educated and most intelligent of the Pilgrims, wielded almost unlimited powers and was largely responsible for the remarkable theocratic community organization of Plymouth. He was elected governor each year by the General Court of Freemen. With a minimum of written legislation and with only a council of five "Assistants" he accomplished an administrative task of great difficulty. He managed to free the colony from the control of the merchant adventurers of England and laid the foundations for an independent church "body-politic" based on a mutual compact between members who agreed to obey the Law of God as it was administered by their governor. He maintained the practical identity of the church and the colony in spite of opposing tendencies within the colony and external pressure from Massachusetts Bay. Bradford was forced, however, to transfer to more general control the allotment of land and of trading privileges, so that toward the end of his governorship some lands had been acquired by non-members of the church. Throughout his long administration he enjoyed the general support of the colony and by his success in organizing this small community on a theocratic basis was influential in shaping Puritan political theory and in promoting congregational government in New England.

HERBERT W. SCHNEIDER

Consult: Usher, R. G., *The Pilgrims and their History* (New York 1918).

BRADLAUGH, CHARLES (1833–91), English secularist and reformer. The son of a poor attorney's clerk in London, Bradlaugh had merely a primary education. At the age of twelve he worked as wharf clerk for a coal merchant and witnessed and spoke at Chartist meetings. After a short period as a private in the army he became a solicitor's clerk in London and acquired the considerable knowledge of law with which he later defended himself in court. In 1858 he became editor of a skeptical paper, the *Investigator*; in 1860 he founded his most important periodical, the *National Reformer*, and six years later organized the National Secular Society. For a time he described himself as an "atheist" although he interpreted the term as synonymous with "agnostic." Later, however, he took over the name "secularist" from G. J. Holyoake. Bradlaugh's struggle with the authorities led to the repeal in 1869 of the Security Laws, thereby bestowing on the cheap press as great a freedom as was enjoyed by the more expensive journals. As president of the National Secular Society he established free thought agitation on an organized basis and gave the doctrine great publicity. He began in 1868 at Northampton his long campaign to enter Parliament and was finally elected in 1880, but because of his request to substitute an affirmation for the oath he was denied a seat in the House. He was successful in four subsequent elections, but it was not until 1886 that he was allowed to take his seat. Two years later he carried a law permitting affirmation instead of an oath. He espoused the unpopular Malthusian movement and with Mrs. Annie Besant republished Charles Knowlton's *The Fruits of Philosophy; or, The Private Companion of Young Married People*. He was convicted of selling obscene literature but successfully appealed. Through the wide attention that it aroused the trial facilitated the spread of neo-Malthusian ideas. Bradlaugh was largely responsible for the organization of the Malthusian Society in 1861. The last twenty years of Bradlaugh's life were devoted mainly to political work. One of the leading radicals of his day, he agitated for a wide variety of political and social reforms such as woman's suffrage, birth control, trade unionism, liberation of oppressed nationalities and the spread of scientific knowledge. He favored taxation and land law reform but bitterly opposed the rising socialist movement. Bradlaugh was a man of slight culture, but his strength and impressiveness on the platform made him one of the most popular orators and debaters of his time.

JOSEPH MCCABE

Consult: Bonner, Hypatia Bradlaugh, *Charles Bradlaugh* (7th ed. London 1908); Field, James A., "Publicity by Prosecution" in *The Survey*, vol. xxxv (1916) 599–601; Robertson, J. M., *A History of Freethought in the 19th Century* (London 1929).

BRADLEY, FRANCIS HERBERT (1846–1924), English philosopher. Bradley studied at Oxford and lived in retirement as fellow of Merton College from 1876 to the end of his life. His

work was influential in discrediting the individualistic English philosophy of experience and replacing it by Kantian-Hegelian idealism with its higher regard for the state and for human interdependence.

The hedonistic utilitarianism of Bentham, James Mill and their followers had begun as a radical philosophy, making for greater liberty of opinion, for free economic enterprise and for the removal of established legal and political abuses. But the devastating effects of free competition and the factory system indicated to a newer generation of radicals the need for state action along such lines as factory legislation, compulsory education or the legalization of trade unions. The Hegelian philosophy of which Bradley was the keenest representative supplied effective intellectual weapons against the traditional liberalism and the "administrative nihilism" of men like Herbert Spencer. It was Bradley's firm contention that only by integrating his work in the life of the larger whole of which he is a part, can the individual be, find or realize his true self. Bradley combined a profound regard for religion with an unfriendliness toward established churches. He was a most keen critic of Spencer's complacent evolutionary optimism, of Arnold's "Culture" and of the intellectually stolid positivism of Frederic Harrison. His appreciation of the natural delights of sensory and emotional experience led Sturt, a hostile critic, to class him as a "prophet of the flesh."

MORRIS R. COHEN

Important works: *Ethical Studies* (London 1876, 2nd ed. 1927); *Principles of Logic* (London 1883; 2nd ed. 2 vols., 1922); *Appearance and Reality* (London 1893, 2nd ed. 1897).

Consult: Taylor, A. E., in British Academy, *Proceedings*, vol. xi (1924–25) 458–69; *Mind*, vol. xxxiv (1925) 1–69 and 173–84; Sturt, Henry C., *Idola theatri* (London 1906) ch. ix; Barker, Ernest, *Political Thought in England from Herbert Spencer to the Present* (London 1915) p. 61–66; Eliot, T. S., *For Lancelot Andrewes* (London 1928) ch. iv.

BRÁF, ALBIN (1851–1912), Czech economist, statistician and statesman. Bráf was the first professor of economics at the Czech university at Prague (1882–1909) and taught virtually all the economists who are at present active in the universities of Czechoslovakia. Always interested in methodological problems, he at first pursued the lead of J. S. Mill, later that of the German historical school and at last found satisfaction in Karl Menger's *Untersuchungen über die Methode der Sozialwissenschaften*. It was the Austrian method which he followed in the still important "Letters on the Study of Economics" (*Listy o studiu národohospodářském*, Prague 1897). Deterred by other pursuits Bráf never finished his principal theoretical work on the prolegomena to the social sciences, and even his university lectures covering economic theory, economic policy and public finance were published posthumously (*Život a dílo*, 5 vols., Prague 1913–24). Much more numerous are his writings on current practical problems such as social legislation, banking and credit and agricultural questions, of which the outstanding work is *Břímě, které se dá zmenšit* (The burden which can be lightened, Prague 1896), a proposal to secure cheap mortgage credit for the small farmer. Bráf's interest in agrarian problems is reflected also in his statistical works as well as in the type of organization which he helped to found and direct; among these the Czech land bank and the rural insurance fund have survived to the present time. The climax of his public career came in 1909 when he held for a few months the post of Austrian minister of agriculture; he was reappointed to the same position a year before his death. A revered teacher and an indefatigable reformer, Bráf is honored as an important public figure of the pre-war period.

JAN LOEVENSTEIN

Consult: Horáček, C., in *Statistische Monatsschrift*, vol. xxxviii (1912) 461–62.

BRAHMANISM AND HINDUISM. The religious history of India, while it exhibits a marked continuity of tradition and development, may be classified and treated under the separable headings of Vedism, Brahmanism, Buddhism, Jainism and Hinduism. Vedism, an essentially animistic and magical religion with its roots in prehistoric Indo-European life, was brought to India by the Aryan invaders (*c.* 2000–1000 B.C.). Its sacred books, the *Vedas*, have remained the basis of most of the succeeding Indian religions and philosophies. It developed through the activities of a priestly class into the ritualistic Brahmanism (800–500 B.C.). Brahmanism was always peculiarly the religion of an intellectual minority; in its later developments it became increasingly philosophical and difficult for the masses to follow. In reaction against the authority of the Brahmans and against their claim to a monopoly of admission to the ascetic orders there developed in the sixth century B.C. the more democratic and personal religious systems of Buddhism (*q.v.*)

and Jainism. Neither attempted to suppress the older religion; members of both sects, for instance, continued to use Brahmans to direct their family worship; and even during the ascendency of Buddhism under the emperor Asoka (269–232 B.C.) Brahmanism did not completely die out. With the decay of Buddhism in India there was a veritable renaissance of Brahmanism (*c.* 100–400 A.D.), in the course of which it developed a more emotional emphasis and fused more completely the Aryan and non-Aryan religious traditions of India. It is this neo-Brahmanism, developing from the first and second centuries A.D. to the present, which is commonly known as Hinduism. Hinduism is a term of western origin with no corresponding expression in India; it may be used to designate such diverse groups and sects that it is sometimes defined as any Indian religion which cannot be classified under another head. Hinduism possesses, however, the unity given by a dominant social system, by a common tradition based on the *Vedas* and by Brahman authority.

The origin of the social system of India, so inextricably bound up with its religious history, can be traced to the circumstances of the Aryan invasion. The invaders from the West, representing a new ethnological type and bringing a new language of Indo-European origin destined in time to cover almost the whole of India, fought and conquered the indigenous Dasyus or Dasas on the plains of the Punjab. Historians are still in doubt as to the relative advancement in civilization of the two groups, although later discoveries tend to indicate that the city dwelling Dasyus were more civilized than the invading Aryans. As a result of the conflict the indigenous tribes were either slain in battle, driven to the mountains or reduced to slavery, until the word Dasa came finally to mean "slave." The contrast between Aryan and Dasa was that between foreigner and native, light color and dark color, Aryan speaker and *mleccha*, deva worshiper and phallus worshiper, master and slave. There must have been from the first much intermingling of blood with woman slaves; in fact such connections were regularized in the later law codes (*Manu* III. 13, *Vasishtha* I. 56). Thus the color difference was gradually diminished and the Aryans became racially acclimatized. The conquered and enslaved population must have gradually adopted much from the religion of their conquerors, while probably contributing on their part phallus worship and the worship of mother goddesses.

As a result of this gradual modification of contrasts between conquerors and conquered toward the end of the Vedic age the Dasyu under the name of Shudra had come to be ranked among the four orders of Vedic society, albeit the last and the lowest. Brahman, Kshatriya, Vaishya and Shudra represented a graded organization consisting of priests, rulers, artisans and slaves. By race the first three orders were Aryan "twice-born," as contrasted with the Shudra aborigines, and possessed from Vedic days to the present time privileges from which the Shudras were debarred. The status of each of the four orders according to birth and occupation is definitely given in a text of one of the earliest and the most authoritative Hindu scriptures, the *Rigveda* (X. 90, 12). Here is the religious sanction of Indian caste, a system which, notwithstanding its defects, has furnished India with a tough and enduring social fabric. For three thousand years Hindu society has been based on the recognition of differences of race, color, occupation and status and the organization of those differences into the higher unity of an all embracing social system.

The supremacy in this system of the Brahman order is a central fact in the history of India. It alone of the four original orders has maintained through the centuries its identity and distinctness. Kshatriya, Vaishya and Shudra are largely fossilized terms, but Brahman is a living designation. Not only do the Brahmans constitute the aristocracy of India; they have been intellectually and religiously creative throughout the centuries. In the early days the education of the boys of the three "twice-born" orders was in their hands. They must have had much to do with the formulation of the four *ashrams*, or stages of life—the instruction of the youthful pupil, the discipline of the householder, the meditation of the hermit and the renunciation of the ascetic—which for Brahmanism and Hinduism constitute a preparation for the eternal world. The sacred literature of Hinduism from the *Rigveda* downward is almost entirely the composition of Brahmans, while in the various changes which have occurred in the development of Indian religious thought the Brahmans have always taken a leading part. As priests they were responsible for the development of the ritual, which tended to become more and more complicated. Under Brahman influence the *Vedas* came to be invested with such magic power that the slightest error in pronunciation, accent or meter annulled the effects

of the sacrifice. Hence originated a series of sciences, such as phonetics, grammar, etymology and meter, for the proper understanding and pronunciation of the sacred texts; music to enable the *udgatri* to chant the sacred formulae; mensuration needed in the construction of altars; and astronomy to calculate the right times for sacrifice. In all these developments the Brahman played a leading part. Politically, too, he has been a great factor in Indian history, whether as the *purohita*, or "domestic chaplain" of a king, or as his prime minister. The *Arthashastra*, the most primitive manual of Hindu political science, is ascribed to the Brahman minister of Chandragupta. The earliest Indo-European prose, that of the *Brahmanas*, was the work of the various schools of priestly training.

An antithesis between priestly and popular religion existed from the earliest times; it is clearly indicated by the existence of the popular *Atharvaveda*, a compilation of magic practises, side by side with the priestly *Rigveda*. This antithesis has always tended to break down through the progressive synthesis in Hinduism of the priestly and the popular elements. At first the sacred literature consisted exclusively of the Brahmanical "threefold knowledge," comprising the three priestly *Vedas*, but in time the Brahmans made an astute concession to the pressure of popular religion, and the *Atharvaveda* was given the same canonical position as the other three.

Indian religious development from Vedism to Hinduism involved successive emphasis on "the way of works," "the way of knowledge" and "the way of devotion." "The way of works" designates the stage of religion embodied in the hymns of the four *Vedas* as expounded in the *Brahmanas*. By the time of the *Brahmanas* (*c.* 800 B.C.) the priest and the sacrifice had become central, the gods falling distinctly into the background. The emphasis was on the punctilious accuracy of the whole ritual performance regarded as a magical activity that produced an automatic result. Since the priest controlled the sacrifice it followed that if the sacrifice was greater than the gods the priest was greater than the sacrifice. One *Brahmana* text refers to two kinds of gods, namely, the gods, properly speaking, and the Brahmans, who are human gods. This extreme heralded a needed change, the Upanishad movement which placed emphasis on insight rather than on works.

"The way of knowledge" had as its literature the *Aranyakas* and the *Upanishads* (*c.* 700–600 B.C.). It probably owed much to the thought of the "forest dwellers," old men and women of the three "twice-born" classes who had finished the household stage of life. It was a more democratic movement in which Kshatriyas and even women had a part. But here too the Brahman undoubtedly played the leading role; not the Brahman priest who officiated at the altar, but the Brahman who had retired from the world, given up largely conventional religious rites and embraced the life of meditative calm. The "new thought" was marked by new features. It was monistic, or monotheistic, Brahman-Atman being recognized as the central reality of the universe. Over against the changeless bliss of the Atman stood the weakness and vanity of mortal life not only subject to change here and now but also—in accordance with the new doctrines of karma and transmigration developed in the *Upanishads*—bound to suffer the vicissitudes involved in an indefinite number of births. Hence there developed a pessimistic attitude and the idealization and practise of an ascetic renunciation of the world, both coupled with a passionate desire for release from the bondage of transmigration. It is this group of doctrines that constitutes "essential Hinduism." Their social implications have been enormous. Transmigration and karma furnish the philosophical bases of caste; for they explain one's caste and condition in the present life as the expression of merit or demerit gained in past lives.

Brahmanism and Buddhism, which were early influenced in their development by the Brahmanic *Upanishads* and the contemporary dualistic and materialistic Sankhya philosophy, furnished the background of Hinduism. Buddhism emphasized ethics, organized more fully the ascetic life, taught non-injury (*ahimsa*) and through the character of its founder probably stimulated the growth of the doctrine of incarnation in Hinduism. Brahmanism passed on to Hinduism (but not to Buddhism) the great social organization of caste, which through contact and "peaceful penetration" gradually extended itself throughout the whole of India. Brahmanism, moreover, furnished the religious background for Hinduism, the great mass of sacred rites and the worship of endless gods, which had come down from the past, and a philosophical background in the *Upanishads*. The great revival of Brahmanism, which was equally the birth of Hinduism, produced in addition to the old *Veda*, *Brahmana* and *Upanishad* a new series of liter-

ary documents, all the work of the Brahman class. These were the *Puranas*, a collection of ancient writings, *Sutras*, the law books, and the great epics, the *Ramayana* and the *Mahabharata*, crystallizing the traditions of hundreds of years. The new spirit of Hinduism is particularly evident in one section of the *Mahabharata*, the *Bhagavadgita*. In this monotheistic and eclectic philosophy the doctrine of fervent faith, the "way of devotion" of Hinduism, receives literary expression.

By the fourth or fifth century A.D. Hinduism was fairly well established with a developed tradition, social institutions based on the caste system and a philosophy adapted to the continued absorption of new elements, new deities, new practises. Hinduism as the product of many diverse streams of thought and practise may indeed be called "an anthropological process"; it is not more a religion than a social organism, since it reflects the life and institutions and beliefs of over two hundred million people. Its hospitality is so generous that it welcomes alike the weirdest superstitions and the highest forms of religious philosophy; so all embracing that it is willing to absorb any and every religion on the face of the earth. If Vedism represents a polytheism of nature gods and Brahmanism in its deepest insight the doctrine of a single spiritual reality, then Hinduism furnishes a kind of synthesis of the two, namely, a revised polytheism grounded in the pantheistic one and all. So radical is the doctrine of immanence that the whole universe is regarded as an incarnation of God and hence everything in heaven, on earth and under the earth may be worshiped—333,000,000 gods—while at the same time the claim is made that God is one.

This type of religious philosophy explains the special form of religious growth in India. All through the history of Brahmanism and Hinduism compromise and synthesis have been the rule—an aboriginal tribe gradually coming under Aryan influences, the tribe being transformed into a caste, some Aryan customs and beliefs being generally adopted and the gods of the aboriginal tribes being connected with the Hindu gods as attendants or manifestations. Thus Hinduism has proceeded by the "mass movement" method, annexing whole tribes or communities; if it may be considered in any sense to proselytize it is a proselytization by absorption, as much social as religious. Hinduism, therefore, never developed a series of religious institutions. So diverse a tradition has neither room nor need for a central organization or a central creed; its priests need not struggle for secular power, they are an essential part of society. In no country are there more temples or more frequent religious performances than in India, but in contrast to western conditions both are maintained as part of the social fabric and not through corporate organization.

As Vedism had emphasized works and Brahmanism in its final form knowledge, so in Hinduism devotion (*bhakti*) is central. It is devotion to one personal god—Vishnu, Shiva or others—that forms the religion of the great mass of Hindus, a kind of monotheism, howbeit unstable, since other gods are recognized. Thus Hinduism finds expression through a great many separate sects, each carrying some elements of the tradition, each with characteristics of its own. The two most important sects have been Vaishnavism and Shaivism, worshiping the gods Vishnu and Shiva. Representing the synthesis of innumerable local cults and worshiped under innumerable local forms each has nevertheless developed certain unifying characteristics.

Vishnu is an old Vedic god represented by a series of "descents" or incarnations: the princely and ethical Rama; the erotic Krishna; the heterodox Buddha; and the one yet to come, the Kalki *avatara*, really a kind of Messianic anticipation within Hinduism. Krishna, probably an aboriginal chieftain, is celebrated in the *Mahabharata*. Later versions of the Krishna legend are found in the various Vishnuite *Puranas*, in which he is set forth as the boy Krishna, slayer of demons and player of youthful pranks, and also as the lover of the *gopis* and especially of Radha. The Indian drama may have originated here and Indian painting certainly owes a great many of its themes to the Krishna legend. The admission of Buddha into the category of "descents" was late, itself an expression of the spirit of compromise.

Shiva, the other great god, is worshiped in the form of his symbol, the *linga* (phallus). Shiva probably represents the synthesis of Aryan and non-Aryan elements, and through Shaivism the phallic worship so reprobated in the *Rigveda* finally secured for itself a definite place in Hinduism. Shiva's wife or Shakti, called variously Kali, Durga, etc., is the center of a worship even more extensive than that of Shiva. The literature devoted to Kali consists of the *Tantras*—of the right hand more decent and of the left hand less decent—strange books full of magic and sorcery.

Other sects have had temporary or local importance. Like Sikhism, a reform movement of the fifteenth and sixteenth centuries A.D. which opposed the caste system, most of them have become reabsorbed into the main body of Hindu tradition. It is this remarkable power of synthesis that has enabled Hinduism to persist through centuries of change and in spite of the impact of a series of foreign influences. Thus, when Buddhism was finally driven out of India through the destruction of its monasteries by the Mohammedan invaders in the twelfth and thirteenth centuries A.D., Hinduism merely developed certain new aspects under the influence of the hostile religion.

While the persistence and proliferation of Hindu culture is to a large extent a result of the comparative isolation of India, Hinduism has by no means been free from foreign influence, nor has it failed to exert a marked effect on the entire world. In addition to the major contacts of Dravidian and Aryan, Hindu and Mohammedan, Indian and European, Indian history has been marked by a series of less important but fruitful contacts. Thus the Brahmi and the Kharoshthi scripts were introduced from abroad between 800 and 400 B.C. in connection with trade and civil administration. A script, apparently even older, found on the Harappa seals, may prove to be a memorial of an earlier connection between the Indus Valley and the Euphrates. For two centuries the western Punjab formed a frontier province of the Persian Empire. Alexander the Great after his military raid into India left on the western frontier some Greek colonies modeled after the Greek city-state. As a result Greek artistic influences combined with those of India to form the Gandhara school of sculpture which is closely connected with the Mahayana type of Buddhism. From 100 B.C. to 600 A.D. Scythians, Parthians, Kushans and Huns invaded India and were swallowed up in the population; while during the first two Christian centuries there was considerable commercial intercourse between India and the Roman Empire. At the same time Indians were penetrating into other countries. In addition to the preaching of Buddhism in the Mongolian world there was a Hindu migration into Cambodia and Java which was notable for its artistic accomplishments in architecture and sculpture. Asceticism invaded the Christian church first in Egypt, probably coming from India, the true home of the ascetic life. From the fifth to the seventh century Buddhist pilgrims from China visited India.

Since the eighteenth century the literature of Brahmanism has had a profound effect on European thought and culture. The *Rigveda*, as studied by the great orientalists, has given rise to the new sciences of comparative philology and comparative religion and has profoundly influenced the whole range of Indo-European studies. The *Upanishads* even in a most imperfect Latin translation greatly impressed the German pessimist Schopenhauer, and through the expositions of such scholars as Max Müller, Deussen, Oldenberg, Das Gupta and Radhakrishnan they are becoming more and more influential in the philosophical thought of the world. The *Bhagavadgita* and to a less extent the *Yoga* of Patanjali are fundamental sources of the teaching of Mrs. Besant and the Theosophical Society, and through the Hindu propaganda in the West as established by Swami Vivekananda they are taught in many Vedanta societies in Europe and America. New Thought and Christian Science, if they do not owe something directly to Hindu sources, at least have resemblances to Hindu teachings.

At the same time far reaching changes have been inaugurated in India by the foreign influences which have touched and molded it since about 1800 A.D.—British administration, English education and Christian missions. The vast system of British administration has helped to create the idea of a united India and has furnished administrative training for multitudes of Indians. Educational, medical and philanthropic work, especially on behalf of the depressed classes, has established in the Hindu and Mohammedan communities new standards of social service, public health and social organization. The English language as a medium of higher education has introduced the people of India to the literature and science of the West. Christian missions have not only built up a Christian community but have led to the development of new Hindu sects and their adoption of western methods of religious education. The union in modern Hinduism of Indian and western culture has resulted in new religious and social energy as well as in the development of a national consciousness. The new ideals, however, are still based on the strongest Hindu traditions. Thus the *Bhagavadgita* seems to have inspired both the non-violent and the violent types of agitation for home rule which have marked the twentieth century.

Hinduism, according to the English census,

has begun to show a decline in numbers. Although, as reported in the census of 1921, it still counted some 217,000,000 adherents in a total population of 319,000,000, it had lost 850,000 since the previous census, that of 1911, while Islam, Buddhism and Christianity had increased in number. The query has also been raised by the government whether the "untouchables," numbering 50,000,000 more or less, ought to be reckoned in the census reports as "Hindus" in view of the lack of privileges allowed them by the Hindu community. In addition to this apparent decline in numbers, recent years have also been characterized by an unhappy friction between Hindus and Mohammedans often resulting in riot and bloodshed.

In spite of these difficulties Hinduism remains the basic force in Indian life. For through all the changes of modern years caste and the Brahman in the caste system have held their place at the foundation of Indian society. This fundamental institution has from the beginning of Indian history increased in complexity and rigor. Not only have new castes in large numbers come into being by the transformation of tribes into castes, but differences in occupation, place of residence, etc. have contributed to the same result so that India now has three thousand or more castes with an indefinite number of sub-castes. Modifications in caste usages are taking place. Travel in India and abroad, the enlargements of thought due to education, and the cosmopolitan influences of city life all tend to produce changes in such relatively non-essential rules as have to do with contact and food. But the great bulwark of caste—marriage restriction—still largely holds its own. Moreover one characteristic of Hindu society has been the persistence of "archaic survivals" in the form of primitive customs. Such are *sati*, or the immolation of widows (outlawed in 1829); in South India the occasional dedication of daughters to a life of religious prostitution in connection with a temple, the early marriage of girls and prejudice against widow remarriage; some polygamy, especially among princes and wealthy men; what in some cases practically amounts to the exposure of female infants, and general female illiteracy. These conditions have given rise to protests both within and without India. There is hope that the worst abuses may disappear under modern Indian leaders without destroying the inherent social force of Hinduism.

H. D. GRISWOLD

See: INDIAN QUESTION; CASTE; RELIGION; MAGIC; MYTHOLOGY; ASCETICISM; PRIESTHOOD; SECTS; YOGA; BUDDHISM; ATHEISM; ART, INDIAN.

Consult: *Cambridge History of India*, vol. i, ed. by E. J. Rapson (London 1922); Eliot, C. N. E., *Hinduism and Buddhism*, 3 vols. (London 1921) vols. i–ii; Weber, Max, *Gesammelte Aufsätze zur Religionssoziologie*, 3 vols. (Tübingen 1920–21) vol. ii, *Hinduismus und Buddhismus*; Macdonell, A. A., *India's Past* (Oxford 1927); Oldenberg, H., *Die Lehre der Upanishaden und die Anfänge des Buddhismus* (Göttingen 1915); Bloomfield, M., *The Religion of the Veda* (New York 1908); Pratt, J. B., *India and its Faiths* (Boston 1915); Farquhar, J. N., *Modern Religious Movements in India* (New York 1915). See also relevant articles in Hastings' *Encyclopedia of Religion and Ethics*.

BRAILLE, LOUIS (1809–52), inventor of a system of tangible points to enable the blind to read and write. Braille, who had lost his sight at the age of three, began to teach the blind when he was nineteen, if not younger. In 1829 he invented a system whereby letters of the Roman alphabet, figures and notes of music were represented by an arrangement of embossed points. He was not the first to devise a method of reading and writing for the sightless; there had been earlier efforts in this direction, the first recorded attempt being in Spain in 1517. Braille's system, however, was superior in that it substituted for the actual letters or other essentially visual symbols units of raised dots more easily perceptible to the touch and, above all, capable of being written and read by the same hand. In conciseness, legibility and ease of learning it was also an improvement on the system of raised points devised a few years previously by Charles Barbier, in which signs represented phonetic sounds rather than letters and were too large to be read by a single touch. Braille continued to improve his system until 1834, and five years later made it public in his pamphlet, *Nouveau procédé pour représenter par des points la forme même des lettres . . . à l'usage des aveugles* (Paris 1839).

The new method met with considerable opposition, particularly from seeing teachers of the blind, and was not adopted until 1854 even by the school where Braille himself taught. Its use in the United States dates from 1860 and in England from 1868. Many modified and competitive systems were developed, particularly in the United States. In 1888 a proposal for a standardized type was made at Dresden, but it was not until 1916–17 that American organizations, not without sacrificing minor points of superiority in their own system, agreed to accept

the "Revised Braille," which was based largely on British practise. As a result a uniform alphabet is now coming into general use throughout the world. The Braille invention, which facilitated for the sightless tangible writing as well as finger reading, completely transformed their education; it has given the blind, especially those who lose their sight early in life, the possibility of a remarkable degree of independence in study, work and recreation.

LUCY WRIGHT

Consult: Institution Nationale des Jeunes Aveugles, *Compte rendu de la fête du centenaire de Louis Braille* (Paris 1910); Illingworth, W. H., *History of the Education of the Blind* (London 1910); Best, Harry, *The Blind* (New York 1919) p. 395–410; Villey-Desmeserets, P. L. J., *Le monde des aveugles* (Paris 1914), English translation (London 1922) ch. ii.

BRANCH BANKING is a form of bank organization which comprises in addition to the "unit bank" or head office a number of branch offices under the control of the central management; the accounts and liabilities of the branches are usually a part of the general accounting and general liabilities of the head office. This description applies to branch banking in the strict sense of the term. There exist, however, several types of branch banking in which control and management are not so centralized. Thus branches, while constituting an integral part of the general organization and operating without capital stock of their own, may be developed as autonomous units with local boards of directors which fix their policy. A greater degree of independence is afforded where different branches exist as separate establishments with their entire stock owned by the head office, called in this case the parent bank. Again, chain banking, or group banking, based on the control of a number of bank units through stock ownership by an individual or a holding company, is in some aspects a loose form of branch banking; it raises, however, special problems which do not appear in the more integrated forms of branch banking.

While branch banking is in part the result of competition among banks and is to that extent similar to the amalgamation and concentration found in other lines of business activity, it deserves special attention because it brings up a number of important questions of public policy not found elsewhere. In concrete form it raises the question as to the extent to which the banking organization can safely be trusted with the function of shifting at will the fluid capital of the community from one locality to another, thereby tending to alter local rates of interest and discount and presumably to smooth out inequalities in such rates. It has been argued that branch banking exercises this power in an undesirable way. While one group of critics has occasionally charged that banks with branches transfer funds from city to country districts and there "tie them up" for unduly long periods, the more usual complaint has been that country districts are drained of their fluid funds for the purpose of supplying the needs of commercial and financial centers. It is undoubtedly true that branch banking, more than any other type of bank organization, facilitates the flow of funds and that under certain circumstances there may be some basis for both of these contentions. The actual effect of branch banking depends obviously upon the policy of the governing body of the bank with reference to the types of paper which it deems most suitable for the investment of bank funds. While the older and more conservative theories of bank operation naturally favored the concentration of cash, through branch banking, in commercial centers, this is not necessarily the case under present conditions. The essential quality of branch banking is that of providing an easier flow of funds from one community to another and is seen in its best and most effective application in connection with international operations.

The question of branch banking has assumed the aspect of an urgent political problem only in the United States. While the merits and faults of branch banking were seriously discussed in various countries before the war, it is true on the whole that in every important commercial country with the exception of the United States branch banking has for many years been regarded as an accepted element in the banking system subject to varying degrees of restrictions. In America the fact that in former years combinations of capital and the "money trust" occupied a prominent place in public discussion explains in part the unusual interest of the general public in the problem of branch banking. The belief that large city banks drew funds away from the country, the experience, unfortunate in some particulars, with the form of branch banking attempted by the First and Second Banks of the United States and the general desire on the part of the individual states to retain control over their own banking and financial systems were the chief factors which tended to promote the growth of feeling and

legislation hostile to branch banking. The adoption of the National Bank Act in 1863–64 crystallized antibranch opinion and practically committed the federal government to the so-called "unit system" of banking. While the banking laws of the several states were not so positive or severe, they followed on the whole the lead of the federal government. A tendency to change became apparent only after the opening of the twentieth century.

Even prior to that time certain interrelations between banks had developed as a necessary phase of American banking. There had emerged, under the national banking system, the so-called correspondent plan whereby country banks grouped themselves under the leadership of banks in reserve and central reserve cities. Frequently as many as four or five thousand country banks were numbered as correspondents of a single city bank; and while it was true that each country bank might have several city correspondents, in practise it usually tended to establish close relations with only one. In this way a rough substitute for the European branch bank system was developed. Another means of interbank control was afforded later, especially during the nineties, by the practise of organizing local trust companies or security concerns as state corporations and having their entire stock owned by the national banks responsible for their establishment. The trust company or corporation sometimes purchased the stock of groups of country banks, thus enabling a single large bank by its ownership of an auxiliary corporation to control a group of banking institutions scattered over the country.

After the opening of the present century modifications in state laws, changes in administrative practise, or in a few cases court decisions, led in some states to the recognition of branch banking. Branch banks began to compete fairly actively with independent or "unit" banks in several parts of the country. The Federal Reserve system organized in 1914 did not, as some had expected, retard the development of branch banking, but in certain particulars accelerated it. The World War gave a vigorous impetus to consolidation in all branches of business activity, including banking. After the war bank mergers and amalgamations became even more numerous, and in a few states where branch banking had meanwhile taken root such mergers resulted in establishing closer ties between the institutions which had previously been combined as separate offices or branches under a single common ownership. This movement became especially prominent in California but it also made rapid headway in certain other states. A statistical summary of branch banking development in the past quinquennium is given in the table on page 681.

By the middle of 1928 ten states permitted the establishment of branches in and outside the home city, twelve permitted them only in the home city or county and twenty explicitly prohibited the establishment of new branches. The "branch banking area" is thus limited to twenty-two states, although there are in addition eight states which tolerate the operation of existing branches. On February 25, 1927, Congress passed the so-called McFadden Act, one avowed purpose of which was to legalize under specified conditions the creation of branches in cities but to halt the development of branches outside of the city in which the parent office was located by forbidding new extracity branches to national banks and by excluding from the Federal Reserve system such state banks as might seek a widespread development. The bill did not, however, result in furthering to the extent expected the intracity growth of branches; while it probably tended to stereotype and check the further expansion of the movement in general, other forces which exercised a much greater influence masked its operation in practise.

Branch banking presents also problems in bank management. From the outset the serious question confronting branch banks has been that of obtaining detailed knowledge of local conditions and giving a multitude of relatively small borrowers as much individual attention as can be afforded by small local banks. Efforts have been made to meet this problem by creating local boards of directors, recruited in part from local business circles, and sometimes by vesting in branch managers almost absolute powers over loans up to a specified amount. It may fairly be said, however, that this phase of branch banking still offers considerable difficulties of central management. Locally an operating difficulty is experienced by branch banks in obtaining a satisfactory quota of men to fill responsible positions. Those who have sufficient individuality and enterprise are often disinclined to remain in a branch indefinitely, while employees of the conventional type are usually unable to insure the success of a branch confronted with vigorous local competitors. The training of a large corps of branch managers who

DEVELOPMENT OF BRANCH BANKING IN THE UNITED STATES, 1924–29

	JUNE 30, 1924	DECEMBER, 1925	DECEMBER, 1926	JUNE 30, 1927	JUNE 30, 1928	JUNE 30, 1929
Banks operating branches	714	785	796	792	835	818
National	108	132	146	152	169	164
State members of F.R.S.	191	196	194	186	186	190
Non-member	415	457	456	454	480	464
Parent banks in cities of:						
Less than 25,000	284			288	316	305
25,000 to 50,000	108			57	66	70
50,000 to 100,000				70	81	84
Over 100,000	289			377	372	359
Unclassified	33					
Number operating branches:						
Only in home city	391	466	481	490	526	518
Only outside home city	283	264	270	258	262	252
In and outside home city	40	55	45	44	47	48
Number operating:						
1 branch	376	446	456	446	469	443
2 branches	129	135	129	137	150	153
3 to 5 branches	176	117	123	125	126	130
6 to 10 branches		39	38	33	35	37
Over 10 branches		48	50	51	55	55
Unclassified	33					
Maximum number of branches in one system	88	98	100	284	289	285
Number of branches	2293	2642	2781	2994	3230	3440
Operated by national banks	248	332	406	722	941	993
by state members of F.R.S.	1137	1277	1366	1301	1220	1298
by non-member banks	908	1033	1009	971	1069	1149
Located in the home city	1508	1810	1940	2022	2214	2362
outside the home city	785	832	841	972	1016	1078
Established de novo as branches			1962	2055	2214	2329
by conversion of independents			645	757	853	958
no report			174	182	163	153

Source: Adapted from the *Federal Reserve Bulletin* for February, and December, 1929.

are willing to devote themselves to the work as a life service and for whom a regular system of promotion is arranged has been Great Britain's solution of the problem of management. In the United States the constant changes of ownership and the semi-speculative condition of banking have generally prevented the adoption of such a policy.

The success of branch banks in establishing and maintaining themselves in competition with local banks, which are free from such problems of management, is explained by the fact that they enjoy certain "internal economies." The branch bank is able to dispense very largely with reserve and to obtain coin and currency from the parent office as it is needed; as a result it can ordinarily satisfy its requirements with a comparatively simple vault and equipment. Usually proper management of accounting systems is promoted through branch banking. Moreover, it can reduce the expense of display, which many local banks consider essential as a means of impressing customers, and can economize on the consumption of bank supplies or "stationery," always a costly factor in banking.

The trend is toward a very great development of branch banking in the future. In the United States opposition has been steadily worn away, while in other countries it scarcely exists in its older forms. As a result of present tendencies we may expect the development of a system which will place banking offices at the service of even the smallest community and thus popularize and universalize banking accommodation. Foreign branch banking is likely to proceed more slowly but whatever may be accomplished in this field will have far reaching effects. An interest in the problem is evidenced by the League of Nations' survey of the attitude of various governments toward foreign branches; this has stimulated a tendency to insure uniform legal treatment. As yet success in the organization and management of foreign branches has not been so great as in the case of domestic branches. Never-

theless the experience with the comprehensive network of branches of English overseas banks, partly paralleled by Germany before the war and imitated on a much smaller scale by the United States in recent years, has confirmed the belief that international branch banking will prove an inevitable complement of the growth of foreign trade.

H. PARKER WILLIS

See: BANKING, COMMERCIAL; FEDERAL RESERVE SYSTEM; COMBINATIONS, INDUSTRIAL; INTERNATIONAL TRADE; FOREIGN INVESTMENT; IMPERIALISM.

Consult: Chapman, John M., "Branch Banking in the United States" and "Chain Banking" in *Report of an Inquiry into Contemporary Banking in the United States*, ed. by H. P. Willis and others, 7 vols. (mimeographed, New York 1926) vol. vi, chs. xiii–xiv; Southworth, S. D., *Branch Banking in the United States* (New York 1928); Collins, C. W., *The Branch Banking Question* (New York 1926); Phelps, C. W., *The Foreign Expansion of American Banks* (New York 1927); Sykes, Joseph, *The Amalgamation Movement in English Banking, 1825–1924* (London 1926); *Foreign Banking Systems*, ed. by H. Parker Willis and B. H. Beckhart (New York 1929).

BRANDES, GEORG MORRIS COHEN (1842–1927), Danish literary and social critic. Brandes was born of a Jewish merchant family in Copenhagen. He was from his childhood a sensitive and alert student and as he matured he grew away entirely from the provincialism which characterized Denmark at that time. Hegel, Sainte-Beuve, Taine, Renan, John Stuart Mill and Spencer had each an individual and important place in his development, and extended travels in Europe helped further to impress on him the implications of diverse ways of thought and custom.

Brandes' career began conspicuously on November 3, 1871, when he delivered in Copenhagen the first of a series of lectures which was later to be published as *Main Currents in Nineteenth Century Literature* (*Hovedströmninger i det nittende aarhundredes litteratur*, 6 vols., Copenhagen 1872–90, 5th ed. 1923–24; tr. by D. White and M. Morison, 6 vols., new ed. London 1923). His remarks were intended primarily as a stimulant to Denmark's fading intellectual energy. He demanded that literature forsake its idyllic romanticism and turn to the search for truth and "set up problems for discussion"; he introduced the cult of the familiar into art and the lure of emancipation into the current orthodoxies of religion, philosophy and morality; he tried to impress the necessity for the free right of inquiry and for freedom of thought, which was very close in his mind to political freedom; he revealed in the history of literature the interlocking influences of political events and social conditions and extended the scope of critical inquiry to include the literature of a continent. But he became the target of a furious resentment, was denounced as atheist, antipatriot and cosmopolitan, the apostle of free love, "the fiend who would dechristianize the country," and he was forced eventually to leave Denmark. Only after several years in Germany was it possible for him to return to a slightly more sympathetic public and to find a band of youthful followers.

Brandes inaugurated a new period in Danish literature and brought the writings of the Scandinavian countries to the attention of the rest of the world. For fifty years he wrote books and articles and lectured not only in Denmark but in all the principal cities of the western world. Any manifestation of realistic thinking was certain to command his interest and it was he who first recognized the power of Ibsen and Nietzsche. His desire for naturalism was gradually superseded, however, by an even greater interest in psychology and by a growing conviction of the supreme right of genius—Nietzsche's doctrine of the superman was wholly concordant with his temperament. His long list of analytical biographies was the result: Shakespeare, Goethe, Caesar, Voltaire, Michelangelo, Disraeli, Lassalle are only a few of Brandes' heroes. These works not only launched but show at its highest development the method of interpretative and imaginative analysis; they also exhibit the faults of this method in its tendency to draw generalizations from insufficient and subjective premises.

Although Brandes was primarily a critic of literature his interests covered the entire world of affairs. As early as 1864, when all Denmark was aroused over the war with Prussia, he had become interested in political problems and this interest developed constantly as his powers of perception and judgment matured. He never made any attempt to become a political leader but he was always a well informed and stimulating political observer. His analysis of events was so accurate that he achieved the reputation of a prophet; his volume of essays, *The World at War* (*Verdenskrigen*, Copenhagen 1916, 4th ed. 1917; tr. by C. D. Groth, New York 1917), contains many canny and stimulating observations. During the World War he was greatly criticized for his persistent neutrality—it cost him a

cherished friendship with Clemenceau—but this was the inevitable result of his horror of race hatred and militarism. In politics as well as in art he was a cosmopolitan, and could never be drawn into merely national issues, although when any form of oppression was also involved his sympathies were always ready. To Russia, Finland and Poland he was known as "the friend of our people," and his work on *Poland, a Study of the Land, People and Literature* (tr. from a series of essays, London 1903) attests the seriousness of his interest. In spite of Brandes' sympathy with political liberalism and even with socialism, however, he was too fiercely individual, too contemptuous of mass stupidity, to believe in democracy. Aristocratic radicalism, the phrase he applied so aptly to Nietzsche, was his political as well as his personal philosophy. In his later years his political mood was one of pessimism and he looked with foreboding on a world which he considered increasingly dominated by nationalism, Catholicism and a growing communism.

ELIZABETH TODD

Consult: Brandes, Georg, *Recollections of my Childhood and Youth*, tr. from the Danish (London 1906); Topsöe-Jensen, H. G., *Den skandinaviske litteratur fra 1870 til vore dage* (Copenhagen 1928), tr. by I. Anderson (New York 1929) p. 13–21; Harboe, Paul, in *Outlook*, vol. lxxviii (1904) 852–55; Porterfield, A. W., "The Return of Georg Brandes" in *New Republic*, vol. xxxi (1922) 44–47; Boyd, E. A., in *New Republic*, vol. l (1927) 143–44.

BRANDTS, FRANZ (1834–1914), German industrialist, prominent in Catholic social reform. After a period of residence in England, Brandts introduced textile manufacturing into what later became the textile center of München-Gladbach. He early established in his own plant the reforms which he advocated for industry as a whole. These included the recognition of shop committees and of freedom of association by workers, housing reforms, the extension of employment opportunities to handicapped workers, the exclusion of mothers from factory labor, temperance work, the establishment of workmen's libraries and many other "patriarchal" employers' projects until then unknown in Germany. In 1880 he founded the Arbeiterwohl, the union for workers' welfare for Catholic employers and sympathizers, and in 1890 the Volksverein für das Katholische Deutschland. A dominating personality, he set on foot in many organizations of private and public character an effective propaganda for the introduction of protective labor legislation and social insurance. With Hitze he converted the (Catholic) Center party and German Catholicism to a program of social reform by the state.

THEODOR BRAUER

Consult: Brauns, H., "Franz Brandts" in *Soziale Revue*, vol. xiv (1914) 401–08; Hohn, W., *Franz Brandts*, Führer des Volkes, no. 12 (Munich 1914).

BRANTING, KARL HJALMAR (1860–1925), Swedish statesman and leader of the Social Democratic party. Branting, the son of a wealthy professor, came in his student days under the influence of radical democratic ideas and later established contacts with labor circles, to which he was attracted by his social sympathies and political ambitions. He began by writing for the liberal press, and in 1886 became chief editor of the *Social-Demokraten*. His influence as a journalist, which was due to his pointed and spirited style, prepared him for a political career. In 1889 he was important in persuading the trade unions of the necessity of political action, and served as one of the founders of the Social Democratic party. His leadership was soon recognized; in 1896 he was elected to the Riksdag and in 1907 became chairman of the party. His goal as party leader was to strengthen the position of labor by parliamentary methods, and in parliament he fought indefatigably and successfully for social and political reforms, such as universal pension insurance (1913), compulsory accident insurance (1916), the eight-hour law (1919), the extension and democratization of the franchise. He was minister of finance in 1917, and premier in the cabinets of 1920, 1921 and 1924.

Although he was essentially a pacifist, Branting pursued a zigzag course in foreign policy. In 1905 his influence was important in averting a war between Sweden and Norway, but in 1914 he voted for increased armaments. During the war he advocated strict neutrality for Sweden and made efforts to secure a cessation of hostilities, but was known to have strong pro-Entente sympathies. In 1919 he exhibited a strong anti-Bolshevist bias at the meetings of the Second International in Berne. Elected to the Council of the League of Nations in 1923, he made a sincere attempt to reorient the League in accordance with Wilsonian principles, but was successful in influencing only individual decisions. In 1921 he was awarded the Nobel Peace Prize.

Branting was a statesman rather than a

philosopher. He organized the great majority of Swedish labor under the banner of bourgeois-radical rather than Marxian socialist ideals. His prestige as a labor leader and parliamentarian was enormous, although he was never free from opposition.

WILHELM GROTKOPP

Consult: Magnusson, G., *Socialdemokratien i Sverige* (Stockholm 1920); Heberle, Rudolf, *Zur Geschichte der Arbeiterbewegung in Schweden* (Jena 1925); Hansome, M., in Brotherhood of Locomotive Engineers, *Journal*, vol. lix (1925) 255–56 and 306; Grotkopp, W., "Socialismus und Wirklichkeit" in *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. lvi (1926) 789–98.

BRANTS, VICTOR (1856–1917), Belgian Social Catholic reformer, economist and historian. In 1881 he was appointed professor at the Catholic University of Louvain and thereafter lectured on political economy in the law faculty and taught history in the faculty of philosophy and letters. In the same year he founded the Société Belge d'Économie Sociale, which was modeled after the Le Play society at Paris and exercised considerable influence on the intellectual circles of the Catholic party in Belgium. He was also among the founders of the Association Internationale pour la Protection Légale des Travailleurs, which may in some measure be regarded as a precursor of the Labor Office of the League of Nations.

Brants wrote a number of inductive studies on mediaeval and modern economic conditions and on social policy, in which he displayed a particular interest in the welfare of the peasantry and of the urban handicraftsmen. In his most important work, *Les grandes lignes de l'économie politique* (Louvain 1901, 4th ed. 1904), he questioned the validity of the classical economic man and the finality of economic laws, and asserted that economic behavior is subject to the moral law as embodied in religious norms. He found the cause of unemployment, capitalist exploitation and other evils of the present order in the elevation of economic activity to an end in itself. He preferred the regulated economic system of the Middle Ages and emphasized the ameliorative role of the small scale producer even under modern conditions. In his *La petite industrie contemporaine* (Paris 1902) he attempted to disprove statistically Marx's prophecy as to the eventual disappearance of small scale industry.

Brants was the most outstanding as well as the most authoritative of the Belgian economists who upheld the social doctrines of the famous encyclical *Rerum novarum* issued by Pope Leo XIII in 1891. After 1886, when protective labor legislation was introduced in Belgium, he exercised, despite the opposition of the Catholic Conservative party, some influence on the Catholic government in office. His work on behalf of international labor legislation (*La législation comparée et internationale du travail*, Louvain 1903) made him well known abroad. He was an excellent teacher and had a number of distinguished and influential disciples. The success of the school of social and political sciences at the University of Louvain is due in large part to his efforts.

ERNEST MAHAIM

Consult: Terlinden, Charles, in Université Catholique de Louvain, *Annuaire 1915–1919* (Louvain 1924) p. 436–50.

BRASSEY, THOMAS (1805–70), British railroad contractor and builder. He came of a family of small landowners and began his career by working as land agent and surveyor. In 1834 he secured a small contract on one of George Stephenson's projects. Larger railway commissions followed rapidly in England. In 1841 he contracted with an Anglo-French company to build the Paris-Rouen railway, the first important line in France. Brassey's chief work as railway builder was done in England and on the continent, and nearly every European country possesses a sample of his construction work. He also built railways in Australia, the Argentine, India and Canada. His activities as contractor included the transportation of thousands of laborers to various countries, the operation of equipment plants and rolling mills in England and on the continent and the financing of difficult railway enterprises. As a consequence of his undertakings the technique of railway building was spread over many parts of the world.

Brassey was notable for his skill in handling his subordinates. He built up his own staff of subcontractors and engineers, among whom he distributed responsibility. His principal agents shared in his profits and with them he talked over his labor difficulties. He maintained schools, churches and other community service for his employees. Believing in paying according to results he increased wages in proportion to the progress of each employee. Brassey realized that work may be cheap when wages are high, and without voicing a theory he sought to increase efficiency by advancing wages above the usual rates paid in the areas where he operated. This

policy appears to have resulted from his observations of the comparative efforts of laborers from different countries on different wage scales and dietaries.

LELAND H. JENKS

Consult: Helps, Arthur, *Life and Labours of Mr. Brassey, 1805–1870* (London 1872); Jenks, L. H., *The Migration of British Capital to 1875* (New York 1927) p. 134–38, 176–77.

BRASSEY, THOMAS, FIRST EARL (1836–1918), British political and social reformer, son of Thomas Brassey, the railway contractor. Forsaking the practise of the law he became a member of the House of Commons, remaining there for eighteen years until he was raised to the peerage in 1886. In Parliament he specialized in naval, maritime and industrial questions, upon which he also lectured and wrote extensively. His encyclopaedic work on *The British Navy* (5 vols., London 1882–83) outlines his program for the navy, including reforms in the administration of dockyards and naval pay as well as in general policy. His views on industrial questions are contained in *Trades Unions and the Cost of Labour* (London 1870); *Work and Wages* (London 1872); *Cooperative Production* (London 1874); *Lectures on the Labour Question* (London 1878); *Foreign Work and English Wages* (London 1879). Brassey championed trade unions when they were barely tolerated by many of his liberal associates, advocated industrial arbitration and cooperation and urged ample legislative protection for working women and children. He consistently opposed, however, all measures, including those of the trade unions, in restraint of production. Backed by his father's experience in railway construction he vigorously and continually assailed the persistent fallacy that low wages or long hours imply cheap production.

W. H. DAWSON

BRATIANU, a family of Rumanian statesmen. Ion C. Bratianu (1821–91), founder of the family's prestige, was instrumental in the establishment of modern Rumania. With his brother Demetrie he was prominent in the movement which forced the abdication of Prince Bibescu of Wallachia in 1848 and the election of Alexander Cuza, first prince of Rumania. He was a founder of the Liberal party in Rumania and during a period of political exile was involved in the Orsini attempt to assassinate Napoleon III. He soon directed his radicalism toward nationalist demands, playing an important role in the dethronement of Cuza, the installation of a Hohenzollern dynasty and the winning of independence from Turkey in 1879. In cooperation with King Carol, Bratianu worked for the centralization of government power to develop Rumania's primitive economic system. He conceived of economic organization as the basis of independence and directed his policy along Listian neomercantilist lines. In 1861 he demanded the establishment of a National Bank, an idea realized in 1880 when he was premier. In 1873 and 1875 with the assistance of other statesmen he founded the Urban and Rural Mortgage Banks. In 1881 he established agricultural credit institutions. He next gave attention to transportation and port development, and in 1887 after a tariff war with Austria he inaugurated Rumania's first independent protective tariff. His policy, including opposition to the entrance of foreign capital, was successful in its aim of developing the nucleus of a native middle class.

This policy was less imaginatively continued by his son Ionel (1864–1927), eleven times premier. He relegated economic matters to his brother Vintila who, despite the economic changes which the years had brought, fanatically opposed the use of foreign capital on conditions which involved foreign control. Vintila Bratianu was also largely responsible for the abandonment of a plan approved by parliament to substitute direct taxes (income tax and special levies on capital and war profits) for indirect taxes. The adoption of war time and post-war laws breaking up latifundia (with the resulting Hungarian land dispute), nationalizing the subsoil and inaugurating universal suffrage was largely due to Ionel Bratianu. His greatest work, however, was the reuniting of all the Rumanian provinces after the World War, which Rumania had entered only after long negotiations conducted by Ionel Bratianu.

The Bratianu family were the leaders of banking interests headed by the Banca Romaneasca and sought the subjection of the national economy to these interests. No concessions were made to concerns which had not come to an arrangement with the Banca, and natural resources belonging to the state were ceded at ridiculously low prices to interests headed by the Banca. In connection with these activities there grew up around the Liberal party a coterie of corruptionists who did much to discredit the state abroad. Antisemitism, rife during the lives of both Bratianu generations, was in part an

aspect of their public and private economic policy.

Ionel Bratianu, who held almost dictatorial powers until his death, was instrumental in changing the succession law to oust Crown Prince Carol. The death of King Ferdinand in July, 1927, was a serious blow to the power of the Bratianus, and the organization of the National Peasant party and the liquidation of minor parties used by the Bratianus as political pawns contributed still further to the family's decline. Their thinly veiled dictatorship ended with the fall of the Vintila Bratianu ministry in 1928, partly a result of failure to obtain a foreign loan to stabilize the leu, deflation of which had followed on the financial policy of post-war Bratianu governments.

AURELIU ION POPESCU

Consult: Miller, W., *The Ottoman Empire and Its Successors 1801–1922* (Cambridge, Eng. 1923); Pasvolsky, Leo, *Economic Nationalism of the Danubian States* (New York 1928); Evans, I. L., *The Agrarian Revolution in Roumania* (Cambridge, Eng. 1924).

BRAUN, KARL (1822–93), German politician and economist. He came of a prosperous Catholic peasant family and practised law before his election to the Nassau Landtag in 1849. Later he was a member of the Prussian lower house (1867–79) and of the Reichstag, where he joined at first the National Liberals and subsequently the German Progressive party. He attacked the particularism of the small German states and worked for the creation of a unified Germany under the lead of Prussia. As an economist Braun was one of the leading German free traders. In 1858 he helped to organize the Congress of German Economists and served for a long time as president of this organization. In 1863 he founded the *Vierteljahrschrift für Volkswirtschaft, Politik und Kulturgeschichte* and became a regular contributor to its columns. An opponent of government intervention in economic affairs, he insisted on the abolition of all restrictions upon the free movement of population and on repeal of the legal maximum for interest charges.

PAUL MOMBERT

Important works: *Aus der Mappe eines deutschen Reichsbürgers*, 3 vols. (Hanover 1874); *Bilder aus der deutschen Kleinstaaterei*, 5 vols. (Leipsic 1869, 3rd ed. Hanover 1881); *Randglossen zu den politischen Wandlungen der letzten Jahre* (Bromberg 1878); *Der Staat und die Volkswirtschaft* (Berlin 1879).

Consult: Grandpierre, Ernst, *Karl Braun* (Idstein 1923).

BRAUN, LILY (1856–1916), German feminist and socialist. She was the daughter of an army officer of the aristocracy, and after participation in the ethical culture and feminist movements became a socialist. The fundamental dualism of her character led her to seek a brilliant career as an individual and at the same time to devote herself passionately to the cause of the oppressed. She thus incurred the enmity of both the bourgeois and the socialists. Her collaboration in bourgeois periodicals made her suspect in the eyes of the socialists and compelled her after twelve years of membership to relinquish all connections with the Social Democratic party. On the other hand, together with Clara Zetkin, she criticized the feminist organizations for their implicit bourgeois tendencies. Nevertheless she remained to the end of her life a feminist and a socialist by conviction.

Lily Braun's contribution to feminism consists in combining the belief in the liberating power of labor with faith in the social importance of motherhood. The thesis of her most important work, *Die Frauenfrage* (Leipsic 1901), is that capitalism through its inability to dispense with the wage work of women digs its own grave by destroying the family and endangering the welfare of the offspring. She was one of the first advocates of maternity insurance.

The socialist views of Lily Braun underwent a curious evolution. At the outset a confirmed believer in the class struggle, she came later to insist that socialism is a problem in education and that the movement must include intellectual as well as manual workers. She developed these ideas in the weekly *Die neue Gesellschaft*, which she and her husband, Heinrich Braun, edited. Later she placed even stronger emphasis on the significance of the individual and changed from a protagonist of equality to a protagonist of freedom. In her *Memoiren einer Sozialistin* (2 vols., Munich 1909–11), which became a best seller, she gave an excellent picture of the socialist trends of her time in the setting of a somewhat fictionalized autobiography.

ALICE SALOMON

Works: *Gesammelte Werke*, 5 vols. (Berlin 1922).

Consult: Vogelstein, Julie, *Lily Braun* (Berlin 1923); Puckett, H. W., *Germany's Women Go Forward* (New York 1930).

BRAY, JOHN FRANCIS (1809–95), early socialist writer and labor agitator. New researches based on family correspondence show that Bray, who had been assumed to be an

Englishman, was born in Washington, D. C., and in 1822 was taken by his father to Leeds, England. In 1835 Bray, then a journeyman printer, wrote to his brother in Boston that he had decided to take part in the labor movement and that he had principles which, if he acted upon them, might bring him misfortune but not disgrace. Under the signature "U. S." he published five "Letters for the People" (Leeds *Times*, December, 1835–February, 1836) dealing with natural rights and human equality. In September, 1837, he spoke at the inaugural meeting of the Leeds Working Men's Association and was elected its treasurer. In November of that year he delivered three public lectures on "the working class, their true wrong and their true remedy" (Leeds *Times*, November 11, 22 and 29, 1837), which formed the skeleton of his book *Labour's Wrongs and Labour's Remedy, or the Age of Might and the Age of Right* (Leeds 1839). In 1842 Bray returned to America, where he worked as farmer, printer and journalist in and near Detroit, continuing to be active in the workers' cause. It is known that in 1854 he was engaged in writing a book, but there is no indication that this work was published.

Labour's Wrongs begins with the statement of the "first principles of nature," the equality of all men with regard to their nature and their wants and the importance of labor as the only means of satisfying these wants. Labor is the essence and measure of value and is the only true title to property. In the existing order the wage received by the producer worker from the owner capitalist contains a smaller quantity of labor than that which he had incorporated in the product, while the surplus accrues in the form of rent, interest and profit to the owner. The accumulation of capital is based on withholding remuneration for a part of labor; capitalist property thus acquired through 'rapacity" is illegitimate. The existence of private property engenders private interests, and the unequal exchange of labor and remuneration produces injustice and dissatisfaction. The entire machinery of government is organized for the purpose of protecting and maintaining this injustice. Capitalist society cannot be mended by piecemeal reform through trade unionism, free trade or political action. The existing order must be changed, but not by force, for although force can overthrow existing political arrangements and inaugurate others it cannot generate social institutions. The only remedy is the abolition of private property in favor of communal possession, with a universal duty of labor and equal exchanges. The present generation formed in an unjust society is unfit for the new order; an intermediate stage must be provided from which men may rise gradually to the final goal of a complete communal life. Bray envisaged this intermediate stage as a confederation of joint stock cooperative companies in which all means of production would be owned in common and work remunerated in full by notes which would entitle the bearer to goods valued in accordance with the quantity and quality of labor which they incorporated. Such a company would use self-interest as a stimulus, but would render exploitation through unequal exchange impossible.

This book, which combines all ideas relevant to the working class movement from John Locke to Robert Owen, is written in a vigorous style and with a glow of conviction. The book was much quoted but was not a publishing success since it deprecated the Chartist program of political reforms.

MAX BEER

Consult: Foxwell, H. S., "Introduction" to English edition of Anton Menger's *The Right to the Whole Produce of Labour* (London 1899) p. lxv–lxxi; Beer, Max, *A History of British Socialism*, 2 vols. (London 1919) vol. i, p. 236–44, and his introduction to the German translation of Bray's *Labour's Wrongs* entitled *Die Leiden der Arbeiterklasse und ihre Heilmittel* (Leipsic 1920) p. 1–30; Lowenthal, Esther, *The Ricardian Socialists*, Columbia University studies in History, Economics and Public Law, vol. xlvi, no. 1 (New York 1911) p. 84–100.

BRAY, THOMAS (1656–1730), English clergyman and educator. On the strength of his work designed for use in the religious instruction of poor children (*A Course of Lectures upon the Church Catechism*, Oxford 1696), he was selected by the Bishop of London in 1696 to go to Maryland as "superintendent, commissary, and suffragan" to organize the Anglican church. He did not sail, however, for almost four years and meanwhile he secured funds for the establishment of parochial libraries. Of these more than fifty were founded in America and other countries abroad and more than sixty in England and Wales. In connection with this work he wrote *Bibliotheca parochialis* (London 1697, 2nd ed. 1707), *Bibliotheca catechetica; or, the Country Curates' Library* (London 1699) and *Primordia bibliothecaria* (London 1726). Out of these activities grew the Society for Promoting Christian

Knowledge (S. P. C. K., 1698) and the Society for Propagating the Gospel (S. P. G., 1701), concerned respectively with the development of elementary English and colonial education. In 1699 he sailed to Maryland and in connection with his work there wrote *A Memorial Representing the Present State of Religion on the Continent of North America* (London 1700). After a short stay he returned to England and became interested in the founding of schools for Negroes in the West Indies. In 1723 he formed the Bray Associates to continue this work and also the distribution of books. A few years later his efforts in behalf of imprisoned debtors brought him into contact with General James Edward Oglethorpe and he became interested in Oglethorpe's scheme for an American colony for the needy and unemployed. He died, however, before the plan became a reality. Bray himself bore a great part of the financial burdens of his philanthropic work.

I. L. KANDEL

Consult: Rev. Thomas Bray, his Life and Selected Works relating to Maryland, ed. by B. C. Steiner, Maryland Historical Society, Fund Publication, no. xxxvii (Baltimore 1901); Allen, W. O. B., and McClure, Edmund, *Two Hundred Years: the History of the Society for Promoting Christian Knowledge 1698–1898* (London 1898); Crane, V. W., *The Southern Frontier, 1670–1732* (Durham, N. C. 1928) ch. xiii; Kemp, W. W., *The Support of Schools in Colonial New York by the Society for the Propagation of the Gospel in Foreign Parts*, Teachers College, Columbia University, Contributions to Education, no. lvi (New York 1913).

BREACH OF MARRIAGE PROMISE. The origin of this form of action is rather difficult to discover. There seems to have been a similar one in early Roman times which disappeared before the classical period. In the latter period the recovery of earnest money, a settlement made at betrothal, was permitted, but that did not long survive the empire. When the Code Napoléon combined the remnants of Roman law in southern Europe with the customary law of the North, the action for breach of marriage promise was entirely omitted. Today it is absent not alone in France but in all the civil law countries. This absence does not preclude recovery of actual pecuniary loss; there are statutory or general tort remedies to take care of that situation. It merely means that there is no civil law action for the breach of marriage promise built upon the contract analogy with its train of consequences.

In both civil and common law countries the early action was for specific performance (i.e. forcing the unwilling party to marry). When that remedy dropped out of civil law the form of action was not retained. The common law countries at that time, however, found themselves engaged in a battle for jurisdiction, state and church, law and equity courts claiming what crumbs of litigation they could. The ecclesiastical courts originally had jurisdiction over breach of marriage promise as part of their complete control of the sacrament of marriage. By the middle of the seventeenth century the secular courts, declaring that the action was temporal since it was for damages and not for specific performance, had captured and preserved the action for breach of marriage promise.

The change in jurisdiction implied a change in theory. The ecclesiastical court was protecting the institution of marriage; the secular court allowed this action, "not to meddle with the marriage, but for damages that he hath not taken her according to his promise." To the legal mind this shift in emphasis was of the utmost importance. Accustomed to a static logic, it now thought of the marriage promise and its breach in contractual terms, concepts which carried with them consequences that made abuse easily possible.

In the first place the offer and acceptance, parts of any legal contract, were oral and often equivocal. It was universally granted that the contract did not fall within that section of the Statute of Frauds which required written proof. Because of the private nature of the oral promise the evidence came largely from parties and was frequently uncorroborated. Since the existence of the contract was a question of fact it was argued before a jury, thus giving that body undue power and placing great emphasis on the persuasiveness of counsel or the pulchritude of the plaintiff.

The situation might have been partially saved had the legal mind retained full control. In the early days the contract interpretation greatly restricted the amount of damages awarded, since it required proof of pecuniary loss. Under the influence of juries and persuasive oratory, however, by the early eighteenth century such intangibles as wounded spirit, unmerited disgrace, probable solitude, had been added and their evaluation was entrusted largely to the discretion of the jury.

American courts in the beginning of the nineteenth century, acting on the theory that the early English disputes were purely jurisdic-

tional, accepted the current view and allowed the action. We find an early Massachusetts judge saying with pardonable pride that the "delicacy of the sex . . . requires for its protection and continuance the aid of the laws." The emotional tone of the plaintiff's counsel was taken over by the stern but human court; and in the United States the action was put on the same basis as in the mother country.

It must not be thought that no attempt was made in either country to abolish or modify the action for breach of marriage promise. In 1879 the English Parliament did what it could and failed. Later attempts in state legislatures met with a similar lack of success. A Michigan court declared that "while it is the policy of the law to encourage marriage it is not the policy of the law to encourage unhappy marriages." The same court quoted with approval a statement that the engagement period should be a probationary one.

It is a defect of current methods of legal research that undue emphasis is placed on the opinions of appellate courts and the acts of legislatures. Social aspects of the action can be understood only through studies of other facts, and most of these studies have yet to be made. The nature of breach of promise suits, the wealth of the defendants, the fact that in all but a few cases the plaintiff is a woman, give undue publicity to a situation that may not be widespread. Again the wealth of the defendants and the large awards sought give rise to the assumption that more breach of promise cases are appealed than we expect to find in situations where less money or a poorer class of defendants is involved. In spite of the likelihood of frequent appeals only one hundred and nine were reported in the thirteen-year period 1916–29. While we have no clue to the ratio that number bears to the number handled by the trial courts, the trial court statistics available indicate that the total is far from alarming. Only fourteen cases are recorded in thirteen counties in Connecticut, Massachusetts and New York for the years 1925 and 1926. We know nothing, of course, of the number of cases settled out of court.

On the whole the action, which has survived through no merit of its own, is anomalous and out of date and represents a distinct cultural lag in an age when women are becoming increasingly independent economically. But it is not a much more serious problem than our blue laws and can probably be counted on to die of inanition. As long as its use is infrequent and is confined, as it has been, to a small section of society it cannot be said to constitute a serious social problem.

DONALD SLESINGER

See: FAMILY LAW; MARRIAGE; CONTRACT; EXTORTION; SEDUCTION; WOMAN, POSITION IN SOCIETY.

Consult: MacColla, C. J., *Breach of Promise, its History and Social Considerations* (London 1879); Bryce, James, *Studies in History and Jurisprudence*, 2 vols. (Oxford 1901) vol. ii, p. 792–93; Esmein, A., *Le mariage en droit canonique*, 2 vols. (Paris 1891) vol. i, p. 139–41; Lobingier, C. S., "Notes on International Law: Spanish versus American Law of Breach of Marriage Promise" in *American Law Review*, vol. xliii (1909) 759–69; Burge, William, *The Comparative Law of Marriage and Divorce*, ed. by A. W. Renton and G. G. Phillimore (London 1910) p. 156–58, 174–77; Grunspan, Anna, *De la rupture des promesses de mariage* (Paris 1917); Bishop, J. P., *New Commentaries on Marriage, Divorce and Separation*, 2 vols. (Chicago 1891) vol. i, bk. iii, ch. xi; Keezer, Frank H., *A Treatise on the Law of Marriage and Divorce* (2nd ed. Indianapolis 1923) ch. ii; Howard, G. E., *A History of Matrimonial Institutions*, 3 vols. (Chicago 1904) vol. ii, p. 200–03, 281–82; Wright, H. F., "The Action for Breach of the Marriage Promise" in *Virginia Law Review*, vol. x (1923–24) 361–83.

BRÉAL, MICHEL (1832–1915), French philologist and educator. Bréal was born of Jewish parents in the Rhineland; he studied at Metz and Paris, later going to Germany where he was a pupil of the great orientalist Bopp. Upon his return to France he published important works in semantics, held several professorial chairs and was inspector general of higher education (1879–88) and a member of the Conseil Supérieur de l'Instruction Publique (1880–96). He helped establish several pedagogical societies and frequently contributed to scientific journals.

Bréal early became interested in pedagogy and in 1872 published his influential *Quelques mots sur l'instruction publique en France* (5th ed. Paris 1886), an unusual book in a day and place which neglected pedagogical science. Pointing to the disasters of 1870 as an indication of the need for reforms in French life, he urged the remodeling of the French elementary, secondary and higher systems of education, especially with a view to benefiting from German examples, of which he was a great admirer. He criticized the French system for its rigid traditionalism, its emphasis on preparation for examinations rather than on the development of useful patriotic citizens and independent creative scientists. He urged that in primary schools French be taught as a live and spoken, rather than a dead and written, tongue, that reading habits be developed, libraries

established and that what might be called a primitive form of visual education be introduced. He favored the retention of Latin in the *lycées*, but demanded reform in methods of teaching so as to make its intellectual value greater; he especially demanded the dropping of Latin verse making, which he regarded as fit for the aristocrats of Oxford but not for the French peasant schoolboy. Especially in the field of higher education he urged a general reorganization after the German model. Each of the chief universities was to include the four major faculties of arts, letters, law and medicine, and minor universities were to be regarded as potentially developing toward that end. The universities were to be enabled to give instruction in subjects hitherto reserved to the *écoles spéciales*, elective courses were to be introduced, the number of examinations reduced and better working facilities—libraries and laboratories—provided. He especially urged the appointment of *docteurs libres*, the equivalent of the German *Privatdocenten*. Many of his suggestions, particularly with regard to the universities, were adopted and did much to change them from lecture and examination schools into centers of science and learning.

ROGER COUSINET

Consult: Dihigo y Mestre, J. M., *Bréal estudio crítico* (Havana 1911).

BREMER, FREDRIKA (1801–65), Swedish feminist, novelist and social reformer. Her *Teckningar utur hvardagslifvet* (Sketches from everyday life) (3 vols., Uppsala 1828–31), pleasantly realistic pictures of family life, became very popular. In her later books she became more and more engrossed in the problems of family life as they touched the happiness of women. In 1849 she toured the United States, where she studied social conditions, particularly the reputedly high position of women, and found her ideal of true companionship between men and women most fully realized among the Quakers. Her best known novel, *Hertha* (2 vols., Stockholm 1856; tr. by Mary Howell, 1 vol., London 1856), formulated her demands for women. Recalling her own suffering from repression and restraint as a young girl in a socially prominent family, she proposed that girls be allowed to study whatever their minds could master and do any work for which they had proved their fitness. She asked, moreover, that women should attain their majority automatically at a certain age in order to get command of their persons and their fortunes instead of going through the special legal process required by the law at the time, and her agitation resulted in the repeal of that law. She was a pioneer also in organizing women for various philanthropic purposes and took the initiative in movements for the care and housing of delinquent children and of aged women, the establishment of schools for the deaf and dumb and the securing of work for released prisoners. Her activities initiated the feminist movement in Sweden.

HANNA ASTRUP LARSEN

Consult: Bremer, Fredrika, *Sjelfbiografiska anteckningar, bref och efterlemnade skrifter*, ed. by Charlotte Bremer, 2 vols. (Orebro 1868), tr. by F. Milow and E. Lonnen as *Life, Letters and Posthumous Works of Fredrika Bremer* (London 1868), and *America of the Fifties: Letters*, ed. by A. B. Benson (New York 1924).

BRIBERY is the practise of tendering and accepting private advantage as a reward for the violation of duty. To bribe is to control by means of tangible inducements rather than by persuasion or coercion. An offer of money or position shades over to such less tangible forms of influencing as calculated sociability. The conception of bribery implies choice, and when the element of choice is seriously curtailed we have to do with extortion or imposition. Bribery also involves an intention to influence and to be influenced in a sense incompatible with good faith, and passes by degrees to the offering and receiving of favors in which the offering shows but a vague desire to keep on good terms and the receiving entails no more than perfunctory thanks. The concept likewise implies that the nature of the duty involved is distinctly understood. As the vagueness of obligation increases, acts of bribery merge into bargaining, price setting and term making in general. The definitions of bribery which are adopted in various legal systems often include acts of extortion, but in the main they unduly restrict the term to the bribery of judges, administrators, legislators or voters and fail to include bribery in sport, business, ecclesiastical, artistic and fraternal life.

The prevalence of bribery in human affairs is demonstrated by references to it in the earliest records. The Code of Hammurabi, king of Babylon, dating from the twenty-second century B.C., provides that "if a man (in a case) bear witness for grain or money (as a bribe), he shall himself bear the penalty imposed in that

case." The Edict of Harmhab, king of Egypt, in the fourteenth century B.C. prescribes capital punishment for the official or priest who has accepted a bribe in the performance of his judicial functions. Ashur-bani-pal of Assyria resorted to bribery during his troubles with the Elamites in the seventh century B.C. The provision of penalties shows that bribery was a problem among the Jews, Chinese and Japanese, among the Greeks and Romans and among the Aztecs of the New World.

Bribery is influenced by many factors. A complicated society abounds in agency relations which increase the opportunity for appeals to private interests, since operations which the individual was once able to perform for himself pass through intermediaries, each one of which is a relay of potentially distorting private motives. When new functions arise in an expanding society they are indistinctly defined and inadequately supervised. Frequently they clash with older practises. Those who are immersed in the new would be definitely handicapped were they scrupulously to respect the methods by which formal redefinitions of usage are to be procured, because general rule making presupposes definite knowledge of what is wanted and also leisure for the detached consideration of experience. The very fact that they are engaged in a pioneering enterprise implies that they are not yet entirely sure of what they need. Fired with new hopes of concrete achievement they are submerged in the details of active administration and look upon delay with impatience. These factors cumulate in efforts to secure tentative and piecemeal readjustments by such short cuts as bribery. The process described is especially prominent when opportunities for making large fortunes may be granted or withheld by the state. The will to bribe of the promoter in an expanding society is matched by the will to be bribed on the part of those who serve the old order. This comes about because a period of expansion is usually characterized by an increase in the standards of ostentatious consumption. Those who are accredited agents of the old order are usually on a fixed salary or in a status otherwise circumscribed. They suffer from inferiority as their returns in money and prestige fall off, and this sense of inferiority is quickly transmuted into a sense of injustice when the rich or those who cater to the rich advance more rapidly. This creates an atmosphere of cynicism in which bribery flourishes, for the older proportion between deserts and rewards is upset to the disadvantage of the scrupulous, and there ensues a relapse to more primitive codes of conduct. The spread of the pecuniary calculus dissolves many ancient restrictions.

When society is disintegrating and pessimistic, resentment is aroused by the general deprivations. A belligerent nation which has endured poor food, inferior clothes and unremitting exertion, and whose hopes of victory have been repeatedly dashed, is such a society. If deprivations do not fall evenly, and if simultaneously with the shortages there appears a new class of "profiteers," there results an acute sense of injustice and much demoralization. Those who possess power share the prevailing insecurity and intensify the dissatisfaction by conspicuously enjoying their cake while they have it.

Quite apart from periods of rapid or slow development bribery plays a principal role in society. Politics is always a rather unstable equilibrium of interests, but it is possible to achieve accommodations of interest which work smoothly for extended periods, and bribery is one of the instrumentalities by means of which provisional adjustments are reached and perpetuated. The analysis of American urban communities has shown in certain mobile areas a high concentration of interests which are in opposition to the legal, moral and conventional standards of the more stable areas. Bribery is one of the tools which is used to secure exemption from the enforcement of ostensibly inclusive standards and to temper them to local diversities. Minority groups within empires have likewise been able to ameliorate their lot by bribing the administrators who were legally bound to discriminate against them. These accommodations are maintained until the time when some new accession of power to the general or local interests disturbs the established equilibrium and makes necessary a new level of adjustment.

The ubiquity of bribery and the fact that it is often resorted to where cheaper means would seem appropriate to the desired result suggest that it gratifies drives which are organized very early in the life history of individuals regardless of the particular culture in which they find themselves. The intensive examination of individual life histories shows that there is a strong and only partly conscious drive against authority which is frequently made manifest in efforts to bring authority into contempt. Offering a

bribe is often partially motivated by a drive to put representatives of authority in the wrong by inducing them to violate professions and obligations. Anti-authoritarianism likewise shows itself in an exaggerated sense of guilt and in a resulting compulsion to propitiate authority by giving up tangible goods. This operation appeases the sense of guilt and permits the individual to secure absolution from his own conscience for actual or contemplated acts against accepted standards. These reactions are established in early childhood and depend upon features of the relationship of child to adult which are so general as to exist in varying degrees in every culture.

The phenomenon of bribery is to be treated therefore as a function of diverse cultural contexts and likewise of certain general conditions in the early development of the individual.

It is not surprising that efforts at the eradication of bribery have had very qualified success. Bribery is difficult to control by legal prohibitions since, unlike cases of fraud or violence, all parties usually get what they want and no one is aggrieved. The severity of the penalties imposed where regulation is sought by law is frequently in inverse relation to the success achieved in coping with the problem. Thus bribery is a misdemeanor in England and a crime in the American states. Bribery is often dealt with most successfully when private groups impose ethical norms upon themselves and set up procedures which enable them to deal with difficult cases.

HAROLD D. LASSWELL

See: CORRUPTION, POLITICAL; PUBLIC OFFICE; EXTORTION; INTERESTS; POLITICS; MACHINE, POLITICAL; LOBBY; BUSINESS ETHICS; MORALS; PUBLIC OPINION.

BRICE, CALVIN STEWART (1845–98), American railroad promoter. Brice attained some success as a corporation lawyer before he abandoned active practise in 1870 to begin operating as a railroad promoter and manager. He was one of the first to realize the profit to be obtained from constructing and purchasing short lines of railroad which could later be sold to trunk lines. With this in view he had constructed, and in 1887 became president of, the Lake Erie and Louisville Railroad (later called the Lake Erie and Western) tapping the coal fields of southern Ohio. He was chiefly responsible for the construction of the "Nickel Plate" Railroad as a parallel and competing line to the New York Central System. The Nickel Plate competed so effectively that Brice and his friends reaped a considerable profit by selling it to the Vanderbilt interests. In addition he guided the reorganization of five small southern railroads and consolidated them into the first important railway system of the South. In the process he did some remarkable stock juggling, letting some of these lines deteriorate badly. His southern system was later reorganized by Morgan as the Southern Railway. Brice's railroad interests extended beyond the United States. He formed a syndicate to construct a railroad in Jamaica, W. I., which was purchased by the government in 1896. Two years later he was interested in the Brice Chinese Syndicate, which received concessions to the exclusive right of way for a railroad between Hankow and Canton, China.

JOHN H. FREDERICK

Consult: "The Railroad Men of America: Calvin S. Brice" in *Magazine of Western History*, vol. x (1889) 717–21; Moody, John, *The Railroad Builders*, Chronicles of America series, vol. xxxviii (New Haven 1919) ch. x.

BRIDGEWATER, FRANCIS EGERTON, THIRD DUKE OF (1736–1803), pioneer canal builder in England. When, disappointed in love, the duke turned from a life of aristocratic ease to manage his coal properties he found that the high cost of transporting his product to market at Manchester greatly interfered with the profitable development of his mines. To lower that cost he conceived the idea of building a canal across country from his pits at Worsley to the city. This project was completed in 1761. The resulting reduction in the price of coal at Manchester and the increase in his income led the duke to build a second canal connecting Manchester and Liverpool. This lowered the transportation costs between these cities to half that for the roundabout river route and to less than one sixth of the cost by road and in addition greatly improved the service. In order to build these canals Bridgewater had to fight the strong vested interests of the river navigation monopolies, land owners and others both locally and in Parliament. The success of Bridgewater's ventures gave the impetus to the great era of British canal building which supplied the cheap system of inland transportation that for over half a century was a leading factor in England's industrial revolution.

GEORGE MARSHALL

Consult: Smiles, Samuel, *Lives of the Engineers*, 5 vols. (popular ed. London 1904) vol. i, p. 186–330;

Jackman, W. T., *The Development of Transportation in Modern England*, 2 vols. (Cambridge, Eng. 1916) vol. i, p. 360–66.

BRIESEN, ARTHUR v. (1843–1920), founder of legal aid work in America. Briesen was born in Germany but emigrated to the United States in 1858 and served as a volunteer in the union army during the Civil War. In 1868 he was admitted to the New York bar and in 1890 became president of the Deutscher Rechts-Schutz Verein, a post which he retained for twenty-six years. The society gave aid exclusively to indigent Germans, but Briesen saw the need of expanding the organization in order to furnish aid to all worthy applicants regardless of nationality or race. Despite considerable opposition he had the charter revised to permit legal assistance to non-Germans, and in 1896 the name of the association was changed to the Legal Aid Society. Briesen succeeded in getting considerable publicity for the society, increased its membership, won the support of prominent citizens and for the first time interested members of the bar. By 1916 it was extending aid in more than 40,000 cases annually. Within the organization the attorneys' contracts were revised so that they might devote all their time to legal aid. The success of the society led to the establishment of similar organizations throughout the country; in 1912 they formed a National Alliance of which Briesen was president. The National Alliance later developed into the National Association of Legal Aid Organizations. Briesen believed that the function of legal aid was to further legal reform as well as to render assistance to individuals. With fair success he directed the campaigns of the society against practises which particularly affected the rights of the poor, such as the bucket shop frauds and dishonest instalment plan sales. Briesen's real importance, however, lay not so much in his administrative achievement as in his personal influence. His passion for justice generated a vision which was translated into effective action by his practical, driving, indefatigable energy.

REGINALD H. SMITH

Consult: Smith, R. H., "Justice and the Poor," Carnegie Foundation for the Advancement of Teaching, *Bulletin*, no. 13 (New York 1919); Maguire, J. M., *The Lance of Justice: a Semi-Centennial History of the Legal Aid Society 1876–1926* (Cambridge, Mass. 1928).

BRIGANDAGE is an antisocial activity carried on by groups of armed outlaws usually under the leadership of a locally famed chieftain. Brigand bands resort to holdups, train attacks, plunder, blackmail and holding for ransom. The essence of all the methods that the brigand utilizes to gain his ends is terrorism and violence. Occasionally he engages in smuggling, selling contraband and rustling cattle across frontiers, but these activities are more characteristic of criminal gangs who tend to cluster around the centers of population.

Brigandage is favored by physiographic conditions providing convenient hiding places such as inaccessible mountains, deserts, jungles. The Scottish highlands, the English forests, the mountains of Spain and Latin America, the Australian bush, the jungles of India and the deserts of the Near East and of northern Africa have furnished refuge for bands of brigands whose methods of operation have been influenced by the character of the regional topography. National boundaries often facilitate the escape of brigands from the law, especially where the boundary administration offers complex problems. In Italy before the achievement of political unity brigands moved easily from one jurisdiction to another. Along the Mexican-American border brigandage has been rife. On the northern frontier between China and the disputed Manchurian region brigands, both Chinese and Russian, have raided back and forth. These activities have often endangered the relations between the countries concerned. But such forms of frontier pillage are to be distinguished from filibustering, which usually requires extensive preparations and often has political aims distinct from those of brigandage.

Physiographic conditions are, however, merely the external factors facilitating the operations of brigands. Brigandage usually has its origin in intolerable economic conditions, oppressive laws, political debility and racial and religious antagonisms; it thrives in conditions of chronic civil conflict, as in China and Mexico, and is often to be found associated with or as an aftermath of war, civil war and revolution. Agrarian struggles, as in Croatia and Mexico, have been a fruitful source of brigandage. Often the income which the peasant gains from cultivating the land is supplemented by clandestine marauding. The struggle of peasant versus landlord creates a psychological condition in which on the one hand peasants turned brigands are regarded sympathetically by the countryside, and in which on the other hand the proprietors permit their peons or serfs to sally forth against recalcitrant peasants in predatory fashion and subse-

quently to return to the grange. These were common occurrences during the 1926–29 religious wars in Mexico. Brigandage is likely to flourish also where racial groups in different stages of cultural development come into contact. This accounts for considerable brigandage in India, Afghanistan and Persia, for the raids of the Yaquis in Sonora, Mexico, for the activities of the Kirghiz tribes and for incidents in the opening of the American West. Where differences in race have coincided with differences in religion, as in the case of the Spaniards and Moors, brigandage has often found partisan protection on the part of the dominant racial and religious group. Brigandage has also, especially in politically undeveloped countries, been a forerunner and aftermath of revolution. This has been true in Latin America and in Italy before unification. In France before the revolution lawbreakers with many of the characteristics of brigands were abetted, warned of danger and protected by the population suffering from oppression.

This identification of the brigand's activities with the social aspirations of the community has often given him the protection and admiration of suffering portions of the people, especially in states subjugated by a foreign power. In the case of a Robin Hood or a Pancho Villa the brigand has acquired fame as a protector of the poor and a despoiler of the rich. Sometimes romantic sentiments are attributed to bandits, such as courtesy to beauty in distress or special consideration to poets and bards. But despite popular sentiment the true nature of the bandit is not that of social reformer. He is essentially selfish and has no fundamental interest in rectifying social evils. Frequently he enlists in causes in which he has no real interest, as in the national wars in the Balkans and in Italy before the unification and in the various religious wars in Mexico. Brigandage in such cases is difficult to distinguish from guerilla warfare carried on for some political cause. But the converse—that nationalist opposition to foreign invasion is nothing but brigandage—does not follow. The foreign invader is apt to rationalize his behavior and express his indignation by calling his opponents brigands. This has been true of the American marines fighting Sandino in Nicaragua and Charlemagne Peralte in Haiti, the Spaniards trying to capture the Cuban insurgents, the French in recent years in Morocco and in their control of the Iberian peninsula during the Napoleonic wars.

Although the history of brigandage in any particular locality varies, the natural history of the brigand may be traced in broad terms. Reclus in his *Primitive Folk* gives a vivid description of how in eras before the rise of the modern state the brigand developed from a predatory bandit into a tax collector, a guarantor of order and a lord of the highway. He started by harassing trade routes. When he had sufficient strength and confidence he fortified himself permanently at some strategic point where travelers, caravans and pack trains were obliged to pass. Gradually the violent features of his calling vanished and he exacted a fixed tribute—a procedure that had the advantage of securing a permanent income without destroying the sources of it. Presently a second brigand, observing the profits that the locality yielded, set himself up across the way; and after a few preliminary skirmishes and scowlings from their respective donjons the two came to an agreement to split the spoils and drive off all new poachers. Gradually their joint power was recognized. In return for mulcting the travelers they provided security over a large area. By this process of development the tribute exacted by the original bandit had become a fixed tax for guaranteed order. A somewhat similar process is still going on along the Bagdad trade routes. John Dos Passos in his *Orient Express* has humorously described a conflict between a caravan and a brigand band in which fighting has been reduced to a mock ceremony and both sides haggle over the amount of tribute.

This is the principal role that the brigand plays in political organization. In the interstices of regular political control, where anarchic situations are potential, he steps in and improvises some sort of order—for a price. Thus it is that although he is an outlaw the brigand chief often exercises control over considerable areas; that at times his alliance has been sought by powerful feudal grandees and by the political authorities anxious to suppress incipient disorder and to preserve the equilibrium already established. Dr. Harvey J. Howard, an American captured by the Chinese *hung hutzes*, has described collusion between the brigands and the town and military authorities, opium being the principal "graft" paid over for protection and ammunition. Students of contemporary urban "racketeering" have observed the similarity between its development and that of brigandage, and the political role which, when completely organized, the lawless activity performs.

Throughout the history of the western world

this role has been most evident in periods of political disintegration. During the decline of the Roman Empire, in the interlude when feudalism was emerging but had not yet fully established itself, brigandage was prevalent. Freemen, to avoid serfdom, fled to the forests and formed roving bands. Mercenary soldiers, discharged between wars, swelled their ranks or organized themselves into separate bands to maintain themselves by plunder until their services should be again in demand. One of the edicts of Charles the Bald, characteristic of such a situation, was that these shifting groups instead of acting independently and hiring themselves out now to this lord and now to that should attach themselves to one lord permanently.

In another transition period, when the feudal era was on the threshold of the modern state, brigandage again became an important phenomenon. In the last struggle against the central government, and often in an effort to resist foreign subjugation, the brigands attached themselves to the feudal lords. Inevitably in the cases of resistance to foreign power brigandage became involved with suppressed nationalistic sentiments. Where, as in the Balkans, national independence was not achieved until very recently, brigandage has been a recurrent phenomenon. In general in such instances the brigands were protected by the underlying population who, although they may have suffered on occasion, felt more kinship with the outlaws than with the foreign oppressors. It must be added that even where the brigands have contributed toward obtaining national freedom they have often proved a serious problem for the new governments which have been formed.

The disorganization caused by the World War, as by other wars, resulted in a widespread recrudescence of brigandage. Especially in Russia, the Balkans and other areas devastated by the war, where economic disorganization and famine conditions prevailed and where the hordes of returning soldiers were not reabsorbed in peaceful occupations, a vast amount of lawless plundering took place. Where disputed areas lay open, to be fought over by hostile emerging nationalities, this condition was intensified. A striking example was Galicia, which was overrun by looting soldiers from the Ukraine and from Poland in a concerted terrorizing sponsored by the two governments but with little systematized control. Another was the Ukraine where, in an attempt to gain possession of the province, ten thousand Polish legionaries were set loose from November, 1918, to the middle of 1919, and their activities were mainly those characteristic of brigand bands. In the invasions of the White army under Denikin, Wrangel and others, brigandage by detached units of both the Red and the White forces was common, the peasants being the principal sufferers.

In general the attempts of governments have been to suppress brigandage except in those cases where the brigands have proved temporarily valuable auxiliaries against invaders or rival political authorities or where organized brigandage has seemed a lesser evil than complete anarchy. Brigand bands have often proved valuable instruments for foreign powers which have for one reason or another desired the weakening of the central government of the country in which they had an interest. The struggles over colonial politics in North Africa, concessions in China and foreign investments in Mexico may be cited as instances.

The control of brigandage has proceeded often by the strengthening and centralization of the government and the consequent creation of a disciplined constabulary, as in the case of the Guardia Civil in Spain, organized in 1844, or the famous Rurales of Porfirio Diaz, a highly paid corps into which many of the former bandit chiefs and their followers had been absorbed. The establishment of modern means of communication has lessened the scope of brigand operations. Thus in Mexico one of the notorious bandit nests of the country, celebrated in Manuel Payno's novel *Los bandidos del Río Frío*, dominated the Valley of the Río Frío until the building of a macadam highway from Mexico City to Puebla through this remote mountain region and the resultant rise of a roadside center caused brigandage practically to disappear from that area. Popular wrath has sometimes done away with the worst abuses: in the American West the "vigilance committees" and in Mexico the "committees of social defense," largely of peasant composition, have voluntarily protected the smaller towns from depredations; in Sicily to this day groups of the people have combated the mafia, often refusing to submit their grievances to the police; in 1922 the Ukrainian population in Galicia, incensed at the semi-official brigandage of the Polish soldiers, began a systematic campaign of violence against them.

But in a more general way the control of brigandage has depended on the remedying of

the political disorganization, the economic impoverishment and the social oppression which have constituted its underlying causes. The extension of regular industrial pursuits into previously neglected areas has tended to limit banditry by creating a more stable population with vested interests in pacific conditions. The throwing off of foreign yokes and the liberation of agrarian populations from peonage have had widespread effects. Less controllable, however, is that transition from one economic and social system to another which has often been fundamental in the creation of brigandage.

CARLETON BEALS

See: CARBONARI; COMITADJI; MAFIA; OUTLAWRY; PIRACY; FILIBUSTERING; GUERILLA WARFARE; MERCENARY TROOPS; FEUD; TERRORISM; VIOLENCE; BACKWARD COUNTRIES; GANGS; RACKETEERING; POLICE.

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